BOARD OF HOUSING AND COMMUNITY DEVELOPMENT AND FIRE SERVICES BOARD -
STATEWIDE FIRE PREVENTION CODE DEVELOPMENT COMMITTEE (SFPCDC) MEETING

FOLLOWED BY THE
BOARD OF HOUSING AND COMMUNITY DEVELOPMENT
CODES AND STANDARDS COMMITTEE (CSC)MEETING

2012 CODE CHANGE CYCLE – BOOK 8

December 16, 2013

Opening Statement

TAB 1 (for SFPCDC and then CSC)

Minutes from October 28th SFPCDC Meeting

Memo from Emory Rodgers

Carry Over SFPC Code Changes from October 28, 2013

Recommended action: vote to approve, amend or deny individually.

Proposal	Description of Change	Page No.
SFPC 103.2	Administrative inspections, permits, construction documents	1
SFPC 108.3	Conditions of a permit	8
SFPC IFC 609.3.3.3	Tags – kitchen hood systems	11

TAB 2 (CSC only)

Minutes from October 28th CSC Meeting

Carry Over USBC Code Changes from October 28, 2013

Recommended action: vote to approve, amend or deny individually.

Proposal	Description of Change	Page No.
USBC 108.2	Exemptions from application for permit (temporary ramps)	1
USBC IBC 1008.1.9.7	Delayed egress locks (airports)	2
USBC Section 202	Definition of nightclub	3
USBC IBC 1705.16	Special inspections for firestopping	5
IBC 1008.1.9.8	Sensor locks	7
VCC, IRC E3902.2	Garage GFCI	13
VCC IRC	Habitable attic	17
USBC IECC R403.6 and IRC M1401.3	Energy efficiency of appliances: Two changes approved 10-28-13 …… Two revised changes ……	 18, 22 20, 24

TAB 3 – FINAL REGULATIONS Page No.

Highlights

Virginia Statewide Fire Prevention Code (SFPC) (action by both committees) 1

Virginia Uniform Statewide Building Code (USBC) 79

Virginia Amusement Device Regulations (VADR) 336

Virginia Manufactured Home Safety Regulations (MHSR) 350

Virginia Industrialized Building Safety Regulations (IBSR) 357

Virginia Certification Standards (VCS) 369

Virginia Standards for Individual and Regional Code Academies (IRCA) 374

TAB 1

BOARD OF HOUSING AND COMMUNITY DEVELOPMENT & FIRE SERVICE BOARD

STATEWIDE FIRE PREVENTION CODE DEVELOPMENT COMMITTEE MEETING

October 28, 2013, 10:00 a.m.
Virginia Housing Center, Glen Allen, Virginia

Members Present	Members Absent
Mr. John Ainsle	Mr. Bill Kyger
Mr. J.P. Carr	
Mr. Robby Dawson	
Mr. Edwin Smith	
Mr. Rick Witt	

Call to order	Mr. John Ainsle, Chairman of the Statewide Fire Prevention Code Development Committee, called the meeting of the Committee to order.
Book 6 of the 2012 Code Change Cycle	Please see attached summary for committee actions
Adjournment	Upon motion duly made and seconded, the meeting was adjourned.

Robert F. McDonnell
Governor

James S. Cheng
Secretary of
Commerce and Trade

COMMONWEALTH of VIRGINIA

DEPARTMENT OF
HOUSING AND COMMUNITY DEVELOPMENT

William C. Shelton
Director

MEMORANDUM

To: BHCD Codes and Standards Committee
BHCD/FSB Statewide Fire Prevention Code Development Committee

From: Emory Rodgers, Deputy Director
Department of Housing and Community Development

Date: November 25, 2013

Subject: 2012 USBC and SFPC Carry-Over Code Change

2012 SFPC Carry-Over Code Changes:

- SFPC 103.2, T107.2 and 901.1: The Fire Services Board Codes Committee's original code change is enclosed and no revisions were submitted by the proponent by the time when Book 8 was sent out. Staff is aware of a revised code change that when submitted will be sent to you. Otherwise, staff recommends carrying-over for the 2015 SFPC those portions of FSBCC code change for Sections 103.2 and 901.1 for the scope of enforcement, permits and inspections. Several existing sections of the SFPC in 101.2, 102.4, 103.2.1 and 106.3 support retention of the text being proposed for deletion. Staff believes there might be some need for clarifying language to Section 103.2, but the fire officials can enforce all provisions of the IFC and reference standards regarding inspections, permits and enforcement that are within the statutory and regulatory authority of the SFPC. In past USBC regulatory cycles, language was added to clarify how testing and inspections were to be handled in the model trade codes. Staff hasn't seen any documentation where the courts have thrown out notice of violations that cover Section 103.2. This past year, the State Technical Review Board did rule that a mandated annual visual inspection for all buildings in the SFPC IFC 703.1 couldn't be enforced and upheld the local fire officials that to be the case filed by a local condominium owner. Thus, staff supports additional review between the stakeholders and the fire officials on this matter unless a submitted revised code change addresses these issues. For the FSBCC IFC Section 901.1 for construction documents, the FSBCC recommends the owner has to make available such documents when requested unless they

don't exist. As proposed, there are unresolved issues such as how long can the fire official ask for these construction documents; what construction documents can be asked for as the provision is in Chapter 9 so is it only for sprinkler and alarm plans; and, should perhaps the USBC be amended to set forth how and when the fire or property maintenance code officials can obtain construction documents such at the time when there is plan review done. Staff supports the FSBCC changes to T107.2 and recommends approval of the code change as amended (AM) with only the changes being requested to T107.2.

- SFPC 108.3: The original FSBCC code change is enclosed and no revisions were submitted before Book 8 was sent out. The enclosed staff code change has correctly formatted the section deleting references to sections already deleted. Secondly, the staff code change provides in the note only a pointer, as the FSBCC code change and their supporting statement is seeking, to the USBC. Staff recommends approval as amended (AM) of the staff code change.
- SFPC 609.3.3.3: There are two code changes. The first is from the FSBCC that provides a second means to verify the hood system has been inspected with the addition of a tag where there isn't a written report maintained on-site. This code change will be in the 2015 IFC. The 2nd code change was prepared by DHCD with input from the industry associations that represent hotels, restaurants and other business where a kitchen hood system is present. This code change provides the 1st option of having the written report on-site; provides the 2nd option of using a tag; and, provides a 3rd option of enabling the owner to fax the written report to the fire official within 24 hours. Staff recommends approval of the second code change (the 3rd option being allowed for the 2012 SFPC) and then to revisit the issue again with the promulgation of the 2015 SFPC to determine how effective these options prove to be and so the fire official has the inspection information in a reasonable and timely manner.

2012 USBC Carry-Over Code Changes:

- USBC 108: This code change is for a permit exemption for temporary ramps. It was vetted with the stakeholders and VBCOA to add "temporary", but didn't get into the BHCD's CSC package. This is a consensus code change. Staff recommends approval AS.
- USBC IBC 1008.1.9.7: Staff recommends approval AM with the exception having A-3 identified. The original opponent, the Dulles and Regan International Airports support the AM version. This is a consensus code change.
- USBC IBC 202 Nightclub: The FSBCC original change is enclosed and no revisions were submitted prior to sending out Book 8. There is not a consensus to change the definition and the deletion of the term "main use" by stakeholders or building officials. Staff recommends this code change be carried-over to the 2015 USBC regulatory cycle.
- USBC IBC 1705.16: There is a consensus to delete mandating special inspections for firestopping that has been for decades done by the local inspectors. Staff recommends approval AS for this code change that avoids unnecessary costs and overlap with building inspections now being done by the local building departments.
- USBC IBC 1008.1.9.8: The sensor lock code change has now been revised to add an amendment that now clarifies that it is an electronic control of the push button to release the lock. This code change also correlates with the USBC current technical amendment for delayed locks for I-2 occupancies. Staff recommends approval AM. This is a consensus code change.

- USBC IRC E3902.2: This amended garage only code change still retains the GFCI outlet requirement, but also allows for a dedicated circuit for a refrigerator and garage door opener to not be GFCI protected. This is a non-consensus code change. Staff recommends carrying-over having similar requirements for unfinished basements.
- USBC IRC habitable attic: The VBCOA IRC committee‘s code change was for 1/3 of the floor below. The HBAV has revised the code change with a definition of 2/3 and a maximum 400 s.f. that can be used before the habitable attic is deemed a 4th story for new or existing homes. The VBCOA IRC committee supports the revised HBAV code change. This is a consensus code change.
- USBC IECC R403.6 and IRC M1401.3: The BHCD’s CSC approved these code changes on October 28th. The ICC approved modified versions in November of 2013. The VPMIA and HBAV representatives have been discussing the modified ICC code change and support them with exception 3. Staff recommends approval AM for these revised code changes with the retention of exception 3. This is a consensus code change.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number:_____

Proponent Information (Check one): ☐Individual ☐Government Entity ☐Company

Name: Robby Dawson Representing: Fire Services Board Code Committee

Mailing Address: 1005 Technology Park Drive, Glen Allen, VA 23059

Email Address: dawsonj@chesterfield.gov Telephone Number: 804-748-1426

Proposal Information

Code(s) and Section(s): Statewide Fire Prevention Code – various sections as listed below

Proposed Change (including all relevant section numbers, if multiple sections):

103.2. Amendments. All requirements of the referenced codes and standards that relate to fees, ~~permits,~~ unsafe notices, disputes, condemnation, ~~inspections~~, ~~scope of enforcement~~ and all other procedural, and administrative matters are deleted and replaced by the provisions of Chapter 1 of the SFPC.

107.2 Permits Required. Operational ~~P~~permits may be required by the fire official as permitted under the SFPC in accordance with Table 107.2, except that the fire official shall require permits for the manufacturing, storage, handling, use and sale of explosives. (remainder of section unchanged)

Table 107.2
Operational Permit Requirements (to be filled in by local jurisdiction)

Description	Permit Required (yes or no)	Permit Fee	Inspection Fee
~~**Battery systems.** A permit is required to install stationary lead-acid battery systems having a liquid capacity of more than 50 gallons (189 L).~~			
Compressed gas. An operational permit is required for the storage, use or handling at normal temperature and pressure (NTP) of compressed gases in excess of the amounts listed below. **Exception:** Vehicles equipped for and using compressed gas as a fuel for propelling the vehicle. **PERMIT AMOUNTS FOR COMPRESSED GASES** **TYPE OF GAS** **AMOUNT (cubic feet at NTP)**			

Corrosive 200 Flammable (except cryogenic fluids and liquefied petroleum gases) 200 Highly toxic Any amount Inert and simple asphyxiant 6,000 Oxidizing (including oxygen) 504 Pyrophoric Any amount Toxic Any amount ~~For SI: 1 cubic foot = 0.02832 m3~~			
Covered and open mall buildings. An operational permit is required for: 1. The placement of retail fixtures and displays, concession equipment, displays of highly combustible goods and similar items in the mall. 2. The display of liquid- or gas-fired equipment in the mall. 3. The use of open-flame or flame-producing equipment in the mall.			
LP-gas. An operational permit is required for: 1. Storage and use of LP-gas. **Exception:** A permit is not required for individual containers with a 500-gallon (1893 L) water capacity or less or multiple container systems having an aggregate quantity not exceeding 500 gallons (1893 L), serving occupancies in Group R-3. 2. Operation of cargo tankers that transport LP-gas.			
Cryogenic fluids. An operational permit is required to produce, store, transport on site, use, handle or dispense cryogenic fluids in excess of the amounts listed below. Exception: Operational permits are not required for vehicles equipped for and using cryogenic fluids as a fuel for propelling the vehicle or for refrigerating the lading.			
Explosives, fireworks and pyrotechnics. An operational permit is required for the manufacture, storage, handling, sale or use of any quantity of explosive, explosive materials, fireworks, ~~or~~ pyrotechnic special effects, or pyrotechnic special effects material within the scope of Chapter ~~33~~56. **Exception:** Storage in Group R-3 or R-5 occupancies of smokeless propellant, black powder and small arms primers for personal use, not for resale and in accordance with the quantity limitations and conditions set forth in Section 5601.1, exceptions 4 and 12.			

Type of Cryogenic Fluid	Inside Building (gallons)	Outside Building (gallons)
Flammable	More than 1	60
Inert	60	500
Oxidizing (includes oxygen)	10	50
Physical or health hazard not indicated above	Any amount	Any amount

~~For SI: 1 gallon = 3.785 L.~~

Fumigation, ~~and~~ thermal and insecticidal fogging. An operational permit is required to operate a business of fumigation, ~~or~~ thermal or insecticidal fogging and to maintain a room, vault or chamber in which a toxic or flammable fumigant is used.			
Hazardous materials. An operational permit is required to store, transport on site, dispense, use or handle hazardous materials in excess of the following amounts:			

Type of material	Amount
Combustible liquids	See Flammable and Combustible Liquids
Corrosive materials Gases Liquids Solids	 See Compressed Gases 55 gallons 1000 pounds
Explosive materials	See Explosives
Flammable materials Gases Liquids Solids	 See Compressed Gases See Flammable and Combustible Liquids 100 pounds

Highly toxic materials				
Gases	See Compressed Gases			
Liquids	Any amount			
Solids	Any amount			
Oxidizing materials				
Gases	See Compressed Gases			
Liquids				
Class 4	Any amount			
Class 3	1 gallon[a]			
Class 2	10 gallons			
Class 1	55 gallons			
Solids				
Class 4	Any amount			
Class 3	10 pounds[b]			
Class 2	100 pounds			
Class 1	500 pounds			
Organic peroxides				
Liquids				
Class I	Any amount			
Class II	Any amount			
Class III	1 gallon			
Class IV	2 gallons			
Class V	No permit required			
Solids				
Class I	Any amount			
Class II	Any amount			
Class III	10 pounds			
Class IV	20 pounds			
Class V	No permit required			
Pyrophoric materials				
Gases	See Compressed Gases			
Liquids	Any amount			
Solids	Any amount			
Toxic materials				
Gases	See Compressed Gases			
Liquids	10 gallons			
Solids	100 pounds			
Unstable (reactive) materials				
Liquids				
Class 4	Any amount			
Class 3	Any amount			
Class 2	5 gallons			
Class 1	10 gallons			
Solids				
Class 4	Any amount			
Class 3	Any amount			
Class 2	50 pounds			
Class 1	100 pounds			
Water-reactive Materials				
Liquids				
Class 3	Any amount			
Class 2	5 gallons			
Class 1	55 gallons			
Solids				
Class 3	Any amount			
Class 2	50 pounds			
Class 1	500 pounds			
a. 20 gallons when Table 5003.1.1(1) Note k applies and hazard identification signs in accordance with Section 5003.5 are provided for quantities of 20 gallons or less. b. 20 pounds when Table 5003.1.1(1) Note k applies and hazard identification signs in accordance with Section 5003.5 are provided for quantities of 200 pounds or less.				
Open flames and candles. An operational permit is required to ~~remove paint with a torch; use a torch or open flame device in a hazardous fire area; or to~~ use open				

flames or candles in connection with assembly areas, dining areas of restaurants or drinking establishments.			
Open flames and torches. An operational permit is required to remove paint with a ~~torch~~; or to use a torch or open-flame device in a wildfire risk area.			
Places of ~~A~~assembly~~/educational~~. An operational permit is required to operate a place of assembly~~/educational occupancy~~.			
For SI: 1 cubic foot = 0.02832 m3, 1 gallon = 3.785 L., 1 pound = 0.454 kg.			

301.2 Permits. Permits shall be required as set forth in Section ~~105.6~~107.2 for the activities or uses regulated by Sections 306, 307, 308 and 315.

307.2 Permit required. A permit shall be obtained from the *fire code official* in accordance with Section ~~105.6~~107.2 prior to kindling a fire for recognized silvicultural or range or wildlife management practices, prevention or control of disease or pests, or a bonfire. Application for such approval shall only be presented by and permits issued to the *owner* of the land upon which the fire is to be kindled.

308.2 Permits required. Permits shall be obtained from the *fire code official* in accordance with Section ~~105.6~~107.2 prior to engaging in the following activities involving open flame, fire and burning:
1. Use of a torch or flame-producing device to remove paint from a structure.
2. Use of open flame, fire or burning in connection with Group A or E occupancies.
3. Use or operation of torches and other devices, machines or processes liable to start or cause fire in or upon wildfire risk areas.

315.2 Permit required. A permit for miscellaneous combustible storage shall be required as set forth in Section ~~105.6~~107.2.

501.2 Permits. A permit shall be required as set forth in Sections ~~105.6~~107.2 ~~and 105.7~~.

601.2 Permits. Permits shall be obtained for refrigeration systems, battery systems and solar photovoltaic power systems as set forth in Sections ~~105.6~~107.2 ~~and 105.7~~.

901.2 Construction documents. The *fire code official* shall have the authority to require and receive copies of *construction documents* and calculations for all *fire protection systems* where such *documents* exist. ~~and to require permits be issued for the installation, rehabilitation or modification of any *fire protection system to be installed, rehabilitated or modified*. *Construction documents* for *fire protection systems* shall be submitted for review and approval prior to system installation.~~

901.3 Permits. Permits shall be required as set forth in Sections ~~105.6~~107.2 ~~and 105.7~~.

2001.3 Permits. For permits to operate aircraft-refueling vehicles, application of flammable or combustible finishes and hot work, see Section ~~105.6~~107.2.

2101.2 Permit required. Permits shall be required as set forth in Section ~~105.6~~107.2.

2201.2 Permits. Permits shall be required for *combustible dust*-producing operations as set forth in Section ~~105.6~~107.2.

2301.2 Permits. Permits shall be required as set forth in Section ~~105.6~~107.2.

2401.3 Permits. Permits shall be required as set forth in Sections ~~105.6~~107.2 ~~and 105.7~~.

2501.2 Permits. Permits shall be required as set forth in Section ~~105.6~~107.2.

2601.2 Permits. Permits shall be required as set forth in Section ~~105.6~~107.2.

2701.5 Permits. Permits shall be required as set forth in Section ~~105.6~~107.2.

2801.2 Permit. Permits shall be required as set forth in Section ~~105.6~~107.2.

2901.2 Permits. Permits shall be required as set forth in Section ~~105.6~~107.2.

3001.2 Permits. Permits shall be required as set forth in Sections ~~105.6~~107.2 ~~and 105.7~~.

3103.4 Permits. Permits shall be required as set forth in Sections ~~105.6~~107.2 ~~and 105.7~~.

3201.2 Permits. A permit shall be required as set forth in Section ~~105.6~~107.2.

3401.2 Permit required. Permits shall be required as set forth in Section ~~105.6~~107.2.

5001.5 Permits. Permits shall be required as set forth in Sections ~~105.6~~107.2 ~~and 105.7~~.

5101.2 Permit required. Permits shall be required as set forth in Section ~~105.6~~107.2.

5201.3 Permits. Permits shall be required as set forth in Section ~~105.6~~107.2.

5301.2 Permits. Permits shall be required as set forth in Section ~~105.6~~107.2.

5401.2 Permits. Permits shall be required as set forth in Section ~~105.6~~107.2.

5501.2 Permits. Permits shall be required as set forth in Section ~~105.6~~107.2.

5601.2 Permit required. Permits shall be required as set forth in Section ~~105.6~~107.2 and regulated in accordance with this section.

5701.4 Permits. Permits shall be required as set forth in Sections ~~105.6~~107.2 ~~and 105.7~~.

5801.2 Permits. Permits shall be required as set forth in Section ~~105.6~~107.2.

5901.2 Permits. Permits shall be required as set forth in Section ~~105.6~~107.2.

6001.2 Permits. Permits shall be required as set forth in Section ~~105.6~~107.2.

6201.2 Permits. Permits shall be required for organic peroxides as set forth in Section ~~105.6~~107.2.

6301.2 Permits. Permits shall be required as set forth in Section ~~105.6~~107.2.

6401.2 Permits. Permits shall be required as set forth in Section ~~105.6~~107.2.

6501.2 Permits. Permits shall be required as set forth in Section ~~105.6~~107.2.

6601.2 Permits. Permits shall be required as set forth in Section ~~105.6~~107.2.

Supporting Statement (including intent, need, and impact of the proposal):

NOTE: This original change was proposed by the FSBCC 12/5/2012. This revision reflects comments and clarifications requested by members of the BHCD Codes and Standards Committee. This revision's changes are noted by highlighted areas in the text of the proposal.

The overall objective for this proposed change is to ensure the proper and accurate coordination of the code's permit provisions and to clearly identify how reference standards are to be applied and when.

1. Section 103.2 amends by eliminating "permits" and "scope of enforcement" from this section. The corrected sections If the SFPC now correctly identity what section of the SFPC (107.2) identifies which operational permits are required. If the term "permits" remains, confusion is created that the permitting requirements in the explosives chapter are not enforceable. But with the proper reference to 107.2, it becomes clear that not only are permits potentially required, they are referenced back to the proper administrative provisions of chapter 1.

   The "scope of enforcement" is also removed to clearly indicate those referenced standards (like NFPA) do have limitations on their scope. Without the deletion of this section, one could argue the door is left wide open to take the standard out of context or there is no basis for the standard to be used. The SFPC already has a catch all provision in 102.4 that clearly states any conflict between the SFPC and a reference standard – such as differences in scope –

that the SFPC prevails.

2. References to the permit section of Chapter 1 are often encountered in the technical chapters of the code. When encountered in a technical chapter, this proposed change will provide for the proper and accurate reference of the Chapter 1 permit provisions.

3. The changes to Table 107.2 are intended to incorporate the changes found in the 2012 edition of the IFC with the following notable differences:
   a. An operational permit requirement for battery systems was deleted from the IFC in October 2004 through action by the ICC Code Correlation Committee (CCC). The stated reason for the CCC action was,

      "Section 105.6.5 is the only section in 105.6 that contains the word "install", which clearly indicates that the permit requirement is one of construction, not operation.

      Section 105.6.5 was added to the code by code change F203-99 (AM). It originally said "...install or operate..." but the modification deleted the phrase "...or operate...". At that time, there was only one section, 105.6, that regulated all permits.

      In the same code change cycle, code change F46-99 (AM) divided Section 105.6 into the current separate Required Operational Permits Section 105.6 and Required Construction Permits Section 105.7.

      Since both code changes F46-99 and F203-99 were approved simultaneously, relocating the new construction-oriented permit requirements created by F203-99 for the installation of battery systems from Section 105.6 to the new Section 105.7 should have been accomplished as a correlation change prior to publication of the 2000 edition, however it was overlooked. This correlation change will place the permit requirement for installation of battery systems into the proper section."

      (The ICC references to Section 105.6 equate to SFPC Section 107.2.)

   b. For fumigation, thermal and insecticidal fogging, the model code deleted the reference to "thermal" treatment but its felt this treatment must be retained. To produce high temperatures (thermal) within a building or space may still be a viable method for treating bed bug infestations. One of the methods of thermal pest control is the use of propane. If propane is used to treat bed bug infestations, then a permit may have to be obtained through or coordinated with other chapters of the code such as Chapter 61, Liquefied Petroleum Gas. The changes shown are for the benefit of clarity and distinction for the 3 methods of treatment; fumigation, thermal and fogging.
   c. The SI units of measurement are relocated to the end of the table as opposed to repeating them in multiple locations. The units of measurement would still be applicable throughout the table.
   d. Through an omission, the '09 edition of the SFPC did not have notes "a" and "b" as they relate to liquid and solid oxidizing hazardous materials. This change properly puts those notes back into the table.
   e. As a statewide minimum, the added language regarding explosives, display fireworks and pyrotechnics reflects the combining of separate IFC model code lines and its list of required operational permits. This produces no fundamental or significant operational changes within or for the SFPC and **does not** impact "permissible fireworks".
   f. The exception for the line for explosives is a reiteration for propellants and primers found in Chapter 56 and those contained in previous editions of the SFPC. There's no attempt to change those SFPC exceptions.
   g. As a point of information, no edition of the referenced IFC model code has had educational occupancy listed for operational permits, hence the reason for deleting the reference for educational occupancies. The option to amend the code to include Group E is still available at the local level.
4. The change to Section 901.2 allows the fire official to require and receive copies of construction documents related to the installation, rehabilitation or modification of fire protections systems. It is those documents that establish the benchmark for which a level protection or performance is to be maintain for the life of the building and its systems.

5. Additional supporting information submitted 5/2013 in support of 103.2 changes:

   Further analysis of the specific sections of the referenced codes and standards reveals that the following inspections are not required, nor can the owner/operator be compelled to conduct any inspections under the SFPC:

   a. Fire hydrants to can not be inspected (507.5.2)
   b. There can be no required inspection of emergency or standby power systems, and no records maintained (604.3). These requirements are in the IFC and NFPA 110, 111 – both are deleted by existing language.

c. Commercial kitchen hoods including ducts and fans can no longer be required to be inspected. (609.3.3.1).
d. Portable fire extinguishers are not requited to be inspected, however the exception may now be required since issues dealing with "inspections" is not in the SFPC, so the exception is not included (906.2 Ex 2).
e. The inspection of "fire detection, alarm and extinguishing system" as well as non-required systems are not required to be inspected (901.6).
f. Fire resistance rated construction does not need to be inspected by the owner of the property (703.1).
g. Records can no long be "inspected" concerning the monitoring for excessive temperatures in dust piles (1908.6).
h. Shells of pyrotechnic devices do not need to be inspected for damage after transport (3308.5.3)
i. Magazines of explosive do not have to be routinely inspected for damaged, degrading or missing explosives (3304.9).
j. Records of explosives transactions can not be inspected (3303.2).
k. There is no requirement to inspect the fallout area of a fireworks display to collect any un-exploded shells (3308.9).

The Scoping provisions of the referenced NFPA Standards do not apply as 103.2 is currently written. Additionally, since the scope of NFPA 25 is effectively deleted, the exception is also eliminated making NFPA 25 applicable to ALL water based fire protection systems including NFPA13D systems.

Opposition to much of the change to this section has not been objectively illustrated. There have been no examples (like those listed above to the contrary) that show how the proposed change has a detrimental impact on the fire official's ability to enforce the code or any potential expansion of what was understood scope prior to the TRB ruling earlier this year.

Modification to section 906.2 clarifies this is not directed at the building official, but whoever has possession of these documents to ensure they are available for future fire code enforcement.

6. The change to section 107.2 clarifies that these permits are operational in nature and do not allow or require the fire official to issue permits under any other provision of state code other than the SFPC for the operations noted in Table 107.2 when adopted locally as part of the local fire code adoption process.

Supporting documentation of the referenced adopted standards are also attached to this revised proposal.

Submittal Information

Date Submitted: 12/5/12 – Revision submitted 6/3/13

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
Main Street Centre
600 E. Main St., Ste. 300
Richmond, VA 23219

Email Address: tsu@dhcd.virginia.gov
Fax Number: (804) 371-7092
Phone Numbers: (804) 371-7140 or (804) 371-7150

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number:_____

Proponent Information (Check one): ☐Individual ☐Government Entity ☐Company

Name: Robby Dawson Representing: Fire Services Board Code Committee

Mailing Address: 1005 Technology Park Drive, Glen Allen, VA 23059

Email Address: dawsonj@chesterfield.gov Telephone Number: 804-748-1426

Proposal Information

Code(s) and Section(s): SFPC Section 108.3

Proposed Change (including all relevant section numbers, if multiple sections):

108.3 Conditions of a permit. An operational permit shall constitute permission to maintain, store or handle materials; or to conduct processes in accordance with the SFPC, and shall not be construed as authority to omit or amend any of the provisions of this code. ~~The building official shall issue permits to install equipment utilized in connection with such activities; or to install or modify any fire protection system or equipment or any other construction, equipment installation or modification in accordance with the provisions of this code where a permit is required by Section 108.5. Such permission shall not be construed as authority to omit or amend any of the provisions of this code.~~

Note: The building official shall issue permits to install equipment utilized in connection with such activities; or to install or modify any fire protection system or equipment or any other construction, equipment installation or modification in accordance with the provisions of this code where a permit is required by Section 108.5. Such permission shall not be construed as authority to omit or amend any of the provisions of this code.

Supporting Statement (including intent, need, and impact of the proposal):

The language and authority on who issues a permit to install or modify fire protection systems, equipment, and other building components already resides in the USBC and is clearly stated in SFPC Section 102.6 which renders the language proposed for deletion as repetitive. At best, if it were to be retained in the SFPC, it would be more appropriate for this language to be in the form of an informational note to whoever uses the SFPC.

In addition, the 2nd sentence does not relate to the 1st sentence when asking the question, what is meant by "such activities"? Not does it make sense within the 2nd sentence itself. It appears the sentence is incomplete.

Submittal Information

Date Submitted: June 3, 2013

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
Main Street Centre
600 E. Main St., Ste. 300
Richmond, VA 23219

Email Address: tsu@dhcd.virginia.gov
Fax Number: (804) 371-7092
Phone Numbers: (804) 371-7140 or (804) 371-7150

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number:_____

Proponent Information (Check one): ☐Individual ☐Government Entity ☐Company

Name: DHCD Staff Suggested Clarification of FSBCC Proposal for SFPC 108.3 (Conditions of a Permit)

Proposal Information

Code(s) and Section(s): SFPC 108.3

Proposed Change (including all relevant section numbers, if multiple sections):

Change Section 108.3 to read as shown (Changes to language in proposed regulation shown in brackets):

108.3 Conditions of a permit. An operational permit shall constitute permission to maintain, store or handle materials; or to conduct processes in accordance with the SFPC, and shall not be construed as authority to omit or amend any of the provisions of this code. ~~The building official shall issue permits to install equipment utilized in connection with such activities; or to install or modify any fire protection system or equipment or any other construction, equipment installation or modification in accordance with the provisions of this code where a permit is required by Section 108.5. Such permission shall not be construed as authority to omit or amend any of the provisions of this code.~~ [Such permission shall not be construed as authority to omit or amend any of the provisions of this code.]

[Note: The building official issues permits to install equipment utilized in connection with such activities; or to install or modify any fire protection system or equipment or any other construction, equipment installation or modification.]

Supporting Statement (including intent, need, and cost impact of the proposal):

The proposal by the FSBCC was in reaction to the deletion of the language shown above in Section 108.3 of the SFPC in the proposed 2012 SFPC. Staff deleted the language since it was a reference to a provision for construction permits in the SFPC (Section 108.5) which had been deleted in the 2006 Code Change Cycle. The FSBCC proposal added the language back as a note. The problem was that it still had a reference to Section 108.5, which is a non-existent section. In addition, both staff and the FSBCC missed that the last sentence in the section was addressing operational permits and not construction permits, so that sentence should not have been struck in the proposed regulation, nor was it appropriate to move it to the note.

This DHCD staff proposal corrects those errors by adding the last sentence back into Section 108.3 for operational permits and moving the pertinent part of the reference to permits by the building official into the note without the reference to Section 108.5, which is the section that no longer exists in the SFPC.

Submittal Information

Date Submitted: _____

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

DHCD DBFR SBCO (State Building Codes Office)
600 East Main Street

Email Address: Vernon.hodge@dhcd.virginia.gov

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number:_____

Proponent Information (Check one): ☐Individual ☐Government Entity ☐Company

Name: Robby Dawson Representing: Fire Services Board Code Committee

Mailing Address: 1005 Technology Park Drive, Glen Allen, VA 23059

Email Address: dawsonj@chesterfield.gov Telephone Number: 804-717-6838

Proposal Information

Code(s) and Section(s): Modified 609.3.3.3; New 609.3.3.3.1

Proposed Change (including all relevant section numbers, if multiple sections):

Add new text as follows:

609.3.3.3 Records. Records for inspections shall state the individual and company performing the inspection, a description of the inspection and when the inspection took place. Records for cleanings shall state the individual and company performing the cleaning and when the cleaning took place. Such records shall be completed after each inspection or cleaning~~,~~ and maintained ~~on the premises~~ for a minimum of three years and be copied to the *fire code official* upon request.

609.3.3.3.1 Tags. Where a commercial kitchen hood or duct system is cleaned, a tag containing the service provider name, address, telephone number and date of service shall be provided in a conspicuous location. Prior tags shall be covered or removed.

Exception: Where records required by Section 609.3.3.3 are maintained on the premises.

2012 Code change to Section 609.3.3.3.1 on hood inspection tag

Supporting Statement (including intent, need, and cost impact of the proposal):

The new language requires a tag or similar posting of when the last cleaning was completed. This is presently being done by a number of cleaning contractors and has proven to be beneficial while conducting inspections in the field for determining cleaning effectiveness.

The proposed text clarifies necessary marking requirements to visually confirm serviceability of commercial kitchen hood and ducting systems. The text is consistent with the requirements set forth in ANSI/IKECA C-10, which is proposed for adoption by a separate code change.

This is a replication of ICC/IFC Code Change F93-13 that was recommended for approval at the Dallas CAH with a 14-0 committee vote, with the addition of an exception that allows the business owner to maintain other written reports or documentation on site as previously required. This would allow small businesses who maintain their records locally to continue with their present practice and require larger chain operators to have some form of documentation of the cleaning of the hood in order to show the inspector when the hood was cleaned. Many larger chain operators maintain records centrally and do not have these available at the business location.

Submittal Information

Date Submitted: 6/3/2013

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

DHCD DBFR SBCO (State Building Codes Office)
600 East Main Street
Suite 300
Richmond, VA 23219

Email Address: Vernon.hodge@dhcd.virginia.gov
Fax Number: (804) 371-7092
Phone Numbers: (804) 371-7150

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number:_____

Proponent Information (Check one): ☐Individual ☐Government Entity ☐Company

Name: DHCD Staff (Suggested Alternative to FSBCC Proposal on Tagging Commercial Kitchen Hoods)

Proposal Information

Code(s) and Section(s): SFPC – IFC Section 609.3.3.3

Proposed Change (including all relevant section numbers, if multiple sections):

Modify the FSBCC proposal as follows (changes shown in brackets)

609.3.3.3 Records. Records for inspections shall state the individual and company performing the inspection, a description of the inspection and when the inspection took place. Records for cleanings shall state the individual and company performing the cleaning and when the cleaning took place. Such records shall be completed after each inspection or cleaning, maintained on the premises for a minimum of three years and be copied to the *fire code official* upon request.

Exceptions:

1. Where a commercial kitchen hood or duct system is cleaned, a tag containing the service provider name, address, telephone number and date of service shall be provided in a conspicuous location. Prior tags shall be covered or removed.

2. Where the records required by Section 609.3.3.3 can be made available within 24-hours, they are not required to be maintained on the premises.

Supporting Statement (including intent, need, and cost impact of the proposal):

In the alternative proposal, the first exception permits an owner to choose to use tags in lieu of maintaining the record of cleaning, which is consistent with the FSBCC proposal. The second exception does not use tags, but instead permits the records to be maintained offsite if they can be made available within 24-hours.

Submittal Information

Date Submitted: _____

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

TAB 2

BOARD OF HOUSING AND COMMUNITY DEVELOPMENT
CODES AND STANDARDS COMMITTEE
MEETING
October 28, 2013, 10:00 a.m.
Virginia Housing Center, Glen Allen, Virginia

Members Present	Members Absent
Mr. Anthony Clatterbuck	Mr. Steve Semones
Mr. John Ainsle	Mr. Bill Darden
Mr. J.P. Carr	Mr. Roger McLellon
Mr. Robby Dawson	
Mr. Jim Hyland	
Mr. Robert Kaplan	
Mr. Tito Munoz	
Mr. Jim Petrine	
Mr. Rick Witt	

Call to order	Mr. Anthony Clatterbuck, Chairman of the Codes and Standards Committee, called the meeting of the Committee to order.
Book 5 of the 2012 Code Change Cycle	Please see attached summary for committee actions
Book 7 of the 2012 Code Change Cycle	Please see attached summary for committee actions
Adjournment	Upon motion duly made and seconded, the meeting was adjourned.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

Supporting Statement (including intent, need, and cost impact of the proposal):

DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number:_____

Proponent Information (Check one): ☐Individual ☐Government Entity ☐Company

Name: Gregory Revels Representing: Henrico County

Mailing Address: P.O. Box 90775, Henrico, Va. 23273-0775

Email Address: rev04@co.henrico.va.us Telephone Number: 804-501-4374

Proposal Information

Code(s) and Section(s): 108.2

Proposed Change (including all relevant section numbers, if multiple sections):

108.2 Exemptions from application for permit. Notwithstanding the requirements of Section 108.1, application for a permit and any related inspections shall not be required for the following; however, this section shall not be construed to exempt such activities from other applicable requirements of this code. In addition, when an owner or an owner's agent requests that a permit be issued for any of the following, then a permit shall be issued and any related inspections shall be required.

Items 1-9 no proposed change to current text.....

Add new item 10 to read: Temporary ramps serving dwelling units in Group R-3 and R-5 occupancies where the height of the entrance served by the ramp is no more than 30 inches above grade.

Re-number the current item 10 to item 11, etc.

Supporting Statement:
Temporary ramps that provide access to the entrance door of a single family dwelling that is 30 inches or less above grade require no guardrails, and typically no handrails, per Section R311.8. These ramps are frequently erected, without permits or inspections, by volunteers to provide temporary access for the elderly and disabled, and pose minimal risk to the public. The proposed exception also clarifies that permits are required for ramps when guardrails would be required to prevent falls from walking surfaces that exceed 30 inches above the adjoining grade.

Please submit the proposal to:

DHCD DBFR SBCO (State Building Codes Office)
600 East Main Street
Suite 300
Richmond, VA 23219

Email Address: Vernon.hodge@dhcd.virginia.gov
Fax Number: (804) 371-7092
Phone Numbers: (804) 371-7150

VIRGINIA DHCD

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number:_____

Proponent Information (Check one): ☐Individual ☐Government Entity ☒Organization

Name: J. Kenneth Payne, Jr., AIA Representing: VSAIA

Mailing Address: 3200 Norfolk Street, Richmond, VA 23230

Email Address: kpayne@moseleyarchitects.com Telephone Number: 804.794.7555

Proposal Information

Code(s) and Section(s): **2012 VCC, Section 1008.1.9.7 – REVISION #2**

Proposed Change (including all relevant section numbers, if multiple sections):

1008.1.9.7 Delayed egress locks. In other than Groups A, E, and H, ~~A~~*approved, listed*, delayed egress locks shall be permitted to be installed on doors ~~serving any occupancy including Group A-3, airport facilities, except Group A, E and H occupancies~~ in buildings which are equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or an *approved* automatic smoke or heat detection system installed in accordance with Section 907, provided that the doors unlock in accordance with Items 1 through 6 below. A building occupant shall not be required to pass through more than one door equipped with a delayed egress lock before entering an *exit*.

Exception: *Approved, listed*, delayed egress locks shall be permitted to be installed on doors serving A-3 airport facilities, provided they are installed in accordance with this section.

[Items 1-6 remain unchanged]

Supporting Statement (including intent, need, and impact of the proposal):

Exceptions should not be included in charging paragraphs. It is common code syntax to isolate exceptions under their own heading.

As currently written, the syntax is confusing and could possibly be interpreted in a manner which is not consistent with the intent (as described in the 2012 IBC Commentary). For example, it appears to allow delayed egress locks in Groups A, E, and H, if those groups do not have a sprinkler, smoke, or heat detection system. The 2012 IBC syntax is also confusing. We do not believe this was the original intent, which is to not allow delayed egress locks in Groups A, E, or H – except for A-3 airport facilities (which is a USBC addition to the IBC).

Cost Impact:
No cost impact. Proposed code change is for grammatical purposes only.

Submittal Information

Date Submitted: ~~May 17, 2013~~ ~~August 23, 2013~~ October 31, 2013

VIRGINIA DHCD

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number:_____

Proponent Information (Check one): ☐Individual ☐Government Entity ☐Company

Name: Robby Dawson Representing: Self

Mailing Address: PO Box 40 Chesterfield, Virginia 23832

Email Address: dawsonj@chesterfield.gov Telephone Number: 804-717-6838

Proposal Information

Code(s) and Section(s): Section 202

Proposed Change (including all relevant section numbers, if multiple sections):

Section 202 (SFPC and USBC)

NIGHT CLUB. Any Group A-2 building ~~in which the main use is a place of public assembly~~ that provides exhibition, performance or other forms of entertainment; serves alcoholic beverages; and provides music and space for dancing.

USBC
903.2.1.2 Group A-2. An automatic sprinkler system shall be provided for Group A-2 occupancies where on of the following conditions exists:

1. The fire area exceeds 5,000 square feet (464.5 m^2);
2. The fire area has an occupant load of 100 or more ~~in night clubs or 300 or more in other Group A-2 occupancies~~; or
3. The fire area is located on a floor other than a level of exit discharge servicing such occupancies

Supporting Statement (including intent, need, and impact of the proposal):

Much confusion has been created by using differing thresholds for different uses in the USBC and model codes. The historic use of "main use" has always cased discussion between fire and building officials of what the term actually means. If a building is used as a warehouse for 99% of the time and a holds a night club like function the other 1% , The "main use" is still warehouse and therefore not subject to the A-2 requirements for any building.

Equally, the Commonwealth held numberous meetings in the aftermath of the Rhode Island Night Club fire where it was recommended that the sprinkler threshold be lowered. The model code organizations followed suit and set the limit at 100. Virginia eliminated this fire and life safety requirement without opposing data to support that decision. The code as it is written today creates conflict locally and reduces safety for the public by ignoring a key model code safety provision.

Date Submitted: 7/1/2013

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

DHCD DBFR SBCO (State Building Codes Office)
600 East Main Street
Suite 300
Richmond, VA 23219

Email Address: Vernon.hodge@dhcd.virginia.gov
Fax Number: (804) 371-7092
Phone Numbers: (804) 371-7150

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number:_____

Proponent Information (Check one): ☐Individual ☐Government Entity ☐Company

Name: Shaun Pharr, Kenney Payne

Representing: AOBA, VA AIA

Mailing Address: _____

Email Address: _____ Telephone Number: _____

Proposal Information

Code(s) and Section(s) 2012 USBC IBC 1705.16 - Delete in its entirety.

Proposed Change (including all relevant section numbers, if multiple sections):

~~**1705.16 Fire-resistant penetrations and joints.** In high-rise buildings or in buildings assigned to *Risk Category* III or IV in accordance with Section 1604.5, special inspections for through-penetrations, membrane-penetration firestops, fireresistant joint systems, and perimeter fire-barrier systems that are tested and listed in accordance with Sections 714.3.1.2, 714.4.1.2, 715.3 and 715.4 shall be in accordance with Section 1705.16.1 or 1705.16.2.~~

~~**1705.16.1 Penetration firestops.** Inspections of penetration firestop systems that are tested and listed in accordance with Sections 714.3.1.2 and 714.4.1.2 shall be conducted by an approved inspection agency in accordance with ASTM E 2174.~~

~~**1705.16.2 Fire-resistant joint systems.** Inspection of fireresistant joint systems that are tested and listed in accordance with Sections 715.3 and 715.4 shall be conducted by an approved inspection agency in accordance with ASTM E 2393.~~

This new 2012 IBC Special Inspection section will add potentially significant costs to building owners as these inspections are currently performed as part of the permit.

Concerns related to this new Special Inspection were presented at the Final Action Hearings and included testimony from the U.S. Department of General Services who stated, "We do not concur with the action of the Fire Safety Code Committee to require the need for special inspections to be conducted by an approved inspection agency in accordance with ASTM E 2174 for all penetration firestop systems and ASTM E 2393 for all fireresistant joint systems in all high-rise buildings. Typically, special inspections are only required for complex engineering systems or systems that are unusual in nature. It is our opinion that penetration firestop systems and fire resistant joint systems typically occur on every new construction project and are currently adequately addressed in Sections 110.3.6 and 110.3.8. Therefore, the need to require special inspections in all high-buildings is not warranted. In addition, the proponent has failed to provide any technical data or life loss data to substantiate that if the penetration firestop systems and fire resistant joint systems fail within any high-building, a substantial hazard to human life would occur (e.g., a fully sprinklered six story office building, etc.). It should also be pointed out that ASTM E 2174 and ASTM E 2393 do not provide any minimum qualification requirements for an "inspection agency" but does have qualification requirements for the inspector. For example, one acceptable qualification includes having a minimum of two years experience in construction field inspections and have education, credentials, and experience acceptable to the authorizing authority (i.e., architect, engineer, building owner). Therefore, we feel that these requirements should be in the project specification and not the Code".

Additional concerns were raised by NAHB who stated, "The authority having jurisdiction, under the auspice of section 1704.15 as found in the current 2009 IBC, already has the authority to require certain methods and materials to be certified by a third party. The proponent has provide no technical justification nor any historical data showing that AHJ or their inspectors are unqualified to conduct these inspection or have failed in their duties due to a loss of any magnitude. In the proponent's written testimony, there are numerous examples referencing the misapplication of products by unqualified installers, yet the proposed change takes away the ability for the AHJ to perform inspections on these products unless they are an approved inspection agency in accordance with the two ASTM standards, as referenced...this needlessly increases the number of special inspection required by the code".

Submittal Information

Date Submitted: July 1, 2013

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

DHCD DBFR SBCO (State Building Codes Office)
600 East Main Street
Suite 300
Richmond, VA 23219

Email Address: Vernon.hodge@dhcd.virginia.gov
Fax Number: (804) 371-7092
Phone Numbers: (804) 371-7150

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number:_____

Proponent Information (Check one): ☐Individual X Government Entity ☐Company

Name: Ed Altizer Representing: State Fire Marshal's Office

Mailing Address: 1005 Technology Park Drive, Glen Allen, VA 23059

Email Address: ed.altizer@vdfp.virginia.gov Telephone Number: 804-371-0220

Proposal Information

Code(s) and Section(s):

Proposed Change (including all relevant section numbers, if multiple sections):

1008.1.9.8 (IFC [B] 1008.1.9.8) ~~Access controlled~~ Sensor release of electrically locked egress doors. Electromagnetically locked ~~The entrance~~ doors located in a means of egress in buildings with an occupancy in Groups A, B, E, I-2, M, R-1 or R-2 and entrance doors to tenant spaces in occupancies in groups A, B, E, I-2, M, R-1 or R-2 are permitted ~~to be equipped with an approved entrance and egress access control system, listed in accordance with UL 294, which shall be~~ where installed and operated in accordance with all of the following criteria:

1. A motion sensor shall be provided on the egress side arranged to detect an occupant approaching the doors. The doors shall be arranged to unlock by a signal from or loss of power to the sensor.
2. Loss of power to ~~that~~ the lock ~~part of the access control system which locks the doors~~ shall automatically unlock the doors.
3. The doors shall be arranged to unlock from a manual unlocking device located 40 inches to 48 inches (1016mm to 1219mm) vertically above the floor and within 5 feet (1524mm) of the secured doors. Ready access shall be provided to the manual unlocking device and the device shall be clearly identified by a sign that reads "PUSH TO EXIT." When operated, the manual unlocking device shall result in direct interruption of power to the lock—independent of ~~the access control system~~ other electronics—and the doors shall remain unlocked for a minimum of 30 seconds.
4. Activation of the building fire alarm system, if provided, shall automatically unlock the doors, and the doors shall remain unlocked until the fire alarm system has been reset.
5. Activation of the building automatic sprinkler or fire detection system, if provided, shall automatically unlock the doors. The doors shall remain unlocked until the fire alarm system has been reset.
6. ~~Entrance doors in buildings with an occupancy in Group A, B, E, or M shall not be secured from the egress side during periods that the building is open to the general public.~~ All components of the door locking system shall be listed in accordance with UL 294.

Supporting Statement (including intent, need, and cost impact of the proposal):

This change is a combination of ICC code changes E78-12 and E80-12. E79-12 was withdrawn by the proponent due to the successful action to modify E78. Below are copies of the proposed changes to the IBC, the supporting reasons, and the IBC Egress Committee reason statements.

This change is also supported by the FSBCC at its May 30, 2013 meeting.

E78-12

1008.1.9.8 (IFC [B] 1008.1.9.8)

Proponent: John Williams, CBO, Chair, ICC Ad Hoc Committee on Health Care and Carl Baldassarra, P.E., FSFPE, Chair, ICC Code Technology Committee

Revise as follows:

1008.1.9.8 (IFC [B] 1008.1.9.8) ~~Access controlled~~ Motion sensor release of electromagnetically locked egress doors. Electromagnetically locked ~~The entrance~~ doors located in a means of egress in buildings with an occupancy in Groups A, B, E, I-2, M, R-1 or R-2 and entrance doors to tenant spaces in occupancies in groups A, B, E, I-2, M, R-1 or R-2 are permitted ~~to be equipped with an approved entrance and egress access control system, listed in accordance with UL 294,~~ which shall be where installed and operated in accordance with all of the following criteria:

1. A motion sensor shall be provided on the egress side arranged to detect an occupant approaching the doors. The doors shall be arranged to unlock by a signal from or loss of power to the sensor.
2. Loss of power to ~~that~~ the lock ~~part of the access control system which locks the~~ doors shall automatically unlock the doors.
3. The doors shall be arranged to unlock from a manual unlocking device located 40 inches to 48 inches (1016mm to 1219mm) vertically above the floor and within 5 feet (1524mm) of the secured doors. Ready access shall be provided to the manual unlocking device and the device shall be clearly identified by a sign that reads "PUSH TO EXIT." When operated, the manual unlocking device shall result in direct interruption of power to the lock—independent of ~~the access control system~~ other electronics—and the doors shall remain unlocked for a minimum of 30 seconds.
4. Activation of the building fire alarm system, if provided, shall automatically unlock the doors, and the doors shall remain unlocked until the fire alarm system has been reset.
5. Activation of the building automatic sprinkler or fire detection system, if provided, shall automatically unlock the doors. The doors shall remain unlocked until the fire alarm system has been reset.
6. Entrance doors in buildings with an occupancy in Group A, B, E, or M shall ~~not be secured from the~~ always allow immediate free egress ~~side~~ during periods that the building is open to the general public.
7. All components of the door locking system shall be listed in accordance with UL 294.

Reason: This code was originally proposed to NFPA, UBC/UFC, and BOCA as an **alternative** way to release electromagnetic locks. It came from Washington, D.C. security contractors in the early 1980s when faced with installing electromagnetic locks on hundreds of all glass doors on defense contractors' facilities. There was no way to install bars with switches and no way to conceal the wiring. The title, Access Controlled Egress Doors, **meant** that access to free egress was controlled. It had nothing to do with the (then) new *electronic access control systems.*

The code addressed fire safety by taking aspects of devices not allowed and making them safer when used together. Buttons, once special knowledge, were given specific placement parameters and requirements to break the power to the lock, directly; the somewhat unreliable motion sensor was backed up by the button; the 30 second re-triggerable and independent timer attached to the button protected against CPU failure and allowed 30 seconds before relocking so the disabled could get through the door; and the connection to the fire system meant that the door would unlock upon alarm. It was an alternate code, designed to be used sparingly and in certain situations.

This code is used heavily in hospitals, but its application is often misunderstood. It is time to clean up this code by eliminating confusing references to *access control systems*, directly or implied. Access has never been an issue for the codes, except in high-rise stair towers.

This proposal is submitted by the ICC Ad Hoc Committee for Healthcare (AHC). The AHC was established by the ICC Board of Directors to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. The AHC is composed of building code officials, fire code officials, hospital facility engineers, and state healthcare enforcement representatives. The goals of the committee are to ensure that the ICC family of codes appropriately addresses the fire and life safety concerns of a highly specialized and rapidly evolving healthcare delivery system. This process is part of a joint effort between ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Since its inception in April, 2011, the AHC has held 5 open meetings and over 80 workgroup calls which included members of the AHC as well as any interested party to discuss and debate the

proposed changes. All meeting materials and reports are posted on the AHC website at: http://www.iccsafe.org/cs/AHC/Pages/default.aspx

This proposal is being co-sponsored by the ICC Code Technology Committee. The ICC Board established the ICC Code Technology Committee (CTC) as the venue to discuss contemporary code issues in a committee setting which provides the necessary time and flexibility to allow for full participation and input by any interested party. The code issues are assigned to the CTC by the ICC Board as "areas of study". Information on the CTC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the following website: http://www.iccsafe.org/cs/cc/ctc/index.html. Since its inception in April, 2005, the CTC has held twenty-two meetings – all open to the public.

E79 – 12

1008.1.9.8 (IFC [B] 1008.1.9.8)

Proponent: John Woestman, Kellen Company, representing Builders Hardware Manufacturers Association (BHMA) (jwoestman@kellencompany.com)

Revise as follows:

1008.1.9.8 (IFC [B] 1008.1.9.8) ~~Access controlled~~ Electrically locked egress doors. Electically locked ~~The entrance~~ doors without a door mounted manual lock release located in a means of egress in buildings with an occupancy in Groups A, B, E, I-2, M, R-1 or R-2 and entrance doors to tenant spaces in occupancies in groups A, B, E, I-2, M, R-1 or R-2 ~~are~~ shall be permitted ~~to be equipped with an approved entrance and egress access control system, listed in accordance with UL 294, which shall be~~ where installed and operated in accordance with all of the following criteria:

1. A sensor shall be provided on the egress side arranged to detect an occupant approaching the doors. The doors shall be arranged to unlock by a signal from or loss of power to the sensor.
2. Loss of power to ~~that~~ the lock ~~part of the access control system which locks the doors~~ shall automatically unlock the doors.
3. The doors shall be arranged to unlock from a manual unlocking device located 40 inches to 48 inches (1016mm to 1219mm) vertically above the floor and within 5 feet (1524mm) of the secured doors. Ready access shall be provided to the manual unlocking device and the device shall be clearly identified by a sign that reads "PUSH TO EXIT." When operated, the manual unlocking device shall result in direct interruption of power to the lock—independent of the ~~access control~~ locking system electronics—and the doors shall remain unlocked for a minimum of 30 seconds.
4. Activation of the building fire alarm system, if provided, shall automatically unlock the doors, and the doors shall remain unlocked until the fire alarm system has been reset.
5. Activation of the building automatic sprinkler or fire detection system, if provided, shall automatically unlock the doors. The doors shall remain unlocked until the fire alarm system has been reset.
6. Entrance doors in buildings with an occupancy in Group A, B, E, or M shall ~~not be secured from the~~ always allow immediate free egress side during periods that the building is open to the general public.
7. The components of the door locking system shall be listed in accordance with UL 294.

Reason: Changes above illustrate BHMA's suggested revisions from the 2012 IBC incorporating the ICC AHC MOE work group's proposed revisions, and further BHMA revisions. Revisions are to the main paragraph, Items 1, 3 and 7.

The doors included in this section utilize electrical components in their locking systems to help ensure egress. These systems use a sensor to recognized the presence of a pedestrian, and then unlock the electrical lock (such as an electromagnetic lock) but these electrical locking systems are also required to be unlockable by a manually operated button mounted on the wall on the egress side of the door (Item 3 of the criteria). Regarding the sensors, the sensor technologies used with these doors may not technically be a motion sensor.

Access-controlled egress doors are commonly configured without a door-mounted manual lock release on the egress side such as panic hardware. These doors usually require a magnetic card or similar instrument for authorized entry, and the absence of the door-mounted manual lock release on the egress side prevents a person on the outside from inserting a wire or similar tool between the gaps in the door edges to release the lock.

The other revisions are essentially editorial or help to clarify the intent.

Background: the Builders Hardware Manufacturers Association (BHMA) members have been observing the AHC and CTC meetings and activities with most interest in the potential code proposals that may have implications to the means of egress, and to doors and door hardware requirements.

The BHMA Codes and Government Affairs (CGA) committee met immediately after the Orlando ICC AHC meeting for a final look-see at the proposed language. Many of the BHMA CGA members had reviewed the draft AHC MOE language individually without identifying concern or opportunities for improvement. But when together in Orlando, the BHMA members identified several opportunities for further revision to the AHC proposals.

We've captured our suggestions for additional considerations in this proposal. We're not wanting to circumvent the work of the AHC and CTC; that's why several of us have been attending the AHC and CTC meetings and phone calls. We just did not recognize some of the opportunities while reviewing the language individually, and only when the BHMA CGA committee got together for – what we thought would be – a quick final review, did we realize several concerns and opportunities for revisions

E80 – 12

1008.1.9.8 (IFC [B] 1008.1.9.8)

Proponent: Robert Trotter, representing Tennessee Code Development Committee (bobtrotter1023@aol.com)

Revise as follows:

1008.1.9.8 (IFC [B] 1008.1.9.8) Access-controlled egress doors. The entrance doors in a means of egress in buildings with an occupancy in Group A, B, E, M, R-1 or R-2 and entrance doors to tenant spaces in occupancies in Groups A, B, E, M, R-1 and R-2 are permitted to be equipped with an approved entrance and egress access control system, listed in accordance with UL 294, which shall be installed in accordance with all of the following criteria:

1. A sensor shall be provided on the egress side arranged to detect an occupant approaching the doors. The doors shall be arranged to unlock by a signal from or loss of power to the sensor.
2. Loss of power to that part of the access control system which locks the doors shall automatically unlock the doors.
3. The doors shall be arranged to unlock from a manual unlocking device located 40 inches to 48 inches (1016 mm to 1219 mm) vertically above the floor and within 5 feet (1524 mm) of the secured doors. Ready access shall be provided to the manual unlocking device and the device shall be clearly identified by a sign that reads "PUSH TO EXIT." When operated, the manual unlocking device shall result in direct interruption of power to the lock—independent of the access control system electronics—and the doors shall remain unlocked for a minimum of 30 seconds.
4. Activation of the building fire alarm system, if provided, shall automatically unlock the doors, and the doors shall remain unlocked until the fire alarm system has been reset.
5. Activation of the building automatic sprinkler or fire detection system, if provided, shall automatically unlock the doors. The doors shall remain unlocked until the fire alarm system has been reset.
6. ~~Entrance doors in buildings with an occupancy in Group A, B, E or M shall not be secured from the egress side during periods that the building is open to the general public.~~

Reason: The sixth criterion is redundant and should be removed from the code. The first five requirements satisfactorily meet the needs for access-controlled egress doors. The doors are not secured from the egress side when the first five criterions are met.

E78-12

Committee Action: Approved as Modified

Modify proposal as follows:

1008.1.9.8 (IFC [B] 1008.1.9.8) ~~Motion~~ Sensor release of ~~electromagnetically~~ electrically locked egress doors.

~~Electromagnetically locked~~ The electric locks on sensor released doors located in a means of egress in buildings with an occupancy in Groups A, B, E, I-2, M, R-1 or R-2 and entrance doors to tenant spaces in occupancies in groups A, B, E, I-2, M, R-1 or R-2 are permitted where installed and operated in accordance with all of the following criteria:

1. ~~A motion~~ The sensor shall be ~~provided~~ installed on the egress side arranged to detect an occupant approaching the doors. The doors shall be arranged to unlock by a signal from or loss of power to the sensor.
2. Loss of power to the lock or locking system shall automatically unlock the doors.

3 through 6 *(no change)*

7. ~~All components of~~ The door locking system units shall be listed in accordance with UL 294.

Committee Reason: The modification coordinates with the terminology used in the referenced standard, UL 294 and recognizes that locks are part of a system. The modification also coordinates with the suggested language clarifications brought up in E79. The revision to the title and the start of the section allows for a variety of types of sensors and electric locks. The updated language will improve consistency between the code and the industry. The reference to UL294 would provide consistency between the different types of access control systems.

Assembly Action: None

E79-12

Committee Action: Disapproved

Committee Reason: The issues are addressed and coordinated in E78 with the modifications.

Assembly Action: None

E80-12

Committee Action: Approved as Submitted

Committee Reason: Deletion of Item 6 removes redundant language in this section. The committee agreed

that the doors are effectively open for egress if Items 1 through 5 are met.
Assembly Action: None

Submittal Information

Date Submitted: 6/3/13 by GAD for SFMO

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

DHCD DBFR SBCO (State Building Codes Office)
600 East Main Street
Suite 300
Richmond, VA 23219

Email Address: Vernon.hodge@dhcd.virginia.gov
Fax Number: (804) 371-7092
Phone Numbers: (804) 371-7150

(E77 AS, E78 AM, E80 AS) 1010.1.9.8 ~~1008.1.9.8~~ ~~Access controlled~~ Sensor release of electrically locked egress doors. The electric locks on sensor released ~~The entrance~~ doors located in a means of egress in buildings with an occupancy in Group~~s~~ A, B, E, I-1, I-2, I-4, M, R-1 or R-2 and entrance doors to tenant spaces in occupancies in Group~~s~~ A, B, E, I-1, I-2, I-4, M, R-1 or R-2 are permitted ~~to be equipped with an approved entrance and egress access control system, listed in accordance with UL 294, which shall be~~ where installed and operated in accordance with all of the following criteria:

1. ~~A~~ The sensor shall be ~~provided~~ installed on the egress side arranged to detect an occupant approaching the doors. The doors shall be arranged to unlock by a signal from or loss of power to the sensor.
2. Loss of power to ~~that~~ the lock or locking system ~~part of the access control system which locks the doors~~ shall automatically unlock the doors.
3. The doors shall be arranged to unlock from a manual unlocking device located 40 inches to 48 inches (1016 mm to 1219 mm) vertically above the floor and within 5 feet (1524 mm) of the secured doors. Ready access shall be provided to the manual unlocking device and the device shall be clearly identified by a sign that reads "PUSH TO EXIT." When operated, the manual unlocking device shall result in direct interruption of power to the lock—independent of ~~the access control system other~~ locking system electronics—and the doors shall remain unlocked for ~~a minimum of~~ not less than 30 seconds.
4. Activation of the building fire alarm system, if provided, shall automatically unlock the doors, and the doors shall remain unlocked until the fire alarm system has been reset.
5. Activation of the building automatic sprinkler or fire detection system, if provided, shall automatically unlock the doors. The doors shall remain unlocked until the fire alarm system has been reset.
6. ~~Entrance doors in buildings with an occupancy in Group A, B, E, or M shall not be secured from the egress side during periods that the building is open to the general public.~~
6. The door locking system units shall be listed in accordance with UL 294.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number:_____

Proponent Information (Check one): ☐ Individual ☒ Government Entity ☐ Company

Name: DHCD Staff

Representing:

Proposal Information

Code(s) and Section(s):VCC, IRC Section E3902.2

Proposed Change (including all relevant section numbers, if multiple sections):

Add the following exception to Section E3902.2 of the IRC:

E3902.2 Garage and accessory building receptacles. All 125-volt single-phase, 15- and 20-ampere receptacles installed in garages and grade-level portions of unfinished accessory buildings used for storage or work areas shall have ground-fault circuit-interrupter protection for personnel.

Exception: For other than the receptacle outlets required by Section E3901.9, a single (simplex) receptacle in a garage on a dedicated circuit for each refrigeration appliance or a single (simplex) receptacle for each garage door opener shall not be required to have ground-fault circuit-interrupter protection for personnel.

Supporting Statement (including intent, need, and cost impact of the proposal):

This proposal is based on discussion at the May 20, 2013 BHCD meeting where it was suggested that the need for GFCI protection is minimal when outlets are used solely for refrigeration appliances in garages or for garage door openers and the exceptions would prevent nuisance tripping of GFCI devices which can lead to loss of freezer contents or the ability of a garage door opener to operate. NEMA and IAEI are opposed to this proposal.

Submittal Information

Date Submitted: June 18, 2013 (Revised October 15, 2013)

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

DHCD DBFR SBCO (State Building Codes Office)
600 East Main Street
Suite 300
Richmond, VA 23219

Email Address: Vernon.hodge@dhcd.virginia.gov
Fax Number: (804) 371-7092
Phone Numbers: (804) 371-7150

Tab 2
Dec 16 Comments

Rodgers, Emory (DHCD)

From: Rodgers, Emory (DHCD)
Sent: Friday, November 08, 2013 12:29 PM
To: Abernathy, Paul
Cc: Firestone, Janice (DHCD); caseylittlefieldmcp@gmail.com; Davis, Cindy (DHCD); Hodge, Vernon (DHCD); Potts, Richard (DHCD); Calhoun, Steve (DHCD); Kris Bridges; Bajnai, Charles
Subject: RE: Revised GFCI Proposal

Thanks, we will include your specific concern in the Board package.

-----Original Message-----
From: Abernathy, Paul [mailto:Paul.Abernathy@Nema.org]
Sent: Friday, November 08, 2013 12:24 PM
To: Rodgers, Emory (DHCD)
Cc: Firestone, Janice (DHCD); caseylittlefieldmcp@gmail.com; Davis, Cindy (DHCD); Hodge, Vernon (DHCD); Potts, Richard (DHCD); Calhoun, Steve (DHCD); Kris Bridges; Bajnai, Charles
Subject: Re: Revised GFCI Proposal

Emory,

My concern is this proposal started in garages and is also now moving out into basements now. We discussed garages during workgroups and the proposal has rapidly changed and is now totally different and will warrant a motion after what ever happens on Dec 16 for a new public hearing.

Best Regards,

Paul W. Abernathy
NEMA Southern Field Representative
1-703-646-0381
1-972-358-0543 (Verizon)
Paul.Abernathy@nema.org
Http://www.nema.org

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> On Nov 8, 2013, at 12:03 PM, "Rodgers, Emory (DHCD)" <Emory.Rodgers@dhcd.virginia.gov> wrote:
>
> Paul, we will include your comments in the board book being prepared regarding the latest revision for GFCI. This issue, as you note, has been the subject to several workgroup meetings and also testimony at required public hearings. At the BHCD's CSC on October 28th, this was one of 9 issues that the BHCD's CSC asked to be carried-over again that staff was directed to revise the previously amended code change. All revised changes are being vetted with stakeholders, and is, exactly why we have sent this one to you and Casey. The BHCD's CSC on December 16th and the full BHCD later that day will hear comments for the carried-over items. This code change and revised ones still remain as non-consensus. The regulatory

Rodgers, Emory (DHCD)

TAB 2

From: Rodgers, Emory (DHCD)
Sent: Friday, November 08, 2013 12:03 PM
To: Firestone, Janice (DHCD); caseylittlefieldmcp@gmail.com
Cc: Davis, Cindy (DHCD); Hodge, Vernon (DHCD); Potts, Richard (DHCD); Calhoun, Steve (DHCD); Kris Bridges; 'Bajnai, Charles'; 'paul.abernathy@nema.org'
Subject: RE: Revised GFCI Proposal

Paul, we will include your comments in the board book being prepared regarding the latest revision for GFCI. This issue, as you note, has been the subject to several workgroup meetings and also testimony at required public hearings. At the BHCD's CSC on October 28th, this was one of 9 issues that the BHCD's CSC asked to be carried-over again that staff was directed to revise the previously amended code change. All revised changes are being vetted with stakeholders, and is, exactly why we have sent this one to you and Casey. The BHCD's CSC on December 16th and the full BHCD later that day will hear comments for the carried-over items. This code change and revised ones still remain as non-consensus. The regulatory process has several more steps. The next step is approval of the final regulations on December 16th; then publication of the regulations; then there is a petition process; and, then there is another Board meeting for any petitioned issues.

The DHCD staff is often asked to prepare code changes on behalf of the Board and also where staff needs to point out to the Board a new code section that might have impact here in Virginia not covered in the ICC process. Our regulatory process has been for decades inclusive, open, having numerous workgroup meetings and at least 2 public hearings during the 24 months typically it takes to complete the process.

Our plan is to send out to the Board their December 16th package around November 25th should you have further comments to submit besides this email.

-----Original Message-----
From: Firestone, Janice (DHCD)
Sent: Friday, November 08, 2013 10:39 AM
To: Rodgers, Emory (DHCD)
Cc: Davis, Cindy (DHCD); Hodge, Vernon (DHCD); Potts, Richard (DHCD)
Subject: FW: Revised GFCI Proposal

FYI...

Janice Firestone
Department of Housing and Community Development Division of Building and Fire Regulations
804-371-7150

DHCD is on Facebook, Twitter, and YouTube!

-----Original Message-----
From: Abernathy, Paul [mailto:Paul.Abernathy@Nema.org]
Sent: Friday, November 08, 2013 10:21 AM
To: Firestone, Janice (DHCD); Calhoun, Steve (DHCD)
Cc: CLITTLEFIELD@LOUISA.ORG; rebartell@co.hanover.va.us; bajnaic@chesterfield.gov
Subject: Re: Revised GFCI Proposal

Janice,

The problem is that the BHCD and the DHCD are now making changes, modifications and proposals that have not received proper public comment. The DHCD has now changes this proposal no less that 3 times and its gets more dangerous every time it is edited. The entire process is being pushed behind closed doors and not in a public forum for comment. You have now introduced multiple proposals that change everything discussed.

I will be pointing this to our legal council for input on the methods being followed here as it seems to me that this should be open to public comment.

Best Regards,

Paul W. Abernathy
NEMA Southern Field Representative
1-703-646-0381
1-972-358-0543 (Verizon)
Paul.Abernathy@nema.org<mailto:Paul.Abernathy@nema.org>
Http://www.nema.org

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On Nov 8, 2013, at 9:23 AM, "Firestone, Janice (DHCD)" <Janice.Firestone@dhcd.virginia.gov<mailto:Janice.Firestone@dhcd.virginia.gov>> wrote:

Good morning,

Attached is the latest revised code change for the GFCI proposal that will go into the December 16th Board packet. Emory asked that I forward it to you. Please let us know if you have any comments or questions. Thanks.

Janice Firestone
Department of Housing and Community Development Division of Building and Fire Regulations
804-371-7150
DHCD is on Facebook<http://www.facebook.com/vadhcd>, Twitter<http://www.twitter.com/vadhcd>, and YouTube<http://www.youtube.com/VirginiaDHCD>!
<Code Change - CRE3902.2(4), Staff.docx>

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VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number:_____

Proponent Information (Check one): ☐Individual ☐Government Entity ☐Company

Name: Mike Toalson, HBAV

Proposal Information

Code(s) and Section(s): VCC (IRC)

Proposed Change (including all relevant section numbers, if multiple sections):

Change the definition of "Attic, habitable" in the IRC to read as shown below:

ATTIC, HABITABLE. A finished or unfinished area, not considered a *story*, complying with all of the following requirements:

1. The occupiable floor area is at least 70 square feet (17m^2), in accordance with Section R304,
2. The occupiable floor area has a ceiling height in accordance with Section R305, and
3. The occupiable space is enclosed by the roof assembly above, knee walls (if applicable) on the sides and the floor-ceiling assembly below.

Habitable attics greater than 2/3 of the area of the story below or over 400 square feet shall not be permitted in dwellings or townhouses that are three stories above grade plane in height.

Supporting Statement (including intent, need, and cost impact of the proposal):

The intent of this proposal is to restore the number of habitable area stories above grade to three, consistent with scope of the IRC. R101.2 'Scope' limits the application of the IRC to one- and two-family dwellings and townhouses "not more than three stories above grade plane in height"...; the current language in the 'Attic, Habitable' definition: "not considered a story" allows for an additional habitable level above the three story limitation, or in practical terms - a fourth story. However, language is added to permit a habitable attic above the third floor if such attic is equal to or less than 2/3 of the area of the story below with a limit of 400 square feet.

Cost impact: There is no cost impact in this change.

Submittal Information

Please submit the proposal to:

DHCD DBFR SBCO (State Building Codes Office)
600 East Main Street
Suite 300
Richmond, VA 23219

Email Address: Vernon.hodge@dhcd.virginia.gov
Fax Number: (804) 371-7092
Phone Numbers: (804) 371-7150

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information (Check one): ☐ Individual ☐ Government Entity Company

Name: Guy Tomberlin

Representing: Fairfax County and VPMIA/VBCOA Code Committees

Mailing Address: 12055 Government Center Parkway Fairfax, Virginia 22030

Email Address: guy.tomberlin@fairfaxcounty.gov Telephone Number: 703-324-1611

Proposal Information
Code(s) and Section(s): VECC Section 403.6

Proposed Change (including all relevant section numbers, if multiple sections):

Add new exception. VECC Section **403.6** add new text and **Exception** with text as follows:

VECC - R403.6

Revise as follows:

R403.6 Equipment/appliance Sizing (Mandatory). Heating and cooling equipment and appliances shall be sized in accordance with ACCA Manual S based on building loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies.

Exception: Heating and cooling equipment and appliances shall not be limited to the capacities determined in accordance with Manual S where any of the following conditions apply:

1- The specified equipment or appliance utilizes multi-stage technology or variable refrigerant flow technology and the loads calculated in accordance with Manual J fall within the range of the manufacturer's published capacities for that equipment or appliance.
2- The specified equipment or appliance manufacturer's published capacities cannot satisfy both the total and sensible heat gains calculated in accordance with Manual J and the manufacturer's next larger standard size unit is specified.
3- The specified equipment or appliance is the lowest capacity unit available from the specified manufacturer.

Supporting Statement (including intent, need, and impact of the proposal):
Item 1 - Current technology is widely available that incorporates multi-stage or VRF systems for increased efficiency. Some of these appliances have such a wide span of functionality that they extend beyond the allowable requirements outlined in Manual S. However, this technology allows the appliance to operate between minimum and maximum capacities, based on loads imposed, thus eliminating the problems associated with single-stage, oversized appliances. Additionally, the appliance will operate efficiently during times where outdoor air temperatures exceed those used to calculate the loads in Manual J.

Item 2 - Often times, the appliance manufacturer's published total and sensible capacities are at odds with the requirements of Manual S. There are many cases where the total capacity of the appliance will fall within the parameters of Manual S in relation to the calculated total gain, however the sensible capacity of the appliance may fall short of the calculated sensible gain, thus unable to provide efficient sensible cooling for the space. When the manufacturer's next standard size larger is chosen to meet the sensible gain, the total capacity of the appliance may then exceed the requirements of Manual S. Choosing the larger appliance will enable a more efficient and effective system.

Item 3 - The current code language does not have provisions for sizing appliances for minimal dwelling unit or dwelling addition loads, other than forcing owners and contractors to change appliances to less desirable systems. For example; a 2 story townhouse, in climate zone 4, with 600 square feet per floor wants to utilize a two-zone system, or a separate heat pump system for each floor. A 1.5 ton unit per floor would exceed the requirements of Manual S, however a 1.5 ton unit is the smallest available appliance by the desired manufacturer. Current language would require a complete design change, such as utilizing a single appliance to serve the entire dwelling rather than the more desirable two-zone system, or requiring a system that utilizes electric baseboard heating and window-mounted air conditioning units. This is absurd, and an injustice to an owner that desires to reduce energy costs.

Submittal Information

Date Submitted: _____

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
The Jackson Center
501 N. 2nd Street
Richmond, VA 23219-1321

Email Address: taso@dhcd.virginia.gov
Fax Number: (804) 371-7092
Phone Numbers: (804) 371-7140 or (804) 371-7150

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information (Check one): ☐Individual ☐Government Entity Company

Name: Guy Tomberlin

Representing: Fairfax County and VPMIA/VBCOA Code Committees

Mailing Address: 12055 Government Center Parkway Fairfax, Virginia 22030

Email Address: guy.tomberlin@fairfaxcounty.gov Telephone Number: 703-324-1611

Proposal Information
Code(s) and Section(s): VECC Section R403.6 (Original proposal to be used as revised by this proposal)

Proposed Change (including all relevant section numbers, if multiple sections):

Add new exception. VECC Section **R403.6** to remain unchanged but add new **Exception** with text as follows:

R403.6 Equipment/appliance Sizing. Heating and cooling equipment and appliances shall be sized in accordance with ACCA Manual S or other approved sizing methodologies based on building loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies.

Exception: Heating and cooling equipment and appliances sizing shall not be limited to the capacities determined in accordance with Manual S or other approved sizing methodologies where any of the following conditions apply:

1. The specified equipment or appliance utilizes multi-stage technology or variable refrigerant flow technology and the loads calculated in accordance with ~~Manual J~~ the approved heating and cooling methodology fall within the range of the manufacturer's published capacities for that equipment or appliance.
2. The specified equipment or appliance manufacturer's published capacities cannot satisfy both the total and sensible heat gains calculated in accordance with ~~Manual J~~ the approved heating and cooling methodology and the ~~manufacturer's~~ next larger standard size unit is specified.
3. The specified equipment or appliance is the lowest capacity unit available from the specified manufacturer.

(DHCD Staff Note: The proposal has been modified to add back in Exception #3 as requested by the proponent.)

Supporting Statement (including intent, need, and impact of the proposal):
After listening to the discussions presented during the ICC Committee Action Hearings, we have incorporated those concerns within this modification. The first being the addition of "other approved sizing methodologies". ACCA's Manual S is not the ***only*** approved, appropriate sizing methodology available to size residential HVAC equipment. The current language would not permit other sizing methodologies such as ASHRAE's Handbook series. The second modification was to reword the language to provide clarity to the text. The third modification was to remove the third exception based on concerns voiced during testimony about the broad aspects that such an exception would permit.

The following is from the original reason statement:

Item 1 - Current technology is widely available that incorporates multi-stage or VRF systems for increased efficiency. Some of these appliances have such a wide span of functionality that they extend beyond the allowable requirements outlined in Manual S. However, this technology allows the appliance to operate between minimum and maximum capacities, based on loads imposed, thus eliminating the problems associated with single-stage, oversized appliances. Additionally, the appliance will operate efficiently during times where outdoor air temperatures exceed those used to calculate the loads in Manual J.

Item 2 - Often times, the appliance manufacturer's published total and sensible capacities are at odds with the

requirements of Manual S. There are many cases where the total capacity of the appliance will fall within the parameters of Manual S in relation to the calculated total gain, however the sensible capacity of the appliance may fall short of the calculated sensible gain, thus unable to provide efficient sensible cooling for the space. When the manufacturer's next standard size larger is chosen to meet the sensible gain, the total capacity of the appliance may then exceed the requirements of Manual S. Choosing the larger appliance will enable a more efficient and effective system.

Submittal Information

Date Submitted: _____

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
The Jackson Center
501 N. 2nd Street
Richmond, VA 23219-1321

Email Address: taso@dhcd.virginia.gov
Fax Number: (804) 371-7092
Phone Numbers: (804) 371-7140 or (804) 371-7150

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information (Check one): ☐ Individual ☐ Government Entity Company

Name: Guy Tomberlin

Representing: Fairfax County and VPMIA/VBCOA Code Committees

Mailing Address: 12055 Government Center Parkway Fairfax, Virginia 22030

Email Address: guy.tomberlin@fairfaxcounty.gov Telephone Number: 703-324-1611

Proposal Information
Code(s) and Section(s): VRC Section M1401.3

Proposed Change (including all relevant section numbers, if multiple sections):

Add new exception. VIRC Section **M1401.3** add new text and **Exception** with text as follows:

VRC M1401.3

Revise as follows:

M1401.3 Equipment/appliance Sizing. Heating and cooling equipment and appliances shall be sized in accordance with ACCA Manual S based on building loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies.

Exception: Heating and cooling equipment and appliances shall not be limited to the capacities determined in accordance with Manual S where any of the following conditions apply:

1- The specified equipment or appliance utilizes multi-stage technology or variable refrigerant flow technology and the loads calculated in accordance with Manual J fall within the range of the manufacturer's published capacities for that equipment or appliance.
2- The specified equipment or appliance manufacturer's published capacities cannot satisfy both the total and sensible heat gains calculated in accordance with Manual J and the manufacturer's next larger standard size unit is specified.
3- The specified equipment or appliance is the lowest capacity unit available from the specified manufacturer.

Supporting Statement (including intent, need, and impact of the proposal):
Item 1 - Current technology is widely available that incorporates multi-stage or VRF systems for increased efficiency. Some of these appliances have such a wide span of functionality that they extend beyond the allowable requirements outlined in Manual S. However, this technology allows the appliance to operate between minimum and maximum capacities, based on loads imposed, thus eliminating the problems associated with single-stage, oversized appliances. Additionally, the appliance will operate efficiently during times where outdoor air temperatures exceed those used to calculate the loads in Manual J.

Item 2 - Often times, the appliance manufacturer's published total and sensible capacities are at odds with the requirements of Manual S. There are many cases where the total capacity of the appliance will fall within the parameters of Manual S in relation to the calculated total gain, however the sensible capacity of the appliance may fall short of the calculated sensible gain, thus unable to provide efficient sensible cooling for the space. When the manufacturer's next standard size larger is chosen to meet the sensible gain, the total capacity of the appliance may then exceed the requirements of Manual S. Choosing the larger appliance will enable a more efficient and effective system.

Item 3 - The current code language does not have provisions for sizing appliances for minimal dwelling unit or dwelling addition loads, other than forcing owners and contractors to change appliances to less desirable systems. For example; a 2 story townhouse, in climate zone 4, with 600 square feet per floor wants to utilize a two-zone system, or a separate heat pump system for each floor. A 1.5 ton unit per floor would exceed the requirements of Manual S, however a 1.5 ton unit is the smallest available appliance by the desired manufacturer. Current language would require a complete design change, such as utilizing a single appliance to serve the entire dwelling rather than the more desirable two-zone system, or requiring a system that utilizes electric baseboard heating and window-mounted air conditioning units. This is absurd, and an injustice to an owner that desires to reduce energy costs.

Submittal Information

Date Submitted: _____

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
The Jackson Center
501 N. 2nd Street
Richmond, VA 23219-1321

Email Address: taso@dhcd.virginia.gov
Fax Number: (804) 371-7092
Phone Numbers: (804) 371-7140 or (804) 371-7150

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information (Check one): ☐Individual ☐Government Entity Company

Name: Guy Tomberlin

Representing: Fairfax County and VPMIA/VBCOA Code Committees

Mailing Address: 12055 Government Center Parkway Fairfax, Virginia 22030

Email Address: guy.tomberlin@fairfaxcounty.gov Telephone Number: 703-324-1611

Proposal Information
Code(s) and Section(s): VRC Section M1401.3 (Original proposal to be used as revised by this proposal)

Proposed Change (including all relevant section numbers, if multiple sections):

Add new exception. VRC Section **M1401.3** to remain unchanged but add new **Exception** with text as follows:

M1401.3 Equipment/appliance Sizing. Heating and cooling equipment and appliances shall be sized in accordance with ACCA Manual S or other approved sizing methodologies based on building loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies.

Exception: Heating and cooling equipment and appliances sizing shall not be limited to the capacities determined in accordance with Manual S or other approved sizing methodologies where any of the following conditions apply:

1. The specified equipment or appliance utilizes multi-stage technology or variable refrigerant flow technology and the loads calculated in accordance with ~~Manual J~~ the approved heating and cooling methodology fall within the range of the manufacturer's published capacities for that equipment or appliance.
2. The specified equipment or appliance manufacturer's published capacities cannot satisfy both the total and sensible heat gains calculated in accordance with ~~Manual J~~ the approved heating and cooling methodology and the ~~manufacturer's~~ next larger standard size unit is specified.
3. The specified equipment or appliance is the lowest capacity unit available from the specified manufacturer.

(DHCD Staff Note: The proposal has been modified to add back in Exception #3 as requested by the proponent.)

Supporting Statement (including intent, need, and impact of the proposal):
After listening to the discussions presented during the ICC Committee Action Hearings, we have incorporated those concerns within this modification. The first being the addition of "other approved sizing methodologies". ACCA's Manual S is not the ***only*** approved, appropriate sizing methodology available to size residential HVAC equipment. The current language would not permit other sizing methodologies such as ASHRAE's Handbook series. The second modification was to reword the language to provide clarity to the text. The third modification was to remove the third exception based on concerns voiced during testimony about the broad aspects that such an exception would permit.

The following is from the original reason statement:

Item 1 - Current technology is widely available that incorporates multi-stage or VRF systems for increased efficiency. Some of these appliances have such a wide span of functionality that they extend beyond the allowable requirements outlined in Manual S. However, this technology allows the appliance to operate between minimum and maximum capacities, based on loads imposed, thus eliminating the problems associated with single-stage, oversized appliances. Additionally, the appliance will operate efficiently during times where outdoor air temperatures exceed those used to calculate the loads in Manual J.

Item 2 - Often times, the appliance manufacturer's published total and sensible capacities are at odds with the requirements of Manual S. There are many cases where the total capacity of the appliance will fall within the parameters of Manual S in relation to the calculated total gain, however the sensible capacity of the appliance may fall short of the calculated sensible gain, thus unable to provide efficient sensible cooling for the space. When the manufacturer's next standard size larger is chosen to meet the sensible gain, the total capacity of the appliance may then exceed the requirements of Manual S. Choosing the larger appliance will enable a more efficient and effective system.

Submittal Information

Date Submitted: _____

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
The Jackson Center
501 N. 2nd Street
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Email Address: taso@dhcd.virginia.gov
Fax Number: (804) 371-7092
Phone Numbers: (804) 371-7140 or (804) 371-7150

TAB 3

2012 Statewide Fire Prevention Code (SFPC) Highlights:

- Approved State Fire Marshal's fee increase proposals for existing programs on inspections of licensed facilities; on late filing fees; and, on permits for blasting, firework and explosives.
- Approved SFM's new inspection programs and fees for bon fires, complaint inspection program and lost certificates.
- Approved training for crowd managers and their duties.
- Approved establishment of fire safety plan for bed and breakfast facilities.
- Approved uniform reporting system for blast records.

2012 Uniform Statewide Building Code (USBC) Highlights:

- Approved a new set of guidelines for the use of rainwater, gray water and reclaimed water for non-potable uses that is coordinated with VDH, DEQ and DCR regulations and guidelines.
- Approved new accessibility features for 1&2 family homes that mandates on the 1st floor interior cased openings and doors to habitable spaces to be 34 inches that enables passage of wheelchairs; and that, where chosen as an option by the builder or owner, a fully accessible 1st floor.
- Approved increased accessible parking spaces for new parking facilities over 100 spaces, the first in the country.
- Approved a new model code requirement that would have increased the cost of construction by deleting special inspections for firestopping that has been done by building departments for decades.
- Approved a new model code requirement for additional testing of exterior wall assemblies used for decades that again would have increased construction.
- Approved to retain long time sprinkler trade-offs where fire extinguishers have not been required to be installed and then forever maintained in designated sprinkler occupancies.
- Approved the retention of the sprinkler threshold for educational (E) occupancies at 20,000 s.f., thereby avoiding additional costs for the construction of smaller schools without impacting the life safety of occupants.
- Approved new model code requirements for Assisted Living Facilities that enables those residents to remain in these facilities even when non-ambulatory and need the assistance of one staff person for emergency evacuation.
- Approved energy provisions for commercial, institutional and industrial buildings that coupled with 2006, 2009 and the 2012 energy provisions represent over 30% in energy usage savings and the overall cost to operate buildings.

- Approved energy provisions for 1&2 family homes that coupled with 2006, 2009 and the 2009 energy provisions represent over 24% in energy usage and cost savings.

- Approved new swimming and spa code requirements that consolidate all the provisions into one reference standards and that will enable the Virginia Department of Health to delete from their regulations all construction requirements.

- Approved a new UL listing for fuel dispensing systems for E-85 gasoline.

- Approved new wall bracing provisions for 1&2 family homes that is more descriptive for uniform applications in enforcement and constructions.

- Approved carbon monoxide alarms for new E occupancies (K-12 schools).

- Approved retail display and storage limits for permissible fireworks.

- Approved a new sensor locking system for institutions and businesses for security purposes, yet still ensures the safety of occupant to exit in emergencies.

2012 Virginia Amusement Device Regulation (VADR) Highlights:

- Approved zip lines and standards as amusement rides.

- Approved new designation for non-covered amusement rides such as water balls, mechanical bulls and mall trains.

- Approved new statewide permit fee that can be charged for generators installed to operate amusement device rides at $165 dollars per event.

2012 Virginia Manufactured Home Safety Regulations (MHSR) Highlights:

- Changed two definitions to match the definitions within the legislative statute.

- Added three new definitions related to new HUD requirements for “Installation” of manufactured homes.

- Reorganized/reformatted sections to clearly define the responsibilities of the local Building Official and to identify when provisions of the USBC would be applicable.

- Repealed language regulating resale of manufactured homes with serious defects.

- Rewrote the penalty and violation section to match the language of the legislative statute.

2012 Virginia Industrialized Building Safety Regulations (IBSR) Highlights:

- Added two definitions; “Label” and “Seal” – to reflect clearly the difference between the two as outlined in the body of the regulations.

- Changed SBCAO to SBCO to reflect the reorganization/renaming of the Division.

- Changed existing and added new language to make it clear that intermodal freight containers and personal temporary storage containers are not covered by these regulations.

- Added language to the Notice of Violation section requiring that a notice of appeal be included with any order or notice issued under these regulations.

- Increased the grace period for manufacturers to implement the newest version of the codes from 90-days to one year.

- Creates a two-year application renewal process for Compliance Assurance Agencies that are responsible for oversight and approval of construction within the manufacturing plants.

- Added language clarifying that only Compliance Assurance Agencies can order Virginia Seals, and that they must maintain responsible control of the seals even if they authorize the manufacturer to receive and apply the seals.

- Changes the fee structure to a two-tier fee system, creating a lower seal fee for residential units. Currently Virginia seals for residential units are $75 per unit. The proposed regulations lower the fee to $50 for residential units.

- Added language to allow refunds for unused Virginia Seals minus a 25% administrative fee that is capped at $250.

- Adds an information note at the end of the regulations as a reminder that certain activities related to Industrialized Buildings may require a license from the Department of Professional and Occupational Regulation.

2012 Virginia Certification Standards (VCS) Highlights:

- Language added allowing for electronic certification application submission in addition to the written format.

- Language added placing a six year limit on the age of the passing examination grade and course work accepted in the certification application process except where the applicant holds an active certification issued by the approved testing agency.

- Removes the language of the specific training requirements sited in the regulations and now references all training requirements to the department maintained list (known as the ‘matrix’).

- Removes the alternative to the mandated examination(s) for certification and no longer accepting applications for an exam alternative.

- New language requiring all certification applications be based on current criteria as indicated on the agency maintained list and delineates the certificate status as ‘lapsed’ when not maintained per the regulation.

- Adds provision for issuance of noncompliance notices when the certificate holder fails to meet the maintenance training or continuing education requirements.

2012 Virginia Individual and Regional Code Academies Standards (IRCA) Highlights:

- Language added to require additional information in the accreditation application to include proposed expenditures, and training schedule, as well as quarterly and end of year reporting requirements and time frames.

- Expands language to clarify the required information to proposed expenditures and revenues for the purposes of academy operations, training schedule, instructor lists, and commitments to be required in accreditation renewal application.

- Correlates the instructor requirements with that of the state building code academy to require all instructors to hold an active certification in the discipline in which they will be instructing.

Virginia Statewide Fire Prevention Code

2012 Final Regulations

Part I- General Regulations

13VAC5-51-11. Chapter 1, Administration, Section 101.0. Scope.

A. 101.1. Title: These regulations shall be known as the Virginia Statewide Fire Prevention Code (SFPC), hereinafter referred to as “this code” or “SFPC.” The term “chapter” means a chapter in the SFPC. The SFPC was cooperatively developed by the Virginia Fire Services Board and the Virginia Board of Housing and Community Development.

B. 101.2. Scope: The SFPC prescribes regulations affecting or relating to maintenance of structures, processes and premises and safeguards to be complied with for the protection of life and property from the hazards of fire or explosion and for the handling, storage and use of fireworks, explosives or blasting agents, and provides for the administration and enforcement of such regulations. The SFPC also establishes regulations for obtaining permits for the manufacturing, storage, handling, use, or sales of explosives. Inspections under the SFPC are a governmental responsibility.

C. 101.3. Purpose: The purposes of the SFPC are to provide for statewide standards to safeguard life and property from the hazards of fire or explosion arising from the improper maintenance of life safety and fire prevention and protection materials, devices, systems and structures, and the unsafe storage, handling, and use of substances, materials and devices, including explosives and blasting agents, wherever located.

D. 101.4. Validity: To the extent that any provisions of the SFPC or the referenced codes or standards are not within the scope of this chapter, those provisions are considered to be invalid. When any provision of the SFPC is found to be in conflict with the USBC, OSHA, or statute, that provision of the SFPC shall become invalid.

E. 101.5. Local regulations: Any local governing body may adopt fire prevention regulations that are more restrictive or more extensive in scope than the SFPC provided such regulations do not affect the manner of construction or materials to be used in the erection, alteration, repair, or use of a building or structure, as provided in the USBC, including the voluntary installation of smoke alarms and regulation and inspections thereof in commercial buildings where such smoke alarms are not required under the provisions of the SFPC.

F. 101.6. Nonresidential farm structures: Farm structures not used for residential purposes are exempt from the SFPC except when the inspection and enforcement provisions of the code are exercised by a warrant issued under the authority of §§ 27-98.2 through 27-98.5 of the Code of Virginia.

13VAC5-51-21. Section 102.0. Applicability.

A. 102.1. General: The provisions of the SFPC shall apply to all matters affecting or relating to structures, processes and premises as set forth in Section 101.0. The SFPC shall supersede any

fire prevention regulations previously adopted by a local government or other political subdivision.

B. 102.1.1. Changes: No change shall be made in the use or occupancy of any structure that would place the structure in a different division of the same group of occupancies, unless such structure is made to comply with the requirements of this code and the USBC.

C. 102.2. Application to pre-1973 buildings and structures: Buildings and structures constructed prior to the USBC (1973) shall comply with the maintenance requirements of the SFPC to the extent that equipment, systems, devices, and safeguards which were provided and approved when constructed shall be maintained. Such buildings and structures, if subject to the state fire and public building regulations (Virginia Public Building Safety Regulations, VR 394-01-05) in effect prior to March 31, 1986, shall also be maintained in accordance with those regulations.

D. 102.3. Application to post-1973 buildings and structures: Buildings and structures constructed under any edition of the USBC shall comply with the maintenance requirements of the SFPC to the extent that equipment, systems, devices, and safeguards which were provided and approved when constructed shall be maintained.

E. 102.4. Referenced codes and standards: The codes and standards referenced in the IFC shall be those listed in Chapter ~~47~~ 80 and considered part of the requirements of the SFPC to the prescribed extent of each such reference. Where differences occur between the provisions of this code and the referenced standards, the provisions of this code shall apply.

F. 102.5. State-owned buildings and structures: The SFPC shall be applicable to all state-owned buildings and structures in the manner and extent described in § 27-99 of the Code of Virginia and the State Fire Marshal shall have the authority to enforce this code in state-owned buildings and structures as is prescribed in §§ 27-98 and 27-99 of the Code of Virginia.

G. 102.6. Relationship to USBC: In accordance with §§ 27-34.4, 36-105.1 and 36-119.1 of the Code of Virginia, the USBC does not supersede the provisions of this code that prescribe standards to be complied with in existing buildings and structures, provided that this code shall not impose requirements that are more restrictive than those of the USBC under which the buildings or structures were constructed. Subsequent alteration, enlargement, rehabilitation, repair or conversion of the occupancy classification of such buildings and structures shall be subject to the construction and rehabilitation provisions of the USBC. Inspection of buildings other than state-owned buildings under construction and the review and approval of building plans for these structures for enforcement of the USBC shall be the sole responsibility of the appropriate local building inspectors.

Upon completion of such structures, responsibility for fire safety protection shall pass to the local fire marshal or official designated by the locality to enforce this code in those localities that enforce the SFPC or to the State Fire Marshal in those localities that do not enforce this code.

H. 102.7. Inspections for USBC requirements: The fire official shall require that existing structures subject to the requirements of the applicable retrofitting provisions relating to the fire protection equipment and system requirements of the USBC, Part I, Construction, ~~Sections~~ Section 103.7 ~~and 3413~~, comply with the provisions located therein.

13VAC5-51-31. Section 103.0. Incorporation by reference.

A. 103.1. General: The following document is adopted and incorporated by reference to be an enforceable part of the SFPC:

The International Fire Code -- ~~2009~~ 2012 Edition, hereinafter referred to as "IFC," published by the International Code Council, Inc., 500 New Jersey Avenue, NW, 6th Floor, Washington, DC 20001-2070, 1-888 422-7233.

B. 103.1.1. Deletion: Delete IFC Chapter 1.

C. 103.1.2. Appendices: The appendices in the IFC are not considered part of the IFC for the purposes of Section 103.1.

Note: Section 101.5 references authority contained in the Code of Virginia for local fire prevention regulations that may be evaluated by localities to determine whether provisions in the IFC appendices may be considered for local fire prevention regulations.

D. 103.2. Amendments: All requirements of the referenced codes and standards that relate to fees, permits, unsafe notices, disputes, condemnation, inspections, scope of enforcement and all other procedural, and administrative matters are deleted and replaced by the provisions of Chapter 1 of the SFPC.

E. 103.2.1. Other amendments: The SFPC contains provisions adopted by the Virginia Board of Housing and Community Development (BHCD), some of which delete, change or amend provisions of the IFC and referenced standards. Where conflicts occur between such changed provisions and the unchanged provisions of the IFC and referenced standards, the provisions changed by the BHCD shall govern.

Note: The IFC and its referenced standards contain some areas of regulation outside of the scope of the SFPC, as established by the BHCD and under state law. Where conflicts have been readily noted, changes have been made to the IFC and its referenced standards to bring it within the scope of authority; however, in some areas, judgment will have to be made as to whether the provisions of the IFC and its referenced standards are fully applicable.

F. 103.3. International Fire Code. Retroactive fire protection system requirements contained in the IFC shall not be enforced unless specified by the USBC.

13VAC5-51-41. Section 104.0. Enforcement.

A. 104.1. Local enforcement: Any local government may enforce the SFPC following official action by such body. The official action shall (i) require compliance with the provisions of the SFPC in its entirety or with respect only to those provisions of the SFPC relating to open burning, fire lanes, fireworks, and hazardous materials and (ii) assign enforcement responsibility to the local agency or agencies of its choice. Any local governing body may establish such procedures or requirements as may be necessary for the administration and enforcement of this code. If a local governing body elects to enforce only those provisions of the SFPC relating to open burning, it may do so in all or in any designated geographic areas of its jurisdiction. The terms "enforcing agency" and "fire official" are intended to apply to the agency or agencies to

which responsibility for enforcement of the SFPC has been assigned. The terms “building official” or “building department” are intended to apply only to the local building official or local building department.

B. 104.1.1. Enforcement of fireworks provisions by law-enforcement officers: In accordance with § 27-100.1 of the Code of Virginia, law-enforcement officers who are otherwise authorized to enforce certain provisions of this code shall not be subject to the certification requirements of Sections 105.2 or 105.3.2.

C. 104.2. State enforcement: In accordance with § 27-98 of the Code of Virginia, the State Fire Marshal shall also have the authority, in cooperation with any local governing body, to enforce the SFPC. The State Fire Marshal shall also have authority to enforce the SFPC in those jurisdictions in which the local governments do not enforce the SFPC and may establish such procedures or requirements as may be necessary for the administration and enforcement of the SFPC in such jurisdictions.

D. 104.3. State structures: Every agency, commission or institution of this Commonwealth, including all institutions of higher education, shall permit, at all reasonable hours, the fire official reasonable access to existing structures or a structure under construction or renovation, for the purpose of performing an informational and advisory fire safety inspection. The fire official is permitted to submit, subsequent to performing such inspection, his findings and recommendations, including a list of corrective actions necessary to ensure that such structure is reasonably safe from the hazards of fire, to the appropriate official of such agency, commission, or institution and the State Fire Marshal. Such agency, commission or institution shall notify, within 60 days of receipt of such findings and recommendations, the State Fire Marshal and the fire official of the corrective measures taken to eliminate the hazards reported by the fire official. The State Fire Marshal shall have the same power in the enforcement of this section as is provided for in § 27-98 of the Code of Virginia. The State Fire Marshal may enter into an agreement as is provided for in § ~~36-139.4~~ 9.1-208 of the Code of Virginia with any local enforcement agency that enforces the SFPC to enforce this section and to take immediate enforcement action upon verification of a complaint of an imminent hazard such as a chained or blocked exit door, improper storage of flammable liquids, use of decorative materials, and overcrowding.

13VAC5-51-51. Section 105.0. Enforcing agency.

A. 105.1. Fire official: Each enforcing agency shall have an executive official in charge, hereinafter referred to as the “fire official.”

Note: Fire officials are subject to sanctions in accordance with the Virginia Certification Standards (13VAC5-21).

B. 105.1.1. Appointment: The fire official shall be appointed in a manner selected by the local government having jurisdiction. After permanent appointment, the fire official shall not be removed from office except for cause after having been afforded a full opportunity to be heard on specific and relevant charges by and before the appointing authority.

C. 105.1.2. Notification of appointment: The appointing authority of the local governing body shall notify the DHCD and the State Fire Marshal's Office (SFMO) within 30 days of the appointment or release of the permanent or acting fire official.

D. 105.1.3. Qualifications: The fire official shall have at least five years of fire-related experience as a firefighter, fire officer, licensed professional engineer or architect, fire or building inspector, contractor or superintendent of fire protection-related or building construction or at least five years of fire-related experience after obtaining a degree in architecture or engineering, with at least three years in responsible charge of work. Any combination of education and experience that would confer equivalent knowledge and ability shall be deemed to satisfy this requirement. The fire official shall have general knowledge of sound engineering practice with respect to the design and construction of structures, the basic principles of fire prevention and protection, the accepted requirements for means of egress and the installation of elevators and other service equipment necessary for the health, safety and general welfare of the occupants and the public. The local governing body may establish additional qualification requirements.

E. 105.2. Certification: The permanent or acting fire official shall obtain certification from the BHCD in accordance with the Virginia Certification Standards (13VAC5-21) within one year after permanent or acting appointment.

Exception: A fire official appointed prior to April 1, 1994, continuously employed by the same local governing body as the fire official shall comply with required DHCD training under the Virginia Certification Standards (13VAC5-21).

F. 105.2.1. Noncertified fire official: Except for a fire official exempt from certification under the exception to Section 105.2, any acting or permanent fire official who is not certified as a fire official in accordance with the Virginia Certification Standards (13VAC5-21) shall attend the core module of the Virginia Building Code Academy or an equivalent course in an individual or regional code academy accredited by DHCD within 180 days of appointment. This requirement is in addition to meeting the certification requirement in Section 105.2.

G. 105.3. Technical assistant: The local governing body or its designee may utilize one or more technical assistants who, in the absence of the fire official, shall have the powers and perform the duties of the fire official.

Note: Technical assistants are subject to sanctions in accordance with the Virginia Certification Standards (13VAC5-21).

H. 105.3.1. Notification: The fire official shall notify the DHCD within 60 days of the employment, contract or termination of all technical assistants for enforcement of the SFPC.

I. 105.3.2. Qualifications: A technical assistant shall have at least three years of experience and general knowledge in at least one of the following areas: fire protection, firefighting, electrical, building, plumbing or mechanical trades. Any combination of education and experience that would confer equivalent knowledge and ability shall be deemed to satisfy this requirement. The locality may establish additional qualification requirements.

J. 105.3.3. Certification: All technical assistants employed by or under contract to an enforcing agency for enforcing the SFPC shall be certified in the appropriate subject area in accordance with the Virginia Certification Standards (13VAC5-21) within one and one-half years after permanent or acting appointment. When required by a locality to have two or more certifications, the remaining certifications shall be obtained within three years from the date of such requirement.

Exception: Any technical assistant continuously employed by or continuously under contract to the same enforcing agency for enforcing the SFPC since before April 1, 1994, shall be exempt from the provisions of this section; however, such exempt technical assistant shall comply with required DHCD training under Virginia Certification Standards (13VAC5-21).

K. 105.4. Continuing education: Fire officials and technical assistants enforcing the SFPC shall attend periodic training courses as designated by the DHCD.

L. 105.5. Control of conflict of interest: The standards of conduct for officials and employees of the enforcing agency shall be in accordance with the provisions of the State and Local Government Conflict of Interests Act, Chapter 31 (§ 2.2-3100 et seq.) of Title 2.2 of the Code of Virginia.

13VAC5-51-61. Section 106.0. Duties and powers of the fire official.

A. 106.1. General: The fire official shall enforce the provisions of the SFPC as provided herein and as interpreted by the State Building Code Technical Review Board (TRB) in accordance with § 36-118 of the Code of Virginia.

B. 106.2. Delegation of duties and powers: The fire official may delegate duties and powers subject to any limitations imposed by the local governing body. The fire official shall be responsible that any powers and duties delegated are carried out in accordance with this code.

C. 106.3. Inspections: The fire official is authorized to conduct such inspections as are deemed necessary to determine the extent of compliance with the provisions of this code and to approve reports of inspection by approved agencies or individuals <u>in accordance with the fire official's written policy</u>. All reports of such inspections by approved agencies or individuals shall be prepared and submitted in writing for review and approval. Inspection reports shall be certified by a responsible officer of such approved agency or by the responsible individual. The fire official is authorized to engage such expert opinion as deemed necessary to report upon unusual, detailed or complex technical issues in accordance with local policies.

D. 106.3.1. Observations: When, during an inspection, the fire official or an authorized representative observes an apparent or actual violation of another law, ordinance or code not within the official's authority to enforce, such official shall report the findings to the official having jurisdiction in order that such official may institute the necessary measures.

E. 106.4. Alternatives: The SFPC provisions are not intended to prevent the use of any safeguards used to protect life and property from the hazards of fire or explosion that are not specifically prescribed by the SFPC, provided that such alternative safeguards comply with the intent of the SFPC. The alternative safeguard offered shall be, for the purpose intended, at least

the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety.

F. 106.5. Modifications: The fire official may grant modifications to any provision of the SFPC upon application by the owner or the owner's agent provided the spirit and intent of the SFPC are observed and public health, welfare, and safety are assured.

Note: The current editions of many nationally recognized model codes and standards are referenced by the SFPC. Future amendments to such codes and standards do not automatically become part of the SFPC; however, the fire official should consider such amendments in deciding whether a modification request should be granted.

G. 106.5.1. Supporting data: The fire official shall require that sufficient technical data be submitted to substantiate the proposed use of any alternative. If it is determined that the evidence presented is satisfactory proof of performance for the use intended, the fire official shall approve the use of such alternative subject to the requirements of this code. The fire official may require and consider a statement from a professional engineer, architect or other competent person as to the equivalency of the proposed modification.

H. 106.5.2. Decision: The application for modification and the final decision of the fire official shall be in writing and shall be recorded in the permanent records of the local enforcing agency.

I. 106.6. Notices and orders: The fire official shall issue all necessary notices or orders to ensure compliance with the SFPC.

J. 106.7. Department records: The fire official shall keep official records of applications received, permits and certificates issued, fees collected, reports of inspections, and notices and orders issued. Such records shall be retained in the official records or disposed of in accordance with General Schedule Number Ten available from The Library of Virginia.

13VAC5-51-81. Section 107.0. Permits and fees.

A. 107.1. Prior notification: The fire official may require notification prior to (i) activities involving the handling, storage or use of substances, materials or devices regulated by the SFPC; (ii) conducting processes which produce conditions hazardous to life or property; or (iii) establishing a place of assembly.

B. 107.2. Permits required: Permits may be required by the fire official as permitted under the SFPC in accordance with Table 107.2, except that the fire official shall require permits for the manufacturing, storage, handling, use, and sale of explosives. In accordance with Section ~~3301.2.3.1~~ 5601.2.3.1, an application for a permit to manufacture, store, handle, use, or sell explosives shall only be made by a designated individual.

Exception: Such permits shall not be required for the storage of explosives or blasting agents by the Virginia Department of State Police provided notification to the fire official is made annually by the Chief Arson Investigator listing all storage locations.

C. Add Table 107.2 as follows:

Table 107.2. OPERATIONAL PERMIT REQUIREMENTS (to be filled in by local jurisdiction).			
Description	Permit Required (yes or no)	Permit Fee	Inspection Fee
Aerosol products. An operational permit is required to manufacture, store or handle an aggregate quantity of Level 2 or Level 3 aerosol products in excess of 500 pounds (227 kg) net weight.			
Amusement buildings. An operational permit is required to operate a special amusement building.			
Aviation facilities. An operational permit is required to use a Group H or Group S occupancy for aircraft servicing or repair and aircraft fuel-servicing vehicles. Additional permits required by other sections of this code include, but are not limited to, hot work, hazardous materials and flammable or combustible finishes			
Carnivals and fairs. An operational permit is required to conduct a carnival or fair.			
Battery systems. An operational permit is required to install stationary lead-acid battery systems having a liquid capacity of more than 50 gallons (189 L).			
Cellulose nitrate film. An operational permit is required to store, handle or use cellulose nitrate film in a Group A occupancy.			
Combustible dust-producing operations. An operational permit is required to operate a grain elevator, flour starch mill, feed mill, or a plant pulverizing aluminum, coal, cocoa, magnesium, spices or sugar, or other operations producing combustible dusts as defined in Chapter 2.			
Combustible fibers. An operational permit is required for the storage and handling of combustible fibers in quantities greater than 100 cubic feet (2.8 m^3). Exception: An operational permit is not required for agricultural storage.			
Compressed gas. An operational permit is required for the storage, use or handling at normal temperature and pressure (NTP) of compressed gases in excess of the amounts listed below. Exception: Vehicles equipped for and using compressed gas as a fuel for propelling the vehicle. Permit Amounts for Compressed Gases Type of Gas — Amount (cubic feet at NTP)			

Corrosive 200 Flammable (except cryogenic fluids and liquefied petroleum gases) 200 Highly toxic Any Amount Inert and simple asphyxiant 6,000 Oxidizing (including oxygen) 504 Toxic Any Amount For SI: 1 cubic foot = 0.02832 m^3.			
Covered mall buildings. An operational permit is required for: 1. The placement of retail fixtures and displays, concession equipment, displays of highly combustible goods and similar items in the mall. 2. The display of liquid-fired or gas-fired equipment in the mall. 3. The use of open-flame or flame-producing equipment in the mall.			
Cryogenic fluids. An operational permit is required to produce, store, transport on site, use, handle or dispense cryogenic fluids in excess of the amounts listed below. Exception: Operational permits are not required for vehicles equipped for and using cryogenic fluids as a fuel for propelling the vehicle or for refrigerating the lading. Permit Amounts for Cryogenic Fluids Type of Cryogenic Fluid	Inside Building (gallons)	Outside Building (gallons)	
Flammable	More than 1	60	
Inert	60	500	
Oxidizing (includes oxygen)	10	50	
Physical or health hazard not indicated above	Any Amount	Any Amount	
For SI: 1 gallon = 3.785 L.			
Cutting and welding. An operational permit is required to conduct cutting or welding operations within the jurisdiction.			
Dry cleaning plants. An operational permit is required to engage in the business of dry cleaning or to change to a more hazardous cleaning solvent used in existing dry cleaning equipment.			

Exhibits and trade shows. An operational permit is required to operate exhibits and trade shows.			
Explosives. An operational permit is required for the manufacture, storage, handling, sale or use of any quantity of explosive, explosive material, fireworks, or pyrotechnic special effects within the scope of Chapter ~~33~~ 56.			
Fire hydrants and valves. An operational permit is required to use or operate fire hydrants or valves intended for fire suppression purposes that are installed on water systems and accessible to a fire apparatus access road that is open to or generally used by the public. Exception: An operational permit is not required for authorized employees of the water company that supplies the system or the fire department to use or operate fire hydrants or valves.			
Flammable and combustible liquids. An operational permit is required: 1. To use or operate a pipeline for the transportation within facilities of flammable or combustible liquids. This requirement shall not apply to the offsite transportation in pipelines regulated by the Department of Transportation (DOTn) ~~(see § 3501.1.2)~~ nor does it apply to piping systems ~~(see § 3503.6)~~. 2. To store, handle or use Class I liquids in excess of 5 gallons (19 L) in a building or in excess of 10 gallons (37.9 L) outside of a building, except that a permit is not required for the following: 2.1. The storage or use of Class I liquids in the fuel tank of a motor vehicle, aircraft, motorboat, mobile power plant or mobile heating plant, unless such storage, in the opinion of the fire official, would cause an unsafe condition. 2.2. The storage or use of paints, oils, varnishes or similar flammable mixtures when such liquids are stored for maintenance, painting or similar purposes for a period of not more than 30 days. 3. To store, handle or use Class II or Class IIIA			

liquids in excess of 25 gallons (95 L) in a building or in excess of 60 gallons (227 L) outside a building, except for fuel oil used in connection with oil-burning equipment. 4. To remove Class I or Class II liquids from an underground storage tank used for fueling motor vehicles by any means other than the approved, stationary on-site pumps normally used for dispensing purposes. 5. To operate tank vehicles, equipment, tanks, plants, terminals, wells, fuel-dispensing stations, refineries, distilleries and similar facilities where flammable and combustible liquids are produced, processed, transported, stored, dispensed or used. 6. To install, alter, remove, abandon, place temporarily out of service (for more than 90 days) or otherwise dispose of an underground, protected above-ground or above-ground flammable or combustible liquid tank. 7. To change the type of contents stored in a flammable or combustible liquid tank to a material that poses a greater hazard than that for which the tank was designed and constructed. 8. To manufacture, process, blend or refine flammable or combustible liquids.			
Floor finishing. An operational permit is required for floor finishing or surfacing operations exceeding 350 square feet (33 m^2) using Class I or Class II liquids.			
Fruit and crop ripening. An operational permit is required to operate a fruit- or crop-ripening facility or conduct a fruit-ripening process using ethylene gas.			
Fumigation and thermal insecticidal fogging. An operational permit is required to operate a business of fumigation or thermal insecticidal fogging and to maintain a room, vault or chamber in which a toxic or flammable fumigant is used.			
Hazardous materials. An operational permit is required to store, transport on site, dispense, use or handle hazardous materials in excess of the amounts listed below. Permit Amounts for Hazardous Materials Type of Material Amount Combustible liquids See flammable and			

	combustible liquids				
Corrosive materials					
Gases	See compressed gases				
Liquids	55 gallons				
Solids	1000 pounds				
Explosive materials	See explosives				
Flammable materials					
Gases	See compressed gases				
Liquids	See flammable and combustible liquids				
Solids	100 pounds				
Highly toxic materials					
Gases	See compressed gases				
Liquids	Any amount				
Solids	Any amount				
Oxidizing materials					
Gases	See compressed gases				
Liquids					
Class 4	Any amount				
Class 3	1 gallon				
Class 2	10 gallons				
Class 1	55 gallons				
Solids					
Class 4	Any amount				
Class 3	10 pounds				
Class 2	100 pounds				
Class 1	500 pounds				
Organic peroxides					
Liquids					
Class I	Any amount				
Class II	Any amount				
Class III	1 gallon				
Class IV	2 gallons				
Class V	No permit required				
Solids					
Class I	Any amount				
Class II	Any amount				
Class III	10 pounds				
Class IV	20 pounds				
Class V	No permit required				
Pyrophoric materials					
Gases	See compressed gases				
Liquids	Any amount				
Solids	Any amount				
Toxic materials					
Gases	See compressed gases				
Liquids	10 gallons				
Solids	100 pounds				
Unstable (reactive) materials					

Liquids Class 4 Any amount Class 3 Any amount Class 2 5 gallons Class 1 10 gallons Solids Class 4 Any amount Class 3 Any amount Class 2 50 pounds Class 1 100 pounds Water reactive materials Liquids Class 3 Any amount Class 2 5 gallons Class 1 55 gallons Solids Class 3 Any amount Class 2 50 pounds Class 1 500 pounds For SI: 1 gallon = 3.785 L, 1 pound = 0.454 kg.			
HPM facilities. An operational permit is required to store, handle or use hazardous production materials.			
High piled storage. An operational permit is required to use a building or portion thereof as a high-piled storage area exceeding 500 square feet (46 m^2).			
Hot work operations. An operational permit is required for hot work including, but not limited to: 1. Public exhibitions and demonstrations where hot work is conducted. 2. Use of portable hot work equipment inside a structure. Exception: Work that is conducted under a construction permit. 3. Fixed-site hot work equipment such as welding booths. 4. Hot work conducted within a hazardous fire area. 5. Application of roof coverings with the use of an open-flame device. 6. When approved, the fire official shall issue a permit to carry out a Hot Work Program. This program allows approved personnel to regulate			

their facility's hot work operations. The approved personnel shall be trained in the fire safety aspects denoted in this chapter and shall be responsible for issuing permits requiring compliance with the requirements found in this chapter. These permits shall be issued only to their employees or hot work operations under their supervision.			
Industrial ovens. An operational permit is required for operation of industrial ovens regulated by Chapter ~~21~~30 .			
Lumber yards and woodworking plants. An operational permit is required for the storage or processing of lumber exceeding 100,000 board feet (8,333 ft^3) (236 m^3).			
Liquid-fueled or gas-fueled vehicles or equipment in assembly buildings. An operational permit is required to display, operate or demonstrate liquid-fueled or gas-fueled vehicles or equipment in assembly buildings.			
LP-gas. An operational permit is required for: 1. Storage and use of LP-gas. Exception: An operational permit is not required for individual containers with a 500-gallon (1893 L) water capacity or less serving occupancies in Group R-3. 2. Operation of cargo tankers that transport LP-gas.			
Magnesium. An operational permit is required to melt, cast, heat treat or grind more than 10 pounds (4.54 kg) of magnesium.			
Miscellaneous combustible storage. An operational permit is required to store in any building or upon any premises in excess of 2,500 cubic feet (71 m^3) gross volume of combustible empty packing cases, boxes, barrels or similar containers, rubber tires, rubber, cork or similar combustible material.			
Open burning. An operational permit is required for the kindling or maintaining of an open fire or a fire on any public street, alley, road, or other public or private ground. Instructions and stipulations of the permit shall be adhered to. Exception: Recreational fires.			
Open flames and candles. An operational permit is			

required to remove paint with a torch; use a torch or open-flame device in a hazardous fire area; or to use open flames or candles in connection with assembly areas, dining areas of restaurants or drinking establishments.			
Organic coatings. An operational permit is required for any organic-coating manufacturing operation producing more than 1 gallon (4 L) of an organic coating in one day.			
Assembly/educational. An operational permit is required to operate a place of assembly /educational occupancy.			
Private fire hydrants. An operational permit is required for the removal from service, use or operation of private fire hydrants. Exception: An operational permit is not required for private industry with trained maintenance personnel, private fire brigade or fire departments to maintain, test and use private hydrants.			
Pyrotechnic special effects material. An operational permit is required for use and handling of pyrotechnic special effects material.			
Pyroxylin plastics. An operational permit is required for storage or handling of more than 25 pounds (11 kg) of cellulose nitrate (pyroxylin) plastics and for the assembly or manufacture of articles involving pyroxylin plastics.			
Refrigeration equipment. An operational permit is required to operate a mechanical refrigeration unit or system regulated by Chapter 6.			
Repair garages and service stations. An operational permit is required for operation of repair garages and automotive, marine and fleet service stations.			
Rooftop heliports. An operational permit is required for the operation of a rooftop heliport.			
Spraying or dipping. An operational permit is required to conduct a spraying or dipping operation utilizing flammable or combustible liquids or the application of combustible powders regulated by Chapter ~~15~~ 24.			
Storage of scrap tires and tire byproducts. An operational permit is required to establish, conduct or maintain storage of scrap tires and tire byproducts that exceeds 2,500 cubic feet (71 m^3) of total volume of scrap tires and for indoor storage of tires and tire byproducts.			
Temporary membrane structures and tents. An			

operational permit is required to operate an air-supported temporary membrane structure or a tent. Exceptions: 1. Tents used exclusively for recreational camping purposes. 2. Tents and air-supported structures that cover an area of 900 square feet (84 m^2) or less, including all connecting areas or spaces with a common means of egress or entrance and with an occupant load of 50 or less persons.			
Tire-rebuilding plants. An operational permit is required for the operation and maintenance of a tire-rebuilding plant.			
Waste handling. An operational permit is required for the operation of wrecking yards, junk yards and waste material-handling facilities.			
Wood products. An operational permit is required to store chips, hogged material, lumber or plywood in excess of 200 cubic feet (6 m^3).			

D. 107.3. Application for permit: Application for a permit shall be made on forms prescribed by the fire official.

E. 107.4. Issuance of permits: Before a permit is issued, the fire official shall make such inspections or tests as are necessary to assure that the use and activities for which application is made comply with the provisions of this code.

F. 107.5. Conditions of permit: A permit shall constitute permission to store or handle materials or to conduct processes in accordance with the SFPC, and shall not be construed as authority to omit or amend any of the provisions of this code. Permits shall remain in effect until revoked or for such period as specified on the permit. Permits are not transferable.

[~~G. 107.5.1. Special conditions for the State Fire Marshal's office. Permits issued by the State Fire Marshal's office for the use of explosives in special operations or under emergency conditions shall be valid for one week from the date of issuance and shall not be renewable.~~

~~H. 107.6. State Fire Marshal: Permits will not be required by the State Fire Marshal except for those permits listed in Sections 107.13 and 107.14 of this code.~~

~~Exception: Such permits shall not be required for the storage of explosives or blasting agents by the Virginia Department of State Police provided notification to the State Fire Marshal is made annually by the Chief Arson Investigator listing all storage locations within areas where enforcement is provided by the State Fire Marshal's office.~~

~~I.~~ G. ~~107.7.~~ 107.6.] Annual: The enforcing agency may issue annual permits for the manufacturing, storage, handling, use, or sales of explosives to any state regulated public utility.

[~~J.~~ H. ~~107.8.~~ 107.7.] Approved plans: Plans approved by the fire official are approved with the intent that they comply in all respects to this code. Any omissions or errors on the plans do not relieve the applicant of complying with all applicable requirements of this code.

[~~K.~~ I. ~~107.9.~~ 107.8.] Posting: Issued permits shall be kept on the premises designated therein at all times and shall be readily available for inspection by the fire official.

[~~L.~~ J. ~~107.10.~~ 107.9.] Suspension of permit: A permit shall become invalid if the authorized activity is not commenced within six months after issuance of the permit, or if the authorized activity is suspended or abandoned for a period of six months after the time of commencement.

~~M. 107.11. Revocation of permit: The fire official may revoke a permit or approval issued under the SFPC if conditions of the permit have been violated, or if the approved application, data or plans contain misrepresentation as to material fact.~~

~~N.~~ [~~M.~~ K. ~~107.12.~~ 107.10.] Local fees: In accordance with § 27-97 of the Code of Virginia, fees may be levied by the local governing body in order to defray the cost of enforcement and appeals under the SFPC.

~~O.~~ [~~N.~~ L. ~~107.13.~~ 107.11.] State Fire Marshal's office permit fees for explosives, blasting agents, theatrical flame effects, and fireworks: ~~Applications~~ Except as modified herein, applications for firework or pyrotechnic displays shall be submitted to and received by the State Fire Marshal's office not less than 15 days prior to the planned event. [~~Fees for permits issued by the State Fire Marshal's office for the storage, use, sale or manufacture of explosives or blasting agents, and for the display of fireworks and flame effects on state-owned property shall be as follows~~ State Fire Marshal's Office permit fees shall be as follows]:

1. [~~$125~~ $150] per year per magazine to store explosives and blasting agents.

2. [~~$200~~ $250] per year per city or county to use explosives and blasting agents.

3. [~~$150~~ $200] per year to sell explosives and blasting agents.

4. [~~$200~~ $250] per year to manufacture explosives, blasting agents and fireworks.

5. $350 the first day of fireworks, pyrotechnics or proximate audience displays conducted in any state-owned building and $150 per day for each consecutive day for identical multi-day events. If an application is received by the State Fire Marshal's office less than 15 days prior to the planned event, the permit fee shall be ~~$450 per~~ $550 the first day and $150 per day for each consecutive day for identical multi-day events. If an application is received by the State Fire Marshal's office less than seven days prior to the planned event, the permit fee shall be ~~$550 per~~ $650 the first day and $150 per day for each consecutive day for identical multi-day events.

6. $250 the first day of fireworks, pyrotechnics or proximate audience displays conducted out-of-doors on any state-owned property and $150 per day for each consecutive day for

identical multi-day events. If an application is received by the State Fire Marshal's office less than 15 days prior to the planned event, the permit fee shall be ~~$450 per~~ $550 the first day and $150 per day for each consecutive day for identical multi-day events. If an application is received by the State Fire Marshal's office less than seven days prior to the planned event, the permit fee shall be ~~$550 per~~ $650 the first day and $150 per day for each consecutive day for identical multi-day events.

7. $100 per [~~event~~ nonrenewable permit, valid for one week from the date of issuance,] for the use of explosives in special operations or emergency conditions.

8. $300 the first day for flame effects conducted in accordance with Section 308.3.6 indoors of any state-owned building or outdoors on state-owned property and [~~$150~~ $200] per day for each consecutive day for identical multi-day events, or, if conducted as part of a firework (pyrotechnic) display, [~~$100~~ $150] the first day and [~~$75~~ $125] per day for each consecutive day for identical multi-day events. If an application for flame effects is received by the State Fire Marshal's office less than 15 days prior to the planned event, the permit fee shall be ~~$450 per~~ $550 the first day and [~~$150~~ $200] per day for each consecutive day for identical multi-day events or, if conducted as part of a firework (pyrotechnic) display, $200 the first day and $100 per day for each consecutive day for identical multi-day events. If an application is received by the State Fire Marshal's office less than 7 days prior to the planned event, the permit fee shall be ~~$550 per~~ $650 the first day and $150 per day for each consecutive day for identical multi-day events or, if conducted as part of a firework (pyrotechnic) display, $300 the first day and $125 per day for each consecutive day for identical multi-day events.

[Exception: Permits shall not be required for the storage of explosives or blasting agents by the Virginia Department of State Police provided notification to the State Fire Marshal is made annually by the Chief Arson Investigator listing all storage locations within areas where enforcement is provided by the State Fire Marshal's office.]

~~P.~~ [~~O.~~ M. ~~107.14~~ 107.12.] State annual [compliance] inspection [~~permit~~] fees. [~~Annual fees~~ Fees] for [compliance ~~inspection permits issued~~ inspections performed] by the State Fire Marshal's office [~~for the inspection of buildings~~] shall be as follows:

1. Nightclubs.

1.1. $350 for occupant load of 100 or less.

1.2. $450 for occupant load of 101 to 200.

1.3. $500 for occupant load of 201 to 300.

1.4. $500 plus $50 for each 100 occupants where occupant loads exceed 300.

2. Private college dormitories with or without assembly areas. If containing assembly areas, such assembly areas are not included in the computation of square footage.

2.1. $150 for 3500 square feet or less.

2.2. $200 for greater than 3500 square feet up to 7000 square feet.

2.3. $250 for greater than 7000 square feet up to 10,000 square feet.

2.4. $250 plus $50 for each additional 3000 square feet where square footage exceeds 10,000.

3. Assembly areas that are part of private college dormitories.

3.1. $50 for 10,000 square feet or less provided the assembly area is within or attached to a dormitory building.

3.2. $100 for greater than 10,000 square feet up to 25,000 square feet provided the assembly area is within or attached to a dormitory building, such as gymnasiums, auditoriums or cafeterias.

3.3. $100 for up to 25,000 square feet provided the assembly area is in a separate or separate buildings such as gymnasiums, auditoriums or cafeterias.

3.4. $150 for greater than 25,000 square feet for assembly areas within or attached to a dormitory building or in a separate or separate buildings such as gymnasiums, auditoriums or cafeterias.

4. Hospitals.

4.1. $300 for 1 to 50 beds.

4.2. $400 for 51 to 100 beds.

4.3. $500 for 101 to 150 beds.

4.4. $600 for 151 to 200 beds.

4.5. $600 plus $100 for each additional 100 beds where the number of beds exceeds 200.

5. [~~Child day centers, assisted living facilities and adult day care centers~~ Facilities] licensed by the Virginia Department of Social Services based on licensed capacity as follows:

5.1. $50 for 1 to 8.

5.2. $75 for 9 to 20.

5.3. $100 for 21 to 50.

5.4. $200 for 51 to 100.

5.5. [~~$400~~ $300] for 101 [~~or more~~ to 150].

[5.6. $400 for 151 to 200.

5.7. $500 for 201 or more.]

Exception: Annual [compliance] inspection [~~permits~~ fees] for any building or groups of buildings on the same site may not exceed $2500.

[6. Registered complaints.

6.1. No charge for first visit (initial complaint), and if violations are found,

6.2. $51 per hour for each State Fire Marshal's office staff for all subsequent visits.

7. Bonfires (small and large) on state-owned property.

7.1 For a small bonfire pile with a total fuel area more than 3 feet in diameter and more than 2 feet in height, but not more than 9 feet in diameter and not more than 6 feet in height, the permit fee is $50. If an application for a bonfire permit is received by the State Fire Marshal's office less than 15 days prior to the planned event, the permit fee shall be $100. If an application for a bonfire permit is received by the State Fire Marshal's office less than 7 days prior to the planned event, the permit fee shall be $150.

7.2 For a large bonfire pile with a total fuel area more than 9 feet in diameter and more than 6 feet in height, the permit fee is $150. If an application for a bonfire permit is received by the State Fire Marshal's office less than 15 days prior to the planned event, the permit fee shall be $300. If an application for a bonfire permit is received by the State Fire Marshal's office less than 7 days prior to the planned event, the permit fee shall be $450.]

~~Q.~~ [~~P.~~ N. ~~107.15.~~ 107.13.] Fee schedule: The local governing body may establish a fee schedule. The schedule shall incorporate unit rates, which may be based on square footage, cubic footage, estimated cost of inspection or other appropriate criteria.

~~R.~~ [~~Q.~~ O. ~~107.16.~~ 107.14.] Payment of fees: A permit shall not be issued until the designated fees have been paid.

Exception: The fire official may authorize delayed payment of fees.

[P. 107.14.1. State Fire Marshal's office certification and permit fees not refundable. No refund of any part of the amount paid as a permit or certification fee will be made where the applicant, permit or certification holder, for any reason, discontinued an activity, changed conditions, or changed circumstances for which the permit or certification was issued. However, the permit or certification fee submitted with an application will be refunded if the permit or certification is cancelled, revoked, or suspended subsequent to having been issued through administrative error, or if a permit being applied for is to be obtained from a locally appointed fire official.]

13VAC5-51-85. Section 108.0. Operational permits.

A. 108.1. General. Operational permits shall be in accordance with Section 108. The fire official may require notification prior to (i) activities involving the handling, storage or use of

substances, materials or devices regulated by the SFPC; (ii) conducting processes which produce conditions hazardous to life or property; or (iii) establishing a place of assembly.

B. 108.1.1. Permits required. Operational permits may be required by the fire official in accordance with Table 107.2. The fire official shall require operational permits for the manufacturing, storage, handling, use and sale of explosives. Issued permits shall be kept on the premises designated therein at all times and shall be readily available for inspection by the fire official.

Exceptions:

1. Operational permits will not be required by the State Fire Marshal except for the manufacturing, storage, handling, use and sale of explosives in localities not enforcing the SFPC.

2. Operational permits will not be required for the manufacturing, storage, handling or use of explosives or blasting agents by the Virginia Department of State Police provided notification to the fire official is made annually by the Chief Arson Investigator listing all storage locations.

C. 108.1.2. Duration of operational permits.

An operational permit allows the applicant to conduct an operation or a business for which a permit is required by Section 108.1.1 for either:

1. A prescribed period.

2. Until renewed, suspended, or revoked.

D. 108.1.3. Operational permits for the same location. When more than one operational permit is required for the same location, the fire official is authorized to consolidate such permits into a single permit provided that each provision is listed in the permit.

E. 108.2. Application. Application for an operational permit required by this code shall be made to the fire official in such form and detail as prescribed by the fire official. Applications for permits shall be accompanied by such plans as prescribed by the fire official.

F. 108.2.1. Refusal to issue permit. If the application for an operational permit describes a use that does not conform to the requirements of this code and other pertinent laws and ordinances, the fire official shall not issue a permit, but shall return the application to the applicant with the refusal to issue such permit. Such refusal shall, when requested, be in writing and shall contain the reasons for refusal.

G. 108.2.2. Inspection authorized. Before a new operational permit is approved, the fire official is authorized to inspect the receptacles, vehicles, buildings, devices, premises, storage spaces or areas to be used to determine compliance with this code or any operational constraints required.

H. 108.2.3. Time limitation of application. An application for an operational permit for any proposed work or operation shall be deemed to have been abandoned six months after the date of

filing, unless such application has been diligently prosecuted or a permit shall have been issued; except that the fire official is authorized to grant one or more extensions of time for additional periods not exceeding 90 days each if there is reasonable cause.

I. 108.2.4. Action on application. The fire official shall examine or cause to be examined applications for operational permits and amendments thereto within a reasonable time after filing. If the application does not conform to the requirements of pertinent laws, the fire official shall reject such application in writing, stating the reasons. If the fire official is satisfied that the proposed work or operation conforms to the requirements of this code and laws and ordinances applicable thereto, the fire official shall issue a permit as soon as practicable.

J. 108.3. Conditions of a permit. An operational permit shall constitute permission to maintain, store or handle materials; or to conduct processes in accordance with the SFPC, and shall not be construed as authority to omit or amend any of the provisions of this code. ~~The building official shall issue permits to install equipment utilized in connection with such activities; or to install or modify any fire protection system or equipment or any other construction, equipment installation or modification in accordance with the provisions of this code where a permit is required by section 108.5. Such permission shall not be construed as authority to omit or amend any of the provisions of this code.~~

K. 108.3.1. Expiration. An operational permit shall remain in effect until reissued, renewed, or revoked for such a period of time as specified in the permit. Permits are not transferable and any change in occupancy, operation, tenancy or ownership shall require that a new permit be issued.

L. 108.3.2. Extensions. A permittee holding an unexpired permit shall have the right to apply for an extension of the time within which the permittee will commence work under that permit when work is unable to be commenced within the time required by this section for good and satisfactory reasons. The fire official is authorized to grant, in writing, one or more extensions of the time period of a permit for periods of not more than 90 days each. Such extensions shall be requested by the permit holder in writing and justifiable cause demonstrated.

M. 108.3.3. Annual. The enforcing agency may issue annual operational permits for the manufacturing, storage, handling, use, or sales of explosives to any state regulated public utility.

N. 108.3.4. Suspension of permit. An operational permit shall become invalid if the authorized activity is not commenced within six months after issuance of the permit, or if the authorized activity is suspended or abandoned for a period of six months after the time of commencement.

O. 108.3.5. Posting. Issued operational permits shall be kept on the premises designated therein at all times and shall be readily available for inspection by the fire official.

P. 108.3.6. Compliance with code. The issuance or granting of an operational permit shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this code or of any other ordinance of the jurisdiction. Operational permits presuming to give authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction shall not be valid. The issuance of a permit based on other data shall not prevent the fire official from requiring the correction of errors in the provided documents and other data. Any addition to or alteration of approved provided documents shall be approved in advance by the fire official, as evidenced by the issuance of a new or amended permit.

Q. 108.3.7. Information on the permit. The fire official shall issue all operational permits required by this code on an approved form furnished for that purpose. The operational permit shall contain a general description of the operation or occupancy and its location and any other information required by the fire official. Issued permits shall bear the original or electronic signature of the fire official or other designee approved by the fire official.

R. 108.4. Revocation. The fire official is authorized to revoke an operational permit issued under the provisions of this code when it is found by inspection or otherwise that there has been a false statement or misrepresentation as to the material facts in the application or documents on which the permit or approval was based including, but not limited to, any one of the following:

1. The permit is used for a location or establishment other than that for which it was issued.

2. The permit is used for a condition or activity other than that listed in the permit.

3. Conditions and limitations set forth in the permit have been violated.

4. Inclusion of any false statements or misrepresentations as to a material fact in the application for permit or plans submitted or a condition of the permit.

5. The permit is used by a different person or firm than the person or firm for which it was issued.

6. The permittee failed, refused or neglected to comply with orders or notices duly served in accordance with the provisions of this code within the time provided therein.

7. The permit was issued in error or in violation of an ordinance, regulation or this code.

13VAC5-51-91. Section 109.0. Inspection.

A. 109.1. Inspection: The fire official may inspect all structures and premises for the purposes of ascertaining and causing to be corrected any conditions liable to cause fire, contribute to the spread of fire, interfere with firefighting operations, endanger life, or any violations of the provisions or intent of the SFPC.

Exception: Single family dwellings and dwelling units in two family and multiple family dwellings and farm structures shall be exempt from routine inspections. This exemption shall not preclude the fire official from conducting routine inspections in Group R-3 or Group R-5 occupancies operating as a commercial bed and breakfast as outlined in Section ~~310.1~~ 310.3 of the USBC or inspecting under § 27-98.2 of the Code of Virginia for hazardous conditions relating to explosives, flammable and combustible conditions, and hazardous materials.

B. 109.1.1. Right to entry: The fire official may enter any structure or premises at any reasonable time to inspect subject to constitutional restrictions on unreasonable searches and seizures. If entry is refused or not obtained, the fire official may pursue recourse as provided by law.

Note: Specific authorization and procedures for inspections and issuing warrants are set out in §§ 27-98.1 through 27-98.5 of the Code of Virginia and shall be taken into consideration.

C. 109.1.2. Credentials: The fire official and technical assistants shall carry proper credentials of office when inspecting in the performance of their duties under the SFPC.

D. 109.2. Coordinated inspections: The fire official shall coordinate inspections and administrative orders with any other state and local agencies having related inspection authority, and shall coordinate those inspections required by the USBC for new construction when involving provisions of the amended IFC, so that the owners and occupants will not be subjected to numerous inspections or conflicting orders.

Note: The USBC requires the building official to coordinate such inspections with the fire official.

E. 109.3. Other inspections: In accordance with § ~~36-139.3~~ 9.1-207 of the Code of Virginia, the State Fire Marshal, upon presenting proper credentials, shall make annual inspections for hazards incident to fire in all (i) residential care facilities operated by any state agency, (ii) assisted living facilities licensed or subject to licensure pursuant to Chapter 18 (§ 63.2-1800 et seq.) of Title 63.2 of the Code of Virginia which are not inspected by a local fire marshal, (iii) student-residence facilities owned or operated by the public institutions of higher education in the Commonwealth, and (iv) public schools in the Commonwealth which are not inspected by a local fire marshal. In the event that any such facility or residence is found to be nonconforming to the SFPC, the State Fire Marshal or local fire marshal may petition any court of competent jurisdiction for the issuance of an injunction.

13VAC5-51-101. Section 110.0. Unsafe conditions.

A. 110.1. General: The fire official shall order the following dangerous or hazardous conditions or materials to be removed or remedied in accordance with the SFPC:

1. Dangerous conditions which are liable to cause or contribute to the spread of fire in or on said premises, building or structure, or to endanger the occupants thereof.

2. Conditions which would interfere with the efficiency and use of any fire protection equipment.

3. Obstructions to or on fire escapes, stairs, passageways, doors or windows, which are liable to interfere with the egress of occupants or the operation of the fire department in case of fire.

4. Accumulations of dust or waste material in air conditioning or ventilating systems or grease in kitchen or other exhaust ducts.

5. Accumulations of grease on kitchen cooking equipment, or oil, grease or dirt upon, under or around any mechanical equipment.

6. Accumulations of rubbish, waste, paper, boxes, shavings, or other combustible materials, or excessive storage of any combustible material.

7. Hazardous conditions arising from defective or improperly used or installed electrical wiring, equipment or appliances.

8. Hazardous conditions arising from defective or improperly used or installed equipment for handling or using combustible, explosive or otherwise hazardous materials.

9. Dangerous or unlawful amounts of combustible, explosive or otherwise hazardous materials.

10. All equipment, materials, processes or operations which are in violation of the provisions and intent of this code.

B. 110.2. Maintenance: The owner shall be responsible for the safe and proper maintenance of any structure, premises or lot. In all structures, the fire protection equipment, means of egress, alarms, devices and safeguards shall be maintained in a safe and proper operating condition as required by the SFPC and applicable referenced standards.

C. 110.3. Occupant responsibility: If a building occupant creates conditions in violation of this code, by virtue of storage, handling and use of substances, materials, devices and appliances, such occupant shall be held responsible for the abatement of said hazardous conditions.

D. 110.4. Unsafe structures: All structures that are or shall hereafter become unsafe or deficient in adequate exit facilities or which constitute a fire hazard, or are otherwise dangerous to human life or the public welfare, or by reason of illegal or improper use, occupancy or maintenance or which have sustained structural damage by reason of fire, explosion, or natural disaster shall be deemed unsafe structures. A vacant structure, or portion of a structure, unguarded or open at door or window shall be deemed a fire hazard and unsafe within the meaning of this code. Unsafe structures shall be reported to the building official or building maintenance official who shall take appropriate action under the provisions of the USBC to secure abatement. Subsequently, the fire official may request the legal counsel of the local governing body to institute the appropriate proceedings for an injunction against the continued use and occupancy of the structure until such time as conditions have been remedied.

E. 110.5. Evacuation: When, in the fire official's opinion, there is actual and potential danger to the occupants or those in the proximity of any structure or premises because of unsafe structural conditions, or inadequacy of any means of egress, the presence of explosives, explosive fumes or vapors, or the presence of toxic fumes, gases or materials, the fire official may order the immediate evacuation of the structure or premises. All notified occupants shall immediately leave the structure or premises and no person shall enter until authorized by the fire official.

F. 110.6. Unlawful continuance: Any person who refuses to leave, interferes with the evacuation of other occupants or continues any operation after having been given an evacuation order shall be in violation of this code.

Exception: Any person performing work directed by the fire official to be performed to remove an alleged violation or unsafe condition.

13VAC5-51-111. Section 111.0. Violations.

A. 111.1. Notice: When the fire official discovers an alleged violation of a provision of the SFPC or other codes or ordinances under the fire official's jurisdiction, the fire official shall prepare a

written notice citing the section allegedly violated, describing the condition deemed unsafe and specifying time limitations for the required abatements to be made to render the structure or premises safe and secure.

B. 111.1.1. Right of appeal [~~.~~:] Notices of violation issued under Section 111.1 shall indicate the right of appeal by referencing the appeals section of this code.

Exceptions:

1. Summons issued in lieu of a notice of violation in accordance with Section 111.5 of this code.

2. Documents reflecting uncorrected violations in subsequent inspections to verify compliance.

~~B.~~ C. 111.2. Service: The written notice of violation of this code shall be served upon the owner, a duly authorized agent or upon the occupant or other person responsible for the conditions under violation. Such notice shall be served either by delivering a copy of same to such persons by mail to the last known post office address, by delivering in person or by delivering it to and leaving it in the possession of any person in charge of the premises, or, in the case such person is not found upon the premises, by affixing a copy thereof in a conspicuous place at the entrance door or avenue of access. Such procedure shall be deemed the equivalent of personal notice.

~~C.~~ D. 111.3. Failure to correct violations: If the notice of violation is not complied with within the time specified, the fire official shall request the legal counsel of the local governing body to institute the appropriate legal proceedings to restrain, correct, or abate such alleged violation.

~~D.~~ E. 111.4. Penalty: Penalties upon conviction of violating the SFPC shall be as set out in § 27-100 of the Code of Virginia.

~~E.~~ F. 111.5. Summons: When authorized and certified in accordance with § 27-34.2 of the Code of Virginia, the fire official may, subject to any limitations imposed by the local governing body, issue a summons in lieu of a notice of violation. Fire officials not certified in accordance with § 27-34.2 of the Code of Virginia may request the law-enforcement agency of the local governing body to make arrests for any alleged violations of the SFPC or orders affecting the immediate public safety.

13VAC5-51-121. Section 112.0. Appeals.

A. 112.1. Local Board of Fire Prevention Code Appeals (BFPCA): Each local governing body which enforces the SFPC shall have a BFPCA to hear appeals as authorized herein or it shall enter into an agreement with the governing body of another county or municipality, with some other agency, or with a state agency approved by the DHCD to act on appeals. An appeal case decided by some other approved agency shall constitute an appeal in accordance with this section and shall be final unless appealed to the State Building Code Technical Review Board (TRB).

B. 112.2. Membership: The BFPCA shall consist of at least five members appointed by the local governing body and having terms of office established by written policy. Alternate members may be appointed to serve in the absence of any regular members and as such, shall have the full

power and authority of the regular members. Regular and alternate members may be reappointed. Written records of current membership, including a record of the current chairman and secretary shall be maintained in the office of the local governing body. In order to provide continuity, the terms of the members may be of different length so that less than half will expire in any one-year period. The BFPCA shall meet at least once annually to assure a duly constituted board, appoint officers as necessary and receive such training on the code as may be appropriate or necessary from staff of the locality.

C. 112.2.1. Chairman: The BFPCA shall annually select one of its regular members to serve as chairman. In case of the absence of the chairman at a hearing, the members present shall select an acting chairman.

D. 112.2.2. Secretary: The local governing body shall appoint a secretary to the BFPCA to maintain a detailed record of all proceedings.

E. 112.3. Qualifications of members: BFPCA members shall be selected by the local governing body on the basis of their ability to render fair and competent decisions regarding application of the SFPC and shall, to the extent possible, represent different occupational or professional fields relating to building construction or fire prevention. At least one member should be an experienced builder and one member a licensed professional engineer or architect. Employees or officials of the local governing body shall not serve as members of the BFPCA.

F. 112.4. Disqualification of member: A member shall not hear an appeal in which that member has conflict of interest in accordance with the State and Local Government Conflict of Interests Act, Chapter 31 (§ 2.2-3100 et seq.) of Title 2.2 of the Code of Virginia.

G. 112.5. Application for appeal: The owner of a structure, the owner's agent or any other person involved in the design, construction or maintenance of the structure may appeal a decision of the fire official concerning the application of the SFPC or the fire official's refusal to grant modification under Section 106.5 to the provisions of the SFPC. The appeal shall first lie to the local board of fire prevention code appeals (BFPCA) and then to the TRB except that appeals concerning the application of the SFPC or refusal to grant modifications by the State Fire Marshal shall be made directly to the TRB. The appeal shall be submitted to the BFPCA within 14 calendar days of the application of the SFPC. The application shall contain the name and address of the owner of the structure and the person appealing if not the owner. A copy of the written decision of the fire official shall be submitted along with the application for appeal and maintained as part of the record. The application shall be stamped or otherwise marked by the BFPCA to indicate the date received. Failure to submit an application for appeal within the time limit established by this section shall constitute acceptance of the fire official's decision.

Note: In accordance with § 27-98 of the Code of Virginia, any local fire code may provide for an appeal to a local board of appeals. If no local board of appeals exists, the TRB shall hear appeals of any local fire code violation.

H. 112.6. Notice of meeting: The BFPCA shall meet within 30 calendar days after the date of receipt of the application for appeal. Notice indicating the time and place of the hearing shall be sent to the parties in writing to the addresses listed on the application at least 14 calendar days prior to the date of the hearing. Less notice may be given if agreed upon by the applicant.

I. 112.7. Hearing procedures: All hearings before the BFPCA shall be open to the public. The appellant, the appellant's representative, the local governing body's representative and any person whose interests are affected shall be given an opportunity to be heard. The chairman shall have the power and duty to direct the hearing, rule upon the acceptance of evidence and oversee the record of all proceedings.

J. 112.7.1. Postponement: When a quorum of the BFPCA is not present to hear an appeal, either the appellant or the appellant's representative shall have the right to request a postponement of the hearing. The BFPCA shall reschedule the appeal within 30 calendar days of the postponement.

K. 112.8. Decision: The BFPCA shall have the power to uphold, reverse or modify the decision of the fire official by a concurring vote of a majority of those present. Decisions of the BFPCA shall be final if no appeal is made therefrom and the appellant and the fire official shall act accordingly.

L. 112.8.1. Resolution: The ~~BFPCA"s~~ BFPCA's decision shall be by resolution signed by the chairman and retained as part of the record by the BFPCA. The following wording shall be part of the resolution: "Any person who was a party to the appeal may appeal to the State Building Code Technical Review Board (TRB) by submitting an application to the TRB within 21 calendar days upon receipt by certified mail of this resolution. Application forms are available from the Office of the TRB, ~~501 North Second~~ 600 East Main Street, Richmond, Virginia 23219, (804) 371-7150." Copies of the resolution shall be furnished to all parties.

M. 112.9. Appeal to the TRB: After final determination by the BFPCA, any person who was a party to the local appeal may appeal to the TRB. Application shall be made to the TRB within 21 calendar days of receipt of the decision to be appealed. Application for appeal to the TRB arising from the SFMO's enforcement of the code or from any local fire code violation if no local board of appeals exists shall be made to the TRB within 14 calendar days of receipt of the decision to be appealed and shall be accompanied by copies of the inspection reports and other relevant information. Failure to submit an application for appeal within the time limit established by this section shall constitute an acceptance of the BFPCA's resolution or fire official's decision.

N. 112.9.1. Information to be submitted: Copies of the fire official's decision and the resolution of the BFPCA shall be submitted with the application for appeal. Upon request by the office of the TRB, the BFPCA shall submit a copy of all inspection reports and all pertinent information from the record of the BFPCA.

O. 112.9.2. Decision of TRB: Procedures of the TRB are in accordance with Article 2 (§ 36-108 et seq.) of Chapter 6 of Title 36 of the Code of Virginia. Decisions of the TRB shall be final if no appeal is made therefrom and the appellant and the code official shall act accordingly.

Part II - Technical Amendments

13VAC5-51-129. Application of Part II.

The changes in this part shall be made to the model codes and standards as indicated in this chapter for use as part of the SFPC.

13VAC5-51-130. IFC Section 202.0. Definitions.

A. Add the following definitions:

Background clearance card~~: See Section 3302.1~~ or BBC: An identification card issued to an individual who is not a certified blaster or pyrotechnician and is responsible management or an employee of a company, corporation, firm, or other entity, solely for the purpose of submitting an application to the fire official for a permit to manufacture, use, handle, store, or sell explosive materials; or conduct a fireworks display. A person to whom a BCC has been issued can fulfill the role of a designated individual on an application for a permit to manufacture, use, handle, store, or sell explosive materials; or on an application for a permit to design, setup, and conduct a fireworks display.

Blaster, restricted: ~~See Section 3302.1~~ Any person engaging in the use of explosives or blasting agents utilizing five pounds (2.25 kg) or less per blasting operation and using instantaneous detonators. A certified restricted blaster can fulfill the role of a designated individual on an application for permit to manufacture, use, handle, store, or sell explosive materials.

Blaster, unrestricted: ~~See Section 3302.1~~ Any person engaging in the use of explosives or blasting agents without the limit to the amount of explosives or blasting agents or type of detonator. A certified unrestricted blaster can fulfill the role of a designated individual on an application for permit to manufacture, use, handle, store, or sell explosive materials.

Design: For the purposes of a fireworks display, either inside a building or structure or outdoors, it shall mean the pyrotechnician who will be in attendance and makes the final artistic determination for the placement of fireworks and ground display pieces suitable for the display site.

Designated individual: ~~See Section 3302.1~~ A person who is in possession of a BCC issued by the SFMO, certified by the SFMO as a pyrotechnician, or a restricted or unrestricted blaster, any of whom are responsible for ensuring compliance with state law and regulations relating to blasting agents and explosives and applying for explosives or firework permits; is at least 21 years of age; and demonstrates the capability to effectively communicate safety messages verbally and in writing in the English language.

DHCD: The Virginia Department of Housing and Community Development.

Local government, local governing body or locality: The governing body of any county, city, or town, other political subdivision and state agency in this Commonwealth charged with the enforcement of the SFPC under state law.

Night club: Any building or portion thereof in which the main use is a place of public assembly that provides exhibition, performance or other forms or entertainment; serves alcoholic beverages; and provides music and space for dancing.

Permissible fireworks: Any sparklers, fountains, Pharaoh's serpents, caps for pistols, or pinwheels commonly known as whirligigs or spinning jennies.

Pyrotechnician (firework operator): ~~See Section 3302.1~~ Any person supervising or engaged in the design, setup, or conducting of any fireworks display, either inside a building or outdoors. A certified pyrotechnician can fulfill the role of a designated individual on an application for a permit for a fireworks display.

Pyrotechnician, aerial: A person supervising or engaged in the design, setup or conducting of a outdoor aerial fireworks display performed in accordance with the regulations as set forth in this code and NFPA 1123, a referenced standard for fireworks displays.

Pyrotechnician, proximate: A person supervising or engaged in the design, setup, or conducting of a fireworks display, either inside a building or outdoors, performed in accordance with the regulations as set forth in this code and NFPA 1126, a referenced standard for the use of pyrotechnics before a proximate audience.

Responsible management~~.~~: ~~See Section 3302.1~~ A person who is any of the following:

1. The sole proprietor of a sole proprietorship.

2. The partners of a general partnership.

3. The managing partners of a limited partnership.

4. The officers [or directors] of a corporation.

5. The managers [or members] of a limited liability company.

6. The [managers,] officers or directors of an association [~~, or both~~].

7. Individuals in other business entities recognized under the laws of the Commonwealth as having a fiduciary responsibility to the firm.

[Sky lantern: An unmanned device with a fuel source that incorporates an open flame in order to make the device airborne.]

Sole proprietor~~.~~: ~~See Section 3302.1~~ A person or individual, not a corporation, who is trading under his own name or under an assumed or fictitious name pursuant to the provisions of §§ 59.1-69 through 59.1-76 of the Code of Virginia.

State Fire Marshal: The State Fire Marshal as provided for by § ~~36-139.2~~ 9.1-206 of the Code of Virginia.

State Regulated Care Facility (SRCF): A building with an occupancy in Group R-2, R-3, R-4, or R-5 occupied by persons in the care of others where program oversight is provided by the Virginia Department of Social Services, the Virginia Department of Behavioral Health and Developmental Services, the Virginia Department of Education or the Virginia Department of Juvenile Justice.

Technical Assistant: Any person employed by or under an extended contract to a local enforcing agency for enforcing the SFPC. For the purposes of this definition, an extended contract shall be a contract with an aggregate term of 18 months or longer.

TRB: The Virginia State Building Code Technical Review Board.

USBC: The Virginia Uniform Statewide Building Code (13VAC5-63).

B. Add the following definition under the term "Occupancy Classification--Residential Group R":

R-5 Detached one and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories high with separate means of egress and their accessory structures. The terms "R-5" and "one and two-family dwelling" where used in this code shall be interchangeable.

C. Change the following ~~definition~~ definitions to read:

Automatic fire-extinguishing system: An approved system of devices and equipment that automatically detects a fire and discharges an approved fire-extinguishing agent onto or in the area of a fire. Such system shall include an automatic sprinkler system, unless otherwise expressly stated.

Fire code official: The officer or other designated authority charged with administration and enforcement of this code, or a duly authorized representative. For the purpose of this code, the terms "code official" and "fire official" shall have the same meaning as the term "fire code official" and, in addition, such official shall have the powers outlined in § 27-98.1 of the Code of Virginia.

Fireworks: Any firecracker, torpedo, skyrocket, or other substance or object, of whatever form or construction, that contains any explosive or inflammable compound or substance, and is intended, or commonly known, as fireworks and that explodes, rises into the air or travels laterally, or fires projectiles into the air. Fireworks shall not include automobile flares, paper caps containing not more than the average of 0.25 grain (16 mg) of explosive content per cap or toy pistols, toy canes, toy guns, or other devices utilizing such caps and items commonly known as party poppers, pop rocks, and snap-n-pops. Fireworks may be further delineated and referred to as:

Fireworks, 1.4G (formerly known as Class C, Common Fireworks): Small fireworks devices containing restricted amounts of pyrotechnic composition designed primarily to produce visible or audible effects by combustion. Such 1.4G fireworks that comply with the construction, chemical composition, and labeling regulations of the DOTn for Fireworks, UN0336, and the U.S. Consumer Product Safety Commission as set forth in CPSC 16 CFR Parts 1500 and 1507, are not explosive materials for the purpose of this code.

Fireworks, 1.3G (formerly Class B, Special Fireworks): Large fireworks devices, which are explosive materials, intended for the use in fireworks displays and designed to produce audible or visible effects by combustion, deflagration, or detonation. Such 1.3G fireworks include, but are not limited to, firecrackers containing more than 130 milligrams (2 grains) of

explosive composition, aerial shells containing more than 40 grams of pyrotechnic composition, and other display pieces that exceed the limits for classification as 1.4G fireworks. Such 1.3G fireworks are also described as Fireworks, UN0335 by the DOTn.

Smokeless propellants. Solid propellants, commonly referred to as smokeless powders or any propellant classified by DOTn as a smokeless propellant in accordance with NA3178, Smokeless Powder for Small Arms, used in small arms ammunition, firearms, cannons, rockets, propellant-actuated devices, and similar articles.

13VAC5-51-131. IFC Chapter 3. ~~Precautions Against Fire~~ General Requirements.

A. Add Section 301.3 to read:

301.3. Occupancy. The occupancy of a structure shall be continued as originally permitted under and in full compliance with the codes in force at the time of construction or alteration. The occupancy of a structure shall not change to another occupancy that will subject the structure to any special provisions of this code or the USBC without the approval of the building official.

[B. Add the following to the list of definitions in Section 302.1:

Sky lantern.

~~B.~~ C.] Change Section 304.3.2 to read:

304.3.2. Capacity exceeding 5.88 cubic feet. Containers with a capacity exceeding 5.88 cubic feet (44 gallons) (0.17 m^3) shall be provided with lids. Containers and lids shall be constructed of noncombustible materials or approved combustible materials.

[D. Add an exception to Section 307.1 to read:

Exception: Approved outdoor live fire training using equipment or appliances accessible or available to the general public, and that complies with Section 307.4.

E. Add Section 308.1.6.3 to read:

308.1.6.3. Sky lanterns. No person shall release or cause to be released an untethered sky lantern.

F. Change Section 311.1 to read:

311.1. General. Temporarily unoccupied buildings, structures, premises or portions thereof, including tenant spaces, shall be safeguarded and maintained in accordance with Sections 311.1.1 through 311.5.6.

~~C.~~ G.] Add Section 311.5.6 to read:

311.5.6. Removal. Removal of placards posted in accordance with this section without the approval of the fire official shall be a violation of this code.

[H. Add Section 311.6 to read:

311.6. Unoccupied tenant spaces in mall buildings. Unoccupied tenant spaces in covered and open mall buildings shall be:

1. Kept free from the storage of any materials.

2. Separated from the remainder of the building by partitions of at least 0.5-inch-thick (12.7 mm) gypsum board or an approved equivalent to the underside of the ceiling of the adjoining tenant spaces.

3. Without doors or other access openings other than one door that shall be kept key locked in the closed position except during that time when opened for inspection.

4. Kept free from combustible waste and be broom swept clean.

~~D.~~ I.] Change Section 314.1 to read:

314.1. General. Indoor displays constructed within any building or structure shall comply with Sections 314.2 through 314.5.

~~D.~~ [~~E.~~ J.] Add Section 314.5 to read:

314.5. Smokeless powder and small arms primers. Venders shall not store, display, or sell smokeless powder or small arms primers during trade shows inside exhibition halls except as follows:

1. The amount of smokeless powder displayed by each vender is limited to the amount established in Section ~~3306.5.1.1~~ 5506.5.1.1.

2. The amount of smokeless powder each vender may store is limited to the storage arrangements and storage amounts established in Section ~~3306.5.2.1~~ 5506.5.2.1. Smokeless powder shall remain in the manufacturer's original sealed container, and the container shall remain sealed while inside the building. The repackaging of smokeless powder shall not be performed inside the building. Damaged containers shall not be repackaged inside the building and shall be immediately removed from the building in such manner to avoid spilling any powder.

3. There shall be at least 50 feet separation between venders and 20 feet from any exit.

4. Small arms primers shall be displayed and stored in the manufacturer's original packaging and in accordance with the requirements of Section ~~3306.5.2.3~~ 5506.5.2.3.

~~E.~~ [~~F.~~ K.] Change Section ~~315.3~~ 315.4 to read:

~~315.3~~ 315.4. Outside storage. Outside storage of combustible materials shall not be located within 10 feet (3048 mm) of a property line or other building on the site.

Exceptions:

1. The separation distance is allowed to be reduced to 3 feet (914 mm) for storage not exceeding 6 feet (1829 mm) in height.

2. The separation distance is allowed to be reduced when the fire official determines that no hazard to the adjoining property exists.

~~F.~~ [~~G.~~ L.] Change Section ~~315.3.1~~ 315.4.1 to read:

~~315.3.1~~ 315.4.1. Storage beneath overhead projections from buildings. To the extent required by the code the building was constructed under, when buildings are required to be protected by automatic sprinklers, the outdoor storage, display and handling of combustible materials under eaves, canopies or other projections or overhangs is prohibited except where automatic sprinklers are installed under such eaves, canopies or other projections or overhangs.

13VAC5-51-132. IFC Chapter 4. Emergency Planning and Preparedness.

A. Add Section 401.1.1 to read:

401.1.1. State Regulated Care Facilities~~:~~. ~~when~~ When a state license is required by the Virginia Department of Social Services; Virginia Department of Behavioral Health and Developmental Services; Virginia Department of Education; or Virginia Department of Juvenile Justice to operate, SRCF shall comply with this section and the provisions of Section 404.0.

[~~B. Add item~~] ~~15~~ [~~16 to Section 404.2 to read:~~]

~~15~~ [~~16. SRCF.~~

~~C. Add exception to Section 405.1 to read:~~

~~Exception: Emergency evacuation drills shall not be conducted in school buildings during periods of mandatory testing required by the Virginia Board of Education.~~

~~D.~~] ~~Add~~ [~~Delete the "High-rise buildings" category, and add the following category to Table 405.2 to read:~~

-	~~Group or occupancy~~	~~Frequency~~	~~Participation~~
-	~~SRCF~~	~~Monthly~~	~~All occupants~~

~~E. Add Section 405.2.1 to read:~~

~~405.2.1. High-rise buildings. Fire exit drills shall be conducted annually by building staff personnel or the owner of the building in accordance with the fire safety plan and shall not affect other current occupants.~~

~~F. Add Section 408.1.1 to read:~~

~~408.1.1. Maintaining occupant load posting. Occupant load postings required by the building code are required to be maintained.~~

~~G. Change Section 408.2 to read:~~

~~408.2. Group A occupancies. Group A occupancies shall comply with applicable requirements of Sections 408.2.1 through 408.2.3 and 401 through 406.~~

~~H. Add Sections 408.2.3, 408.2.3.1 and 408.2.3.2 to read:~~

~~408.2.3. Night clubs. Night clubs shall comply with Sections 408.2.3.1 and 408.2.3.2.~~

~~408.2.3.1. Audible announcements. Audible announcements shall be made to the occupants no longer than 10 minutes prior to the start of the entertainment and at each intermission to notify the occupants of the location of the exits to be used in the event of a fire or other emergency.~~

~~408.2.3.2. Occupant load count. Upon request of the fire code official, the owner or operator, or both, will be required to keep a running count of the occupant load to provide to the fire code official during performance hours of operation, entertainment hours of operation, or both.~~

B. Change Section 403 to read:

Section 403.
Emergency Preparedness Requirements.

403.1. General. In addition to the requirements of Section 401, occupancies, uses and outdoor locations shall comply with the emergency preparedness requirements set forth in Sections 403.2 through 403.11. Where a fire safety and evacuation plan is required by Sections 403.2 through 403.11, evacuation drills shall be in accordance with Section 405 and employee training shall be in accordance with Section 406.

403.1.1. Maintaining occupant load posting. Occupant load postings required by the building code are required to be maintained.

403.2. Group A occupancies. An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group A occupancies, other than those occupancies used exclusively for purposes of religious worship with an occupant load less than 2,000, and for buildings containing both a Group A occupancy and an atrium. Group A occupancies shall also comply with Sections 403.2.1 through 403.2.4.

403.2.1. Seating plan. In addition to the requirements of Section 404.2, the fire safety and evacuation plans for assembly occupancies shall include a detailed seating plan, occupant load and occupant load limit. Deviations from the approved plans shall be allowed provided the occupant load limit for the occupancy is not exceeded and the aisles and exit accessways remain unobstructed.

403.2.2. Announcements. In theaters, motion picture theaters, auditoriums and similar assembly occupancies in Group A used for noncontinuous programs, an audible announcement shall be made not more than 10 minutes prior to the start of each program to notify the occupants of the location of the exits to be used in the event of a fire or other emergency.

Exception: In motion picture theaters, the announcement is allowed to be projected upon the screen in a manner approved by the fire code official.

403.2.2.1. Night clubs. Night clubs shall comply with Sections 403.2.2.1.1 and 403.2.2.1.2.

403.2.2.1.1. Audible announcements. Audible announcements shall be made to the occupants no longer than 10 minutes prior to the start of the entertainment and at each intermission to notify the occupants of the location of the exits to be used in the event of a fire or other emergency.

403.2.2.1.2. Occupant load count. Upon request of the fire code official, the owner or operator, or both, will be required to keep a running count of the occupant load to provide to the fire code official during performance hours of operation, entertainment hours of operation, or both.

403.2.3. Fire watch personnel. Fire watch personnel shall be provided where required by Section 403.11.1.

403.2.4. Crowd managers. Crowd managers shall be provided where required by Section 403.11.3.

403.3. Group B occupancies. An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for buildings containing a Group B occupancy where the Group B occupancy has an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.

403.4. Group E occupancies. An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group E occupancies and for buildings containing both a Group E occupancy and an atrium. Group E occupancies shall also comply with Section 403.4.1.

403.4.1. Group E occupancies. Group E occupancies shall comply with 403.4.1.1 through 403.4.1.3.

403.4.1.1. First emergency evacuation drill. The first emergency evacuation drill of each school year shall be conducted within 10 days of the beginning of classes.

403.4.1.2. Time of day. Emergency evacuation drills shall be conducted at different hours of the day or evening, during the changing of classes, when the school is at assembly, during the recess or gymnastic periods, or during other times to avoid distinction between drills and actual fires.

403.4.1.3. Assembly points. Outdoor assembly areas shall be designated and shall be located a safe distance from the building being evacuated so as to avoid interference with fire department operations. The assembly areas shall be arranged to keep each class separate to provide accountability of all individuals.

403.5. Group F occupancies. An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for buildings containing a Group F occupancy where the Group F occupancy has an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.

403.6. Group H Occupancies. An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group H occupancies. Group H-5 occupancies shall also comply with Section 403.6.1.

403.6.1. Group H-5 occupancies. Group H-5 occupancies shall comply with Sections 403.6.1.1 through 403.6.1.4.

403.6.1.1. Plans and diagrams. In addition to the requirements of Section 404 and Section 407.6, plans and diagrams shall be maintained in approved locations indicating the approximate plan for each area, the amount and type of HPM stored, handled and used, locations of shutoff valves for HPM supply piping, emergency telephone locations, and locations of exits.

403.6.1.2. Plan updating. The plans and diagrams required by Section 404, 403.6.1.1 and 407.6 shall be maintained up to date and the fire code official and fire department shall be informed of major changes.

403.6.1.3. Emergency response team. Responsible persons shall be designated as an on-site emergency response team and trained to be liaison personnel for the fire department. These persons shall aid the fire department in preplanning emergency responses, identifying locations where HPM is stored, handled and used, and be familiar with the chemical nature of such material. An adequate number of personnel for each work shift shall be designated.

403.6.1.4. Emergency drills. Emergency drills of the on-site emergency response team shall be conducted on a regular basis but not less than once every three months. Records of drills conducted shall be maintained.

403.7. Group I occupancies. An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group I occupancies. Group I occupancies shall also comply with Sections 403.7.1 through 403.7.3.

403.7.1. Group I-1 occupancies. Group I-1 occupancies shall comply with Sections 403.7.1.1 through 403.7.1.6.

403.7.1.1. Fire safety and evacuation plan. The fire safety and evacuation plan required by Section 404 shall include special employee actions, including fire protection procedures necessary for residents, and shall be amended or revised upon admission of any resident with unusual needs.

403.7.1.2. Employee training. Employees shall be periodically instructed and kept informed of their duties and responsibilities under the plan. Such instruction shall be reviewed by employees at intervals not exceeding two months. A copy of the plan shall be readily available at all times within the facility.

403.7.1.3. Resident training. Residents capable of assisting in their own evacuation shall be trained in the proper actions to take in the event of a fire. The training shall include actions to take if the primary escape route is blocked. Where the resident is given rehabilitation or habilitation training, training in fire prevention and actions to take in the event of a fire shall be a part of the rehabilitation training program. Residents shall be trained to assist each other in case of fire to the extent their physical and mental abilities permit them to do so without additional personal risk.

403.7.1.4. Drill frequency. Emergency evacuation drills shall be conducted at least six times per year, two times per year on each shift. Twelve drills shall be conducted in the first year of operation.

403.7.1.5. Drill times. Drills times are not required to comply with Section 405.4.

403.7.1.6. Resident participation in drills. Emergency evacuation drills shall involve the actual evacuation of residents to a selected assembly point.

403.7.2. Group I-2 occupancies. Group I-2 occupancies shall comply with Sections 403.7.2.1 through 403.7.2.3.

403.7.2.1. Drill times. Drill times are not required to comply with Section 405.4.

403.7.2.2. Evacuation not required. During emergency evacuation drills, the movement of patients to safe areas or to the exterior of the building is not required.

403.7.2.3. Coded alarm signal. When emergency evacuation drills are conducted after visiting hours or when patients or residents are expected to be asleep, a coded announcement is allowed instead of audible alarms.

403.7.3. Group I-3 occupancies. Group I-3 occupancies shall comply with Sections 403.7.3.1 through 403.7.3.4.

403.7.3.1. Employee training. Employees shall be instructed in the proper use of portable fire extinguishers and other manual fire suppression equipment. Training of new employees shall be provided promptly upon entrance on duty. Refresher training shall be provided at least annually.

403.7.3.2. Employee staffing. Group I-3 occupancies shall be provided with 24-hour staffing. An employee shall be within three floors or 300 feet (91 440 mm) horizontal distance of the access door of each resident housing area. In Conditions 3, 4 and 5, as defined in “Occupancy Classification – Institutional Group I-3” in Chapter 2, the arrangement shall be such that the employee involved can start release of locks necessary for emergency evacuation or rescue and initiate other necessary emergency actions within 2 minutes of an alarm.

Exception: An employee shall not be required to be within three floors or 300 feet (9144 mm) in areas in which all locks are unlocked remotely and automatically in accordance with Section 408.4 of the International Building Code.

403.7.3.3. Notification. Provisions shall be made for residents in Conditions 3, 4 and 5, as defined in "Occupancy Classification – Institutional Group I-3" in Chapter 2, to readily notify an employee of an emergency.

403.7.3.4. Keys. Keys necessary for unlocking doors installed in a means of egress shall be individually identifiable by both touch and sight.

403.8. Group M occupancies. An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for buildings containing a Group M occupancy, where the Group M occupancy has an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge, and for buildings containing both a Group M occupancy and an atrium.

403.9. Group R occupancies. Group R occupancies shall comply with the provisions of this section applicable to the type of Group R occupancy.

403.9.1. Group R-1 occupancies. An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group R-1 occupancies. Group R-1 occupancies shall also comply with Sections 403.9.1.1 through 403.9.1.3.

403.9.1.1. Evacuation diagrams. A diagram depicting two evacuation routes shall be posted on or immediately adjacent to every required egress door from each hotel or motel sleeping unit.

403.9.1.2. Emergency duties. Upon discovery of a fire or suspected fire, hotel and motel employees shall perform the following duties:

1. Activate the fire alarm system, where provided.

2. Notify the public fire department.

3. Take other action as previously instructed.

403.9.1.3. Fire safety and evacuation instructions. Information shall be provided in the fire safety and evacuation plan required by Section 404 to allow guests to decide whether to evacuate to the outside, evacuate to an area of refuge, remain in place, or any combination of the three.

403.9.2. Group R-2 occupancies. Group R-2 occupancies shall comply with Sections 403.9.2.1 through 403.9.2.3.

403.9.2.1. College and university buildings. An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group R-2 college and

university buildings. Group R-2 college and university buildings shall also comply with Sections 403.9.2.1.1 and 403.9.2.1.2.

403.9.2.1.1. First emergency evacuation drill. The first emergency evacuation drill of each school year shall be conducted within 10 days of the beginning of classes.

403.9.2.1.2. Time of day. Emergency evacuation drills shall be conducted at different hours of the day or evening, during the changing of classes, when the school is at assembly, during the recess or gymnastic periods, or during other times to avoid distinction between drills and actual fires. One required drill shall be held during hours after sunset or before sunrise.

403.9.2.2. Emergency guide. Fire emergency guides shall be provided for Group R-2 occupancies. Guide contents, maintenance and distribution shall comply with Sections 403.9.2.2.1 through 403.9.2.2.3.

403.9.2.2.1. Guide contents. Fire emergency guides shall describe the location, function and use of fire protection equipment and appliances accessible to residents, including fire alarm systems, smoke alarms, and portable fire extinguishers. Guides shall also include an emergency evacuation plan for each dwelling unit.

403.9.2.2.2. Emergency guide maintenance. Emergency guides shall be reviewed and approved by the fire code official.

403.9.2.2.3. Emergency guide distribution. A copy of the emergency guide shall be given to each tenant prior to initial occupancy.

403.9.2.3. Evacuation diagrams for dormitories. A diagram depicting two evacuation routes shall be posted on or immediately adjacent to every required egress door from each dormitory sleeping unit. Evacuation diagrams shall be reviewed and updated as needed to maintain accuracy.

403.9.3. Group R-4 occupancies. An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group R-4 occupancies. Group R-4 occupancies shall also comply with Sections 403.9.3.1 through 403.9.3.6.

403.9.3.1. Fire safety and evacuation plan. The fire safety and evacuation plan required by Section 404 shall include special employee actions, including fire protection procedures necessary for residents, and shall be amended or revised upon admission of a resident with unusual needs.

403.9.3.2. Employee training. Employees shall be periodically instructed and kept informed of their duties and responsibilities under the plan. Such instruction shall be reviewed by employees at intervals not exceeding two months. A copy of the plan shall be readily available at all times within the facility.

403.9.3.3. Resident training. Residents capable of assisting in their own evacuation shall be trained in the proper actions to take in the event of a fire. The training shall include actions to take if the primary escape route is blocked. Where the resident is given rehabilitation or habilitation training, training in fire prevention and actions to take in the event of a fire shall

be a part of the rehabilitation training program. Residents shall be trained to assist each other in case of fire to the extent their physical and mental abilities permit them to do so without additional personal risk.

403.9.3.4. Drill frequency. Emergency evacuation drills shall be conducted at least six times per year, two times per year on each shift. Twelve drills shall be conducted in the first year of operation.

403.9.3.5. Drill times. Drills are not required to comply with Section 405.4.

403.9.3.6. Resident participation in drills. Emergency evacuation drills shall involve the actual evacuation of residents to a selected assembly point and shall provide residents with experience in exiting through all required exits. All required exits shall be used during emergency evacuation drills.

Exception: Actual exiting from windows shall not be required. Opening the window and signaling for help shall be an acceptable alternative.

403.9.4. Group R-3 and R-5 lodging facilities. An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group R-3 and R-5 bed and breakfast and other transient boarding facilities that are either proprietor or non-proprietor occupied.

403.10. Special uses. Special uses shall comply with the provisions of this section applicable to the type of special use.

403.10.1. Covered and open mall buildings. Covered and open mall buildings shall comply with the requirements of Sections 403.10.1.1 through 403.10.1.6.

403.10.1.1. Malls and mall buildings exceeding 50,000 square feet. An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for covered malls exceeding 50,000 square feet (4645 m^2) in aggregate floor area and for open mall buildings exceeding 50,000 square feet (4645 m^2) in aggregate area within perimeter line.

403.10.1.2. Lease plan. In addition to the requirements of Section 404.2.2, a lease plan that includes the following information shall be prepared for each covered and open mall building:

1. Each occupancy, including identification of tenant.

2. Exits from each tenant space.

3. Fire protection features, including the following:

3.1. Fire department connections.

3.2. Fire command center.

3.3. Smoke management system controls.

3.4. Elevators, elevator machine rooms and controls.

3.5. Hose valve outlets.

3.6. Sprinkler and standpipe control valves.

3.7. Automatic fire-extinguishing system areas.

3.8. Automatic fire detector zones.

3.9. Fire barriers.

403.10.1.3. Lease plan approval. The lease plan shall be submitted to the fire code official for approval, and shall be maintained on site for immediate reference by responding fire service personnel.

403.10.1.4. Lease plan revisions. The lease plans shall be revised annually or as often as necessary to keep them current. Modifications or changes in tenants or occupancies shall not be made without prior approval of the fire code official and building official.

403.10.1.5. Tenant identification. Tenant identification shall be provided for secondary exits from occupied tenant spaces that lead to an exit corridor or directly to the exterior of the building. Tenant identification shall be posted on the exterior side of the exit or exit access door and shall identify the business name or address, or both, using plainly legible letters and numbers that contrast with their background.

Exception: Tenant identification is not required for anchor stores.

403.10.1.6. Unoccupied tenant spaces. The fire safety and evacuation plan shall provide for compliance with the requirements for unoccupied tenant spaces in Section 311.

403.10.2. High-rise buildings. An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for high-rise buildings.

403.10.3. Underground buildings. An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for underground buildings.

403.10.4. SRCF. An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for SRCFs.

403.11. Special requirements for public safety. Special requirements for public safety shall be as required in this section.

403.11.1. Fire watch personnel. When, in the opinion of the fire code official, it is essential for public safety in a place of assembly or any other place where people congregate, because of the number of persons or the nature of the performance, exhibition, display, contest or activity, the owner, agent or lessee shall provide one or more fire watch personnel, as

required and approved. Fire watch personnel shall comply with Sections 403.11.1.1 and 403.11.1.2.

403.11.1.1. Duty times. Fire watch personnel shall remain on duty during the times places requiring a fire watch are open to the public, or when an activity requiring a fire watch is being conducted.

403.11.1.2. Duties. On-duty fire watch personnel shall have the following duties:

1. Keep diligent watch for fires, obstructions to means of egress and other hazards.

2. Take prompt measures for remediation of hazards and extinguishment of fires that occur.

3. Take prompt measures to assist in the evacuation of the public from the structures.

403.11.2. Public safety plan for gatherings. In other than Group A or E occupancies, where the fire code official determines that an indoor or outdoor gathering of persons has an adverse impact on public safety through diminished access to buildings, structures, fire hydrants and fire apparatus access roads or where such gatherings adversely affect public safety services of any kind, the fire code official shall have the authority to order the development of or prescribe a public safety plan that provides an approved level of public safety and addresses the following items:

1. Emergency vehicle ingress and egress.

2. Fire protection.

3. Emergency egress or escape routes.

4. Emergency medical services.

5. Public assembly areas.

6. The directing of both attendees and vehicles, including the parking of vehicles.

7. Vendor and food concession distribution.

8. The need for the presence of law enforcement.

9. The need for fire and emergency medical services personnel.

403.11.3. Crowd managers for gatherings exceeding 1,000 people. Where facilities or events involve a gathering of more than 1,000 people, crowd managers shall be provided in accordance with Section 403.11.3.1.

403.11.3.1. Number of crowd managers. The minimum number of crowd managers shall be established at a ratio of one crowd manager for every 250 persons.

Exception: Where approved by the fire code official, the number of crowd managers shall be permitted to be reduced where the facility is equipped throughout with an approved automatic sprinkler system or based upon the nature of the event.

403.11.3.2. Duties. The duties of crowd managers shall include, but not be limited to:

1. Conduct an inspection of the area of responsibility and identify and address any egress barriers.

2. Conduct an inspection of the area of responsibility and identify and mitigate any fire hazards.

3. Verify compliance with all permit conditions, including those governing pyrotechnics and other special effects.

4. Direct and assist the event attendees in evacuation during an emergency.

5. Assist emergency response personnel where requested.

6. Other duties required by the fire code official.

7. Other duties as specified in the fire safety plan.

403.11.3.3. Training. Training for crowd managers shall be approved.

C. Change Section 404 to read:

Section 404.
Fire Safety, Evacuation and Lockdown Plans.

404.1. General. Where required by Section 403, fire safety, evacuation and lockdown plans shall comply with Sections 404.2 through 404.4.1.

404.2. Contents. Fire safety and evacuation plan contents shall be in accordance with Sections 404.2.1 and 404.2.2.

404.2.1. Fire evacuation plans. Fire evacuation plans shall include the following:

1. Emergency egress or escape routes and whether evacuation of the building is to be complete or, where approved, by selected floors or areas only.

2. Procedures for employees who must remain to operate critical equipment before evacuating.

3. Procedures for assisted rescue for persons unable to use the general means of egress unassisted.

4. Procedures for accounting for employees and occupants after evacuation has been completed.

5. Identification and assignment of personnel responsible for rescue or emergency medical aid.

6. The preferred and any alternative means of notifying occupants of a fire or emergency.

7. The preferred and any alternative means of reporting fires and other emergencies to the fire department or designated emergency response organization.

8. Identification and assignment of personnel who can be contacted for further information or explanation of duties under the plan.

9. A description of the emergency voice/alarm communication system alert tone and preprogrammed voice messages, where provided.

404.2.2. Fire safety plans. Fire safety plans shall include the following:

1. The procedure for reporting a fire or other emergency.

2. The life safety strategy and procedures for notifying, relocating or evacuating occupants, including occupants who need assistance.

3. Site plans indicating the following:

3.1. The occupancy assembly point.

3.2. The locations of fire hydrants.

3.3. The normal routes of fire department vehicle access.

4. Floor plans identifying the locations of the following:

4.1. Exits.

4.2. Primary evacuation routes.

4.3. Secondary evacuation routes.

4.4. Accessible egress routes.

4.5. Areas of refuge.

4.6. Exterior areas for assisted rescue.

4.7. Manual fire alarm boxes.

4.8. Portable fire extinguishers.

4.9. Occupant-use hose stations.

4.10. Fire alarm annunciators and controls.

5. A list of major fire hazards associated with the normal use and occupancy of the premises, including maintenance and housekeeping procedures.

6. Identification and assignment of personnel responsible for maintenance of systems and equipment installed to prevent or control fires.

7. Identification and assignment of personnel responsible for maintenance, housekeeping and controlling fuel hazard sources.

404.2.3. Lockdown plans. Where facilities develop a lockdown plan, the lockdown plan shall be in accordance with Sections 404.2.3.1 through 404.2.3.3.

404.2.3.1. Lockdown plan contents. Lockdown plans shall be approved by the fire code official and shall include the following:

1. Initiation. The plan shall include instructions for reporting an emergency that requires a lockdown.

2. Accountability. The plan shall include accountability procedures for staff to report the presence or absence of occupants.

3. Recall. The plan shall include a prearranged signal for returning to normal activity.

4. Communication and coordination. The plan shall include an approved means of two-way communication between a central location and each secured area.

404.2.3.2. Training frequency. The training frequency shall be included in the lockdown plan. The lockdown drills shall not substitute for any of the fire and evacuation drills required in Section 405.2.

404.2.3.3. Lockdown notification. The method of notifying building occupants of a lockdown shall be included in the plan. The method of notification shall be separate and distinct from the fire alarm signal.

404.3. Maintenance. Fire safety and evacuation plans shall be reviewed or updated annually or as necessitated by changes in staff assignments, occupancy or the physical arrangement of the building.

404.4. Availability. Fire safety and evacuation plans shall be available in the workplace for reference and review by employees, and copies shall be furnished to the fire code official for review upon request.

404.4.1. Distribution. The fire safety and evacuation plans shall be distributed to the tenants and building service employees by the owner or owner's agent. Tenants shall distribute to their employees applicable parts of the fire safety plan affecting the employees' actions in the event of a fire or other emergency. Fire safety and evacuation plans shall be made available

by the proprietor of Group R-3 and R-5 bed and breakfast and other transient boarding facilities to transient guests upon their arrival or are present in each transient guest room.

D. Change Section 405.1 to read:

405.1. General. Emergency evacuation drills complying with Sections 405.2 through 405.9 shall be conducted at least annually where fire safety and evacuation plans are required by Section 403 or when required by the fire code official. Drills shall be designed in cooperation with the local authorities.

Exception: Emergency evacuation drills shall not be conducted in school buildings during periods of mandatory testing required by the Virginia Board of Education.

E. Delete the "High-rise buildings" row in Table 405.2; add the following row to Table 405.2, and change footnotes "a," "b," and "d" of Table 405.2 to read:

Group or Occupancy	Frequency	Participation
SRCF	Monthly	All occupants
[a.] In severe climates, the fire code official shall have the authority to modify the emergency evacuation drill frequency. [b.] Fire and evacuation drills in residential care assisted living facilities shall include complete evacuation of the premises in accordance with Section 403.9.3.6. Where occupants receive habilitation or rehabilitation training, fire prevention and fire safety practices shall be included as part of the training program. [d.] Applicable to Group R-2 college and university buildings in accordance with Section 403.9.2.1.		

F. Add Section 405.2.1 to read:

405.2.1. High-rise buildings. Fire exit drills shall be conducted annually by building staff personnel or the owner of the building in accordance with the fire safety plan and shall not affect other current occupants.

G. Change Item 4 of Section 405.5 to read.

4. Employees on duty and participating.

H. Change Section 406.1 to read:

406.1. General. Where fire safety and evacuation plans are required by Section 403, employees shall be trained in fire emergency procedures based on plans prepared in accordance with Section 404.

I. Change Section 406.3.3 to read:

406.3.3. Fire safety training. Employees assigned fire-fighting duties shall be trained to know the locations and proper use of portable fire extinguishers or other manual fire-fighting equipment and the protective clothing or equipment required for its safe and proper use.

J. Delete Section 406.3.4.

K. Add Section 406.4 to read:

406.4. Emergency lockdown training. Where a facility has a lockdown plan, employees shall be trained on their assigned duties and procedures in the event of an emergency lockdown.

L. Delete Section 408 in its entirety.]

13VAC5-51-133. IFC Chapter 5. Fire Service Features.

A. Delete Section 501.4.

B. Add exceptions to Section 503.1 to read:

Exceptions:

1. Fire apparatus access roads shall be permitted to be provided and maintained in accordance with written policy that establish fire apparatus access road requirements and such requirements shall be identified to the owner or his agent prior to the building official's approval of the building permit.

2. On construction and demolition sites fire apparatus access roads shall be permitted to be provided and maintained in accordance with Section ~~1410.1~~ 3310.1.

C. Add exception to Section 503.2.1 to read:

Exception: Fire apparatus access roads exclusively serving single family dwelling or townhouse developments that are fully sprinklered as provided for in Sections R313.1 or R313.2 of the International Residential Code shall have an unobstructed width of not less than 18 feet (5486 mm), exclusive of shoulders.

D. Add Section 503.7 to read:

503.7. Fire lanes for existing buildings. The fire code official is authorized to designate public and private fire lanes as deemed necessary for the efficient and effective operation of fire apparatus. Fire lanes shall comply with Sections 503.2 through 503.6.

~~E. Change the title of Section 506 to read "Key Boxes and Elevator Fire Service Keys."~~

~~F. Change Section 506.1 to read:~~

~~506.1. Where required. Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life-saving or firefighting purposes, the fire code official is authorized to require a key box to be installed in an approved location. The key box shall be of an approved type listed in accordance with UL 1037 and shall contain keys to gain necessary access as required by the fire code official.~~

~~Exception: Existing key boxes are not required to be listed in accordance with UL 1037 unless replaced.~~

~~G. Add Section 506.3, including all subsections, to read:~~

~~506.3. Standardized fire service elevator keys. All buildings with elevators equipped with Phase I emergency recall or Phase II emergency in-car operation, or buildings equipped with fire service access or occupant evacuation elevators shall be equipped to operate with a standardized fire service key approved by the fire code official.~~

~~Exception: Where providing a standardized key is not possible due to the existing nonstandard elevator equipment, the owner shall be permitted to place the building's nonstandardized fire service elevator keys in a key box installed in accordance with Section 506.1.~~

~~506.3.1. Requirements for standardized fire service keys. Standardized fire service elevator keys shall comply with all of the following:~~

~~1. All fire service elevator keys within the jurisdiction shall be uniform and specific for the jurisdiction. Keys shall be cut to a uniform key code.~~

~~2. Fire service elevator keys shall be a patent protected design to prevent unauthorized duplication.~~

~~3. Fire service elevator keys subject to these rules shall be engraved with the words "DO NOT DUPLICATE."~~

~~506.3.2. Access to standardized fire service keys. Access to standardized fire service elevator keys shall be restricted to the following persons or groups:~~

~~1. Elevator owners or their authorized agents.~~

~~2. Elevator contractors.~~

~~3. Elevator inspectors of the jurisdiction.~~

~~4. Fire and building code officials of the jurisdiction.~~

~~5. The fire department and other emergency response agencies designated by the fire code official and the code official responsible for the enforcement of Part III, Maintenance, of the USBC.~~

~~506.3.3. Duplication or distribution of keys. No person may duplicate a standardized fire service elevator key or issue, give, or sell a duplicated key unless in accordance with this code.~~

~~506.3.4. Responsibility to provide keys. The building owner shall provide up to three standardized fire service elevator keys, if required by the fire code official, upon installation of a standardized fire service key switch or switches in the building.~~

~~H.~~ E. Add Sections 507.3.1 and 507.3.2 to read:

507.3.1. Fire flow requirements for fully sprinklered residential developments. Notwithstanding Section 103.1.2, the fire flow requirements in Table B105.1 of Appendix B of the IFC, as modified by Section 507.3.2, shall be permitted to be used for determining fire flow in single family dwelling and townhouse developments which are fully sprinklered as provided for in Sections R313.1 or R313.2 of the International Residential Code.

507.3.2. Modifications to Table B105.1. The first six rows of columns five and six of Table B105.1 of Appendix B of the IFC shall be modified as shown below for the use of Table B105.1 in Section 507.3.1.

Type 5-B	Fire-flow (gallons per minute)
0-5000	1000
5001-7200	1250
7201-8200	1500
8201-9500	1750
9501-11300	2000
11301-13000	2250

~~I.~~ F. Change Section 507.5.1 to read:

507.5.1. Where required. Fire hydrant systems shall be located and installed as directed by the fire department. Fire hydrant systems shall conform to the written standards of the jurisdiction and the fire department.

~~J.~~ G. Add Section ~~507.5.1.1~~ 507.5.1.2 to read:

~~507.5.1.1~~ 507.5.1.2. Fire hydrant requirements for fully sprinklered residential developments. Notwithstanding Section 103.1.2, the number and distribution of fire hydrants in Table C105.1 of Appendix C of the IFC shall be permitted to be used in single family dwelling and townhouse developments which are fully sprinklered as provided for in Sections R313.1 or R313.2 of the International Residential Code, with the spacing and distances of fire hydrants indicated in Table C105.1 increased by 100%.

~~K.~~ H. Change Section 510 to read:

Section 510.
Maintenance of In-Building Emergency Communication Equipment.

510.1. General. In-building emergency communication equipment shall be maintained in accordance with USBC and the provisions of this section.

510.2. Additional in-building emergency communications installations. If it is determined by the locality that increased amplification of their emergency communication system is needed, the building owner shall allow the locality access as well as provide appropriate space within the building to install and maintain necessary additional communication equipment by the

locality. If the building owner denies the locality access or appropriate space, or both, the building owner shall be responsible for the installation and maintenance of these additional systems.

510.3. Field tests. After providing reasonable notice to the owner or their representative, the fire ~~offici0al~~ official, police chief, or their agents shall have the right during normal business hours, or other mutually agreed upon time, to enter onto the property to conduct field tests to verify that the required level of radio coverage is present at no cost to the owner.

13VAC5-51-133.5. IFC Chapter 6. Building Services and Systems.

A. Add a note to Section 603.7 to read:

Note: The fire code official may request a copy of the latest certificate of inspection from the Virginia Department of Labor and Industry for boilers and pressure vessels subject to such requirements. When the certificate is not available, the fire code official shall notify the Department of Labor and Industry to ensure that the required maintenance and testing is performed in accordance the Virginia Boiler and Pressure Vessel Regulations (16VAC25-50).

B. Add Section ~~604.6~~ 604.7 to read:

~~604.6~~ 604.7. Testing of Battery Powered Emergency Lights and Exit Signs. Required emergency lighting utilizing battery powered emergency lights or exit signs, or both, shall be tested annually. The emergency lights and exit signs shall be tested for proper operation for the time period established in the building code in effect when the equipment was installed. Written records of tests shall be retained by the owner of the building for a minimum of two years after the test is conducted and shall be made available to the fire code official upon request.

C. Change Section 605.10.1 to read:

605.10.1. Listed and labeled. Only portable electric space heaters listed and labeled in accordance with UL 1278 shall be used.

[D. Change Section 607.1 to read;

607.1. Operation. Existing elevators with a travel distance of 25 feet (7620 mm) or more shall comply with the requirements of Section 506.3 and the USBC, Part III, Maintenance.

13VAC5 51-133.8. IFC Chapter 7. Fire-Resistance-Rated Construction.

Change Section 704.1 to read;

704.1. Enclosure. New floor openings in existing buildings shall comply with the International Building Code.]

13VAC5-51-134. IFC Chapter 8. Interior Finish, Decorative Materials and Furnishings.

A. Add exception 3 to Section 806.1.1 to read:

3. Trees shall be permitted in places of worship in Group A occupancies.

B. Change Section 807.1 to read:

807.1. General requirements. In occupancies in Groups A, E, I and R-1 and dormitories in Group R-2, curtains, draperies, hangings and other decorative materials suspended from walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 806.2 or be noncombustible.

Exception: In dwelling units or sleeping rooms in Group R-2 dormitories, the permissible amount of decorative material suspended from or attached to the walls shall not exceed 50% of the aggregate area of the walls where the building has an approved automatic sprinkler system or 20% of the aggregate area of the walls where approved smoke alarms are provided and in the corridors of such buildings, the permissible amount of decorative material suspended from or attached to the walls shall not exceed 10% of the aggregate area of the walls.

In Groups I-1 and I-2, combustible decorative materials shall meet the flame propagation criteria of NFPA 701 unless the decorative materials, including, but not limited to, photographs and paintings, are of such limited quantities that a hazard of fire development or spread is not present. In Group I-3, combustible decorative materials are prohibited.

Fixed or movable walls and partitions, paneling, wall pads and crash pads, applied structurally or for decoration, acoustical correction, surface insulation or other purposes, shall be considered interior finish if they cover 10% or more of the wall or of the ceiling area, and shall not be considered decorative materials or furnishings.

In Group B and M occupancies, fabric partitions suspended from the ceiling and not supported by the floor shall meet the flame propagation performance criteria in accordance with Section 807.2 and NFPA 701 or shall be noncombustible.

13VAC5-51-135. IFC Chapter 9. Fire Protection Systems.

A. Change Section 901.4.2 to read:

901.4.2. Nonrequired fire protection systems. Nonrequired fire protection systems shall be maintained to function as originally installed. If any such systems are to be reduced in function or discontinued, approval shall be obtained from the building official in accordance with Section 103.8.1 of Part I of the USBC.

B. Delete Section ~~901.4.3~~ 901.4.4.

C. Change Section 901.6 to read:

901.6. Inspection, testing and maintenance. To the extent that equipment, systems, devices, and safeguards, such as fire detection, alarm and extinguishing systems, which were provided and approved by the building official when constructed, shall be maintained in an operative

condition at all times. And where such equipment, systems, devices, and safeguards are found not to be in an operative condition, the fire official shall order all such equipment to be rendered safe in accordance with the USBC.

D. Add Section ~~901.10~~ 901.11 to read:

~~901.10~~ 901.11. Defective equipment. When the fire official determines through investigation or testing or reports by a nationally recognized testing agency that specific, required water sprinkler or water-spray extinguishing equipment has been identified as failing to perform or operate through not less than 30 randomly selected sprinkler heads at four or more building sites anywhere in the nation, the fire official shall order all such equipment to be rendered safe.

~~E. Change the following definition in Section 902 to read:~~

~~Automatic fire-extinguishing system. An approved system of devices and equipment which automatically detects a fire and discharges an approved fire-extinguishing agent onto or in the area of a fire. Such system shall include an automatic sprinkler system, unless otherwise expressly stated.~~

[E. Change Section 903.6 to read:

903.6. Where required in existing buildings and structures. An automatic sprinkler system shall be provided in existing buildings and structures in accordance with Section 102.7 of this code.

F. Delete Section 905.11.]

~~F.~~ [~~E.~~ G.] Change ~~item~~ Item 1 in Section 906.1 to read:

1. In Group A, B, E, F, H, I, M, R-1, R-4 and S occupancies.

~~Exception~~ Exceptions:

1. In Groups A, B, and E occupancies equipped throughout with quick response sprinklers, portable fire extinguishers shall be required only in locations specified in Items 2 through 6.

2. In Group I-3 occupancies, portable fire extinguishers shall be permitted to be located at staff locations and the access to such extinguishers shall be permitted to be locked.

[~~G.~~ H.] Add a note to Section 906.1 to read:

Note: In existing buildings, whether fire extinguishers are needed is determined by the USBC or other code in effect when such buildings were constructed.

[I. Change Section 907.1 to read:

907.1. General. This section covers the application, installation, performance and maintenance of fire alarm systems and their components in new and existing buildings and structures. The requirements of Section 907.2 are applicable to new buildings and structures.

~~H.~~ J.] Change Section ~~907.9.2~~ 907.8.2 to read:

~~907.9.2~~ 907.8.2. Testing. Testing shall be performed in accordance with the schedules in Chapter 10 of NFPA 72 or more frequently where required by the fire code official. Where automatic testing is performed at least weekly by a remotely monitored fire alarm control unit specifically listed for the application, the manual testing frequency shall be permitted to be extended to annual. In Group R-1 occupancies, battery-powered single station smoke detectors shall be tested and inspected at one-month intervals.

Exception: Devices or equipment that are inaccessible for safety considerations shall be tested during scheduled shutdowns where approved by the fire code official, but not less than every 18 months.

[~~I.~~ K.] Change Section ~~907.9.5~~ 907.8.5 to read:

~~907.9.5~~ 907.8.5. Maintenance, inspection and testing. The building owner shall be responsible for maintaining the fire and life safety systems in an operable condition at all times. Service personnel shall meet the qualification requirements of NFPA 72 for maintaining, inspecting and testing such systems. A written record shall be maintained and shall be made available to the fire code official. In addition to all applicable information contained in Figure 10.6.2.3 of NFPA 72, the written record of inspections, testing and maintenance shall contain the following minimum information:

1. Date, name and address of property.

2. Name of person performing inspection, maintenance and tests, or combination thereof, and affiliation, business address and telephone number.

3. Name, address and representative of approving agency or agencies.

4. Test frequency.

5. Designation of the detector or detectors tested (for example, “Test performed in accordance with Section _____.”).

6. Physical location (for example, “Heat detector in main kitchen; horn-strobe in Room 115.”) and a list of all initiating and notification devices and appliances tested.

7. Functional list of detectors and required sequence of operations.

8. Check of all smoke detectors.

9. Loop resistance for all fixed-temperature, line-type detectors.

10. Other tests as required by either the equipment manufacturer's published instructions or the authority having jurisdiction.

11. Signature of tester and approved authority representative.

12. Disposition of problems identified during test (examples, "Owner notified," "Problem corrected or successfully retested, or both," "Device abandoned in place.").

[L. Delete Section 907.9.

~~J.~~ M.] ~~Add~~ Change Section 908.7 to read:

908.7. Carbon monoxide alarms. Carbon monoxide alarms shall be maintained as approved.

[~~K.~~ N.] Delete Section 908.7.1.

13VAC5-51-135.5. IFC Chapter 10. Means of Egress.

[A.] Add Section 1001.3 to read:

1001.3. Overcrowding. Overcrowding, admittance of any person beyond the approved occupant load established by the USBC or other building code under which the building was constructed, or obstructing aisles, passageways or any part of the means of egress shall not be allowed. The fire code official, upon finding any condition that constitutes a life safety hazard, shall be authorized to cause the event to be stopped until such condition or obstruction is corrected.

[B. Change Section 1029.4 to read:

1029.4. Operational constraints. Emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools. Bars, grilles, grates or similar devices are permitted to be placed over emergency escape and rescue openings provided (i) the minimum net clear opening size complies with Section 1029.2, (ii) such devices shall be releasable or removable from the inside without the use of a key, tool or force greater than that which is required for normal operation of the escape and rescue opening, and (iii) where smoke alarms are installed in accordance with Section 907.2.11 and approved by the building official regardless of the valuation of the alteration.]

13VAC5-51-138. IFC Chapter 11. Construction Requirements for Existing Buildings.

Delete Chapter 11 in its entirety.

13VAC5-51-140. IFC Chapter ~~22~~ 23. ~~Service Stations~~ Motor Fuel-Dispensing Facilities and Repair Garages.

A. Change Section ~~2205.4~~ 2305.4 to read:

~~2205.4~~ 2305.4. Sources of ignition. Smoking and open flames shall be prohibited within 20 feet (6096 mm) of a fuel dispensing device. The engines of vehicles being fueled shall be shut off during fueling. Electrical equipment shall be in accordance with NFPA 70.

B. Change Section ~~2206.2.1.1~~ 2306.2.1.1 to read:

~~2206.2.1.1~~ 2306.2.1.1. Inventory control and leak detection for underground tanks. Accurate inventory records shall be maintained on underground fuel storage tanks for indication of possible leakage from tanks and piping. The records shall be kept at the premises or made available for inspection by the fire official within 24 hours of a written or verbal request and shall include records for each tank. Where there is more than one system consisting of tanks serving separate pumps or dispensers for a product, the inventory record shall be maintained separately for each tank system.

Owners and operators of underground fuel storage tanks shall provide release detection for tanks and piping that routinely contain flammable and combustible liquids in accordance with one of the following methods:

1. Monthly inventory control to detect a release of at least 1.0% of flow-through plus 130 gallons.

2. Manual tank gauging for tanks with 2,000 gallon capacity or less when measurements are taken at the beginning and ending of a 36-hour to 58-hour period during which no liquid is added to or removed from the tank.

3. Tank tightness testing capable of detecting a 0.1 gallon per hour leak rate.

4. Automatic tank gauging that tests for loss of liquid.

5. Vapor monitoring for vapors within the soil of the tank field.

6. Groundwater monitoring when the groundwater is never more than 20 feet from the ground surface.

7. Interstitial monitoring between the underground tank and a secondary barrier immediately around or beneath the tank.

8. Other approved methods that have been demonstrated to be as effective in detecting a leak as the methods listed above.

A consistent or accidental loss of product shall be immediately reported to the fire official.

[C. Change Section 2306.8.1 to read:

2306.8.1. Listed. Dispensers shall be listed in accordance with UL 87A. Hoses, nozzles, breakaway fittings, swivels, flexible connectors or dispenser emergency shutoff valves, vapor recovery systems, leak detection devices, and pumps used in alcohol-blended fuel-dispensing systems shall be listed for the specific purpose.

D. Add Section 2306.8.6 to read:

2306.8.6. Compatibility. Dispensers shall only be used with the fuels for which they have been listed, which are marked on the product. Field installed components including hose assemblies, breakaway couplings, swivel connectors, and hose nozzle valves shall be provided in accordance with the listing and the marking on the unit.

13VAC5-51-142. IFC Chapter 34 Tire Rebuilding and Tire Storage.

Change Section 3406.1 to read:

3406.1. Required access. New and existing tire storage yards shall be provided with fire apparatus access roads in accordance with Section 503 and Section 3406.2.]

13VAC5-51-145. IFC Chapter ~~27~~ 50. Hazardous Materials - General Provisions.

A. Add the following language to the end of Section ~~2701.5.1~~ 5001.5.1 to read:

The HMMP shall be maintained onsite for use by emergency responders, and shall be updated not less than annually.

B. Add the following language to the end of Section ~~2701.5.2~~ 5001.5.2 to read:

The HMIS shall be maintained onsite or readily available through another means where approved by the fire code official for use by temporary responders, and shall be updated not less than annually.

C. Add Sections ~~2701.5.3~~ 5001.5.3, ~~2701.5.3.1~~ 5001.5.3.1, and ~~2701.5.3.2~~ 5001.5.3.2 to read:

~~2701.5.3~~ 5001.5.3. Repository container. When a HMMP or HMIS is required, the owner or operator shall provide a repository container (lock box) or other approved means for the storage of items required in Sections ~~2701.5.1~~ 5001.5.1 and ~~2701.5.2~~ 5001.5.2 so as to be readily available to emergency response personnel.

~~2701.5.3.1~~ 5001.5.3.1. Location and identification. The repository container (lock box) shall be located, installed and identified in an approved manner.

~~2701.5.3.2~~ 5001.5.3.2. Keying. All repository containers (lock boxes) shall be keyed as required by the fire code official.

[D. Change the “Consumer fireworks” row and add a new “Permissible fireworks” row to Table 5003.1.1(1) to read:

Consumer fireworks	1.4G	H-3	125[e,l]	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Permissible fireworks	1.4G	H-3	125[d,e,l]	N/A	N/A	N/A	N/A	N/A	N/A	N/A

~~D.~~ E] Change Section ~~2703.3.1.4~~ 5003.3.1.4 to read:

~~2703.3.1.4~~ 5003.3.1.4. Responsibility for cleanup. The person, firm or corporation responsible for an unauthorized discharge shall institute and complete all actions necessary to remedy the effects of such unauthorized discharge, whether sudden or gradual, at no cost to the jurisdiction. The fire code official may require records and receipts to verify cleanup and proper disposal of unauthorized discharges. When deemed necessary by the fire code official, cleanup may be initiated by the fire department or by an authorized individual or firm. Costs associated with such cleanup shall be borne by the owner, operator or other person responsible for the unauthorized discharge.

13VAC5-51-150. IFC Chapter ~~33~~ 56. Explosives and Fireworks.

A. Change exception 4 in Section ~~3301.1~~ 5601.1 to read:

4. The possession, storage, and use of not more than 15 pounds (6.81 kg) of commercially manufactured sporting black powder, 20 pounds (9 kg) of smokeless powder and any amount of small arms primers for hand loading of small arms ammunition for personal consumption.

B. Add exceptions 10, 11 and 12 to Section ~~3301.1~~ 5601.1 to read:

10. The storage, handling, or use of explosives or blasting agents pursuant to the provisions of Title 45.1 of the Code of Virginia.

11. The display of small arms primers in Group M when in the original manufacturer's packaging.

12. The possession, storage and use of not more than 50 pounds (23 kg) of commercially manufactured sporting black powder, 100 pounds (45 kg) of smokeless powder, and small arms primers for hand loading of small arms ammunition for personal consumption in Group R-3 or R-5, or 200 pounds (91 kg) of smokeless powder when stored in the manufacturer's original containers in detached Group U structures at least 10 feet (3048 mm) from inhabited buildings and are accessory to Group R-3 or R-5.

C. Change exception 4 in Section ~~3301.1.3~~ 5601.1.3 to read:

4. The possession, storage, sale, handling and use of permissible fireworks where allowed by applicable local or state laws, ordinances and regulations provided such fireworks comply with CPSC 16 CFR, Parts 1500-1507, and DOTn 49 CFR, Parts 100-178, for consumer fireworks.

D. Add exception 5 to Section ~~3301.1.3~~ 5601.1.3 to read:

5. The sale or use of materials or equipment when such materials or equipment is used or to be used by any person for signaling or other emergency use in the operation of any boat, railroad train or other vehicle for the transportation of persons or property.

E. Change entire Section ~~3301.2~~ 5601.2 to read:

~~3301.2~~ 5601.2. Permit required. Permits shall be required as set forth in Section 107.2 and regulated in accordance with this section. The manufacture, storage, possession, sale and use

of fireworks or explosives shall not take place without first applying for and obtaining a permit.

~~3301.2.1~~ 5601.2.1. Residential uses. No person shall keep or store, nor shall any permit be issued to keep, possess or store, any fireworks or explosives at any place of habitation, or within 100 feet (30,480 mm) thereof.

Exception: Storage of smokeless propellant, black powder, and small arms primers for personal use and not for resale in accordance with Section ~~3306~~ 5606.

~~3301.2.2~~ 5601.2.2. Sale and retail display. Except for the Armed Forces of the United States, Coast Guard, National Guard, federal, state and local regulatory, law enforcement and fire agencies acting in their official capacities, explosives shall not be sold, given, delivered or transferred to any person or company not in possession of a valid permit. The holder of a permit to sell explosives shall make a record of all transactions involving explosives in conformance with Section ~~3303.2~~ 5603.2 and include the signature of any receiver of the explosives. No person shall construct a retail display nor offer for sale explosives, explosive materials, or fireworks upon highways, sidewalks, public property, or in assembly or educational occupancies.

~~3301.2.3~~ 5601.2.3. Permit restrictions. The fire official is authorized to limit the quantity of explosives, explosive materials, or fireworks permitted at a given location. No person, possessing a permit for storage of explosives at any place, shall keep or store an amount greater than authorized in such permit. Only the kind of explosive specified in such a permit shall be kept or stored.

~~3301.2.3.1~~ 5601.2.3.1. Permit applicants. As a condition of a permit as provided for in Section 107.5, the fire official shall not issue a permit to manufacture, store, handle, use or sell explosives or blasting agents to any applicant who has not provided on the permit application the name and signature of a designated individual as representing the applicant. When, as provided for in Section 107.2 or 107.6, a permit is required to conduct a fireworks display, as a condition of permit as provided for in Section 107.5, the fire official shall not issue a permit to design, setup or conduct a fireworks display to any applicant who has not provided on the permit application the name and signature of a designated individual as representing the applicant.

If the applicant's designated individual changes or becomes no longer qualified to represent the applicant as responsible management or designated individual, the applicant shall notify the fire official who issued the permit on the change of status of the designated individual. The notice is to be made prior to the use of any explosives or conducting a fireworks display but in no case shall the notification occur more than seven days after the change of status and shall provide the name of another designated individual. The fire official may revoke or require the reissuance of a permit based on a change of permit conditions or status or inability to provide another designated individual.

~~3301.2.3.1.1~~ 5601.2.3.1.1. BCC: The SFMO shall process all applications for a BCC for compliance with § 27-97.2 of the Code of Virginia and will be the sole provider of a BCC. Using forms provided by the SFMO, a BBC may be applied for and issued to any person who submits to the completion of a background investigation by providing fingerprints and

personal descriptive information to the SFMO. The SFMO shall forward the fingerprints and personal descriptive information to the Central Criminal Records Exchange for submission to the Federal Bureau of Investigation for the purpose of obtaining a national criminal history records check regarding such applicant.

~~3301.2.3.1.2~~ 5601.2.3.1.2. Issuance of a ~~background clearance card~~ BCC: The issuance of a ~~background clearance card~~ BCC shall be denied if the applicant or designated person representing an applicant has been convicted of any felony, whether such conviction occurred under the laws of the Commonwealth, or any other state, the District of Columbia, the United States or any territory thereof, unless his civil rights have been restored by the Governor or other appropriate authority.

~~3301.2.3.1.3~~ 5601.2.3.1.3. Fee for ~~background clearance card~~ BCC: The fee for obtaining or renewing a ~~background clearance card~~ BCC from the SFMO shall be $150 plus any additional fees charged by other agencies for fingerprinting and for obtaining a national criminal history record check through the Central Criminal Records Exchange to the Federal Bureau of Investigation.

~~3301.2.3.1.4~~ 5601.2.3.1.4. Revocation of a ~~background clearance card~~ BCC: After issuance of a ~~background clearance card~~ BCC, subsequent conviction of a felony will be grounds for immediate revocation of a ~~background clearance card~~ BCC, whether such conviction occurred under the laws of the Commonwealth, or any other state, the District of Columbia, the United States or any territory thereof. The ~~card~~ BCC shall be returned to the SFMO immediately. An individual may reapply for his ~~background clearance card~~ BCC if his civil rights have been restored by the Governor or other appropriate authority.

~~3301.2.4~~ 5601.2.4. Financial responsibility. Before a permit is issued, as required by Section ~~3301.2~~ 5601.2, the applicant shall file with the jurisdiction a corporate surety bond in the principal sum of $500,000 or a public liability insurance policy for the same amount, for the purpose of the payment of all damages to persons or property which arise from, or are caused by, the conduct of any act authorized by the permit upon which any judicial judgment results. The legal department of the jurisdiction may specify a greater amount when conditions at the location of use indicate a greater amount is required. Government entities shall be exempt from this bond requirement.

~~3301.2.4.1~~ 5601.2.4.1. Blasting. Before approval to do blasting is issued, the applicant for approval shall file a bond or submit a certificate of insurance in such form, amount, and coverage as determined by the legal department of the jurisdiction to be adequate in each case to indemnify the jurisdiction against any and all damages arising from permitted blasting but in no case shall the value of the coverage be less than ~~$500,000~~ $1,000,000.

Exception: Filing a bond or submitting a certificate of liability insurance is not required for blasting on real estate parcels of five or more acres conforming to the definition of “real estate devoted to agricultural use” or “real estate devoted to horticultural use” in § 58.1-3230 of the Code of Virginia and conducted by the owner of such real estate.

~~3301.2.4.2~~ 5601.2.4.2. Fireworks display. The permit holder shall furnish a bond or certificate of insurance in an amount deemed adequate by the legal department of the jurisdiction for the payment of all potential damages to a person or persons or to property by

reason of the permitted display, and arising from any acts of the permit holder, the agent, employees or subcontractors, but in no case shall the value of the coverage be less than ~~$500,000~~ $1,000,000.

F. Change entire Section ~~3301.4~~ 5601.4 to read:

~~3301.4~~ 5601.4. Qualifications. Persons in charge of magazines, blasting, fireworks display, or pyrotechnic special effect operations shall not be under the influence of alcohol or drugs which impair sensory or motor skills, shall be at least 21 years of age and possess knowledge of all safety precautions related to the storage, handling or use of explosives, explosive materials or fireworks.

~~3301.4.1~~ 5601.4.1. Certification of blasters and pyrotechnicians. Certificates as a restricted blaster, unrestricted blaster or pyrotechnician will be issued upon proof of successful completion of an examination approved by the SFMO commensurate to the certification sought and completion of a background investigation for compliance with § 27-97.2 of the Code of Virginia. The applicant for certification shall submit proof to the SFMO of the following experience:

1. For certification as a restricted blaster, at least one year under direct supervision by a certified unrestricted blaster, certified restricted blaster or other person(s) approved by the SFMO.

2. For certification as an unrestricted blaster, at least one year under direct supervision by a certified unrestricted blaster or other person or persons approved by the SFMO.

3. For certification as a pyrotechnician, aerial, or pyrotechnician, proximate, applicant was in responsible charge of or has assisted in the documented design, setup and conducting of a fireworks display on at least six occasions within the 24 months immediately preceding the application for certification.

The SFMO shall process all certification applicants for compliance with § 27-97.2 of the Code of Virginia and will be the sole provider of blaster and pyrotechnician certifications.

Exception: The use of explosives by the owner of real estate parcels of five or more acres conforming to the definition of “real estate devoted to agricultural use” or “real estate devoted to horticultural use” in § 58.1-3230 of the Code of Virginia when blasting on such real estate.

~~3301.4.2~~ 5601.4.2. Certification issuance. The issuance of a certification as a blaster or pyrotechnician shall be denied if the applicant has (i) been convicted of any felony, whether such conviction occurred under the laws of the Commonwealth, or any other state, the District of Columbia, the United States or any territory thereof, unless his civil rights have been restored by the Governor or other appropriate authority, (ii) has not provided acceptable proof or evidence of the experience required in Section ~~3301.4.1~~ 5601.4.1, or (iii) has not provided acceptable proof or evidence of the continued training or education required in Section ~~3301.4.5~~ 5601.4.5.

~~3301.4.3~~ 5601.4.3. Fee for certification. The fee for obtaining or renewing a blaster or pyrotechnician certificate from the SFMO shall be $150 plus any additional fees charged by other agencies for fingerprinting and for obtaining a national criminal history record check through the Central Criminal Records Exchange to the Federal Bureau of Investigation.

[5601.4.3.1. Fee for replacement certificate. A written request for a replacement blaster or pyrotechnician certificate shall be accompanied by the payment of an administrative fee in the amount of $20 made payable to the Treasurer of Virginia. Verbal requests shall not be accepted.]

~~3301.4.4~~ 5601.4.4. Revocation of a blaster or pyrotechnician certification. After issuance of a blaster or pyrotechnician certification, subsequent conviction of a felony will be grounds for immediate revocation of a blaster or pyrotechnician certification, whether such conviction occurred under the laws of the Commonwealth, or any other state, the District of Columbia, the United States or any territory thereof. The certification shall be returned to the SFMO immediately. An individual may subsequently reapply for his blaster or pyrotechnician certification if his civil rights have been restored by the Governor or other appropriate authority.

~~3301.4.5~~ 5601.4.5. Expiration and renewal of a BCC, or blaster or pyrotechnician certification. A certificate for an unrestricted blaster, restricted blaster or pyrotechnician shall be valid for three years from the date of issuance. A BCC shall be valid for three years from the date of issuance. Renewal of the unrestricted blaster certificate will be issued upon proof of at least 16 accumulated hours of continued training or education in the use of explosives within three consecutive years and a background investigation for compliance with § 27-97.2 of the Code of Virginia. Renewal of the restricted blaster certificate will be issued upon proof of at least eight accumulated hours of continued training or education in the use of explosives within three consecutive years and a background investigation for compliance with § 27-97.2 of the Code of Virginia. Renewal of the pyrotechnician certificate will be issued upon proof of at least 12 accumulated hours of continued training or education in the subject areas of explosives storage; the design, setup or conduct of a fireworks display within three consecutive years; and a background investigation for compliance with § 27-97.2 of the Code of Virginia. The continued training or education required for renewal of a blaster or pyrotechnician certificate shall be obtained during the three years immediately prior to the certificate's published expiration date. Failure to renew a blaster or pyrotechnician certificate in accordance with this section shall cause an individual to obtain another blaster or pyrotechnician certificate upon compliance with Section ~~3301.4.1~~ 5601.4.1 to continue engaging in the unsupervised use of explosives or conducting a fireworks display.

[5601.4.6. Denial, suspension or revocation of a certificate. If issuance or renewal of a blaster or pyrotechnician certificate is denied, or upon the filing of a complaint against an applicant or certificate holder for non-performance, or performance in violation of the SFPC and the appropriate referenced NFPA 495, 1123 or 1126 standards, the State Fire Marshal may convene a three member panel to hear the particulars of the complaint or denial. The three member panel will be comprised of the following persons:

1. A Virginia certified fire official, excluding any person certified as a blaster or pyrotechnician, or who is on the staff of the SFMO.

2. A Virginia certified blaster or pyrotechnician whose certification is the same as that of the person to whom a complaint is lodged, and who is not associated in any way with the person against whom a complaint is lodged and whose work or employer is geographically remote, as much as practically possible, from the person to whom a complaint is lodged.

3. A member of the general public who does not have a vested financial interest in conducting a fireworks display, or the manufacture, sale, storage, or use of explosives.

Upon the State Fire Marshal convening such panel, the hearing is to commence within 60 calendar days of the filing of the complaint or denial. The three member panel is to hear the complaint and render a written recommendation to the State Fire Marshal for certificate issuance, no action, revocation, or suspension of a certificate for a period not to exceed six months. Notwithstanding the discretionary decision and action to convene such panel, the State Fire Marshal reserves the authority to choose an action that may be contrary to the panel's recommendation. A written decision of the State Fire Marshal is to be delivered to the party within 14 days of the hearing's conclusion. If the certificate is denied, revoked or suspended by the SFMO, in accordance with Section 112.9, the party may file an appeal with the TRB. The party's appeal to TRB must be filed within 14 calendar days of the receipt of the State Fire Marshal's written decision to deny, revoke, or suspend. The denial, revocation or suspension of a license is independent of any criminal proceedings that may be initiated by any state or local authority.

5601.4.6.1. Replacement of revoked certificate. Any person whose certificate as a pyrotechnician or blaster was revoked upon cause may apply for certification as a pyrotechnician or blaster six months or more from the date of the revocation and upon compliance with Section 5601.4.1. All elements of Section 5601.4.1 are required to be obtained and dated after the date of revocation.

5601.4.6.2. Return of suspended certificate. Any certificate that was suspended upon cause will be reinstated at the end of the suspension period without change to its expiration date.]

G. Change Section ~~3301.7~~ 5601.7 to read:

~~3301.7~~ 5601.7. Seizure. The fire official is authorized to remove or cause to be removed or disposed of in an approved manner, at the expense of the owner, fireworks offered or exposed for sale, stored, possessed or used in violation of this chapter.

H. Add the following to the list of definitions ~~to~~ in Section ~~3302.1 to read~~ 5602.1:

Background clearance card (BCC). ~~An identification card issued to an individual who is not a certified blaster or pyrotechnician and is responsible management or an employee of a company, corporation, firm or other entity, solely for the purpose of submitting an application to the fire official for a permit to manufacture, use, handle, store, or sell explosive materials; or conduct a fireworks display. A person to whom a BCC has been issued can fulfill the role of a designated individual on an application for a permit to manufacture, use, handle, store, or sell explosive materials; or on an application for a permit to design, setup and conduct a fireworks display.~~

Blaster, restricted. ~~Any person engaging in the use of explosives or blasting agents utilizing five pounds (2.25 kg) or less per blasting operation and using instantaneous detonators. A certified restricted blaster can fulfill the role of a designated individual on an application for permit to manufacture, use, handle, store, or sell explosive materials.~~

Blaster, unrestricted. ~~Any person engaging in the use of explosives or blasting agents without limit to the amount of explosives or blasting agents or type of detonator. A certified unrestricted blaster can fulfill the role of a designated individual on an application for permit to manufacture, use, handle, store, or sell explosive materials.~~

Design. ~~For the purposes of a fireworks display, either inside a building or structure or outdoors, it shall mean the pyrotechnician who will be in attendance and makes the final artistic determination for the placement of fireworks and ground display pieces suitable for the display site.~~

Designated individual. ~~A person who is in possession of a BCC issued by the SFMO, certified by the SFMO as a pyrotechnician, or a restricted or unrestricted blaster, any of whom are responsible for ensuring compliance with state law and regulations relating to blasting agents and explosives and applying for explosives or firework permits; is at least 21 years of age; and demonstrates the capability to effectively communicate safety messages verbally and in writing in the English language.~~

Fireworks.

Fireworks, 1.4G.

Fireworks, 1.3G.

Permissible fireworks. ~~Any sparklers, fountains, Pharaoh's serpents, caps for pistols, or pinwheels commonly known as whirligigs or spinning jennies.~~

Pyrotechnician (fireworks operator). ~~Any person supervising or engaged in the design, setup or conducting of any fireworks display, either inside a building or outdoors. A certified pyrotechnician can fulfill the role of a designated individual on an application for a permit for a fireworks display.~~

Pyrotechnician, aerial. ~~A person supervising or engaged in the design, setup or conducting of a outdoor aerial fireworks display performed in accordance with the regulations as set forth in this code and NFPA 1123, a referenced standard for fireworks displays.~~

Pyrotechnician, proximate. ~~A person supervising or engaged in the design, setup or conducting of a fireworks display, either inside a building or outdoors, performed in accordance with the regulations as set forth in this code and NFPA 1126, a referenced standard for the use of pyrotechnics before a proximate audience.~~

Responsible management. ~~A person who is any of the following:~~

~~1. The sole proprietor of a sole proprietorship.~~

~~2. The partners of a general partnership.~~

~~3. The managing partners of a limited partnership.~~

~~4. The officers of a corporation.~~

~~5. The managers of a limited liability company.~~

~~6. The officers or directors of an association, or both.~~

~~7. Individuals in other business entities recognized under the laws of the Commonwealth as having a fiduciary responsibility to the firm.~~

Smokeless propellants.

Sole proprietor. ~~A person or individual, not a corporation, who is trading under his own name or under an assumed or fictitious name pursuant to the provisions of § 59.1-69 through 59.1-76 of the Code of Virginia.~~

~~I. Change the following definitions in Section 3302.1 to read:~~

~~Fireworks. Any firecracker, torpedo, skyrocket, or other substance or object, of whatever form or construction, that contains any explosive or inflammable compound or substance, and is intended, or commonly known, as fireworks and that explodes, rises into the air or travels laterally, or fires projectiles into the air. Fireworks shall not include automobile flares, paper caps containing not more than an average of 0.25 grain (16 mg) of explosive content per cap or toy pistols, toy canes, toy guns or other devices utilizing such caps and items commonly known as party poppers, pop rocks and snap-n-pops. Fireworks may be further delineated and referred to as:~~

~~Fireworks, 1.4G. (Formerly known as Class C, Common Fireworks.) Small fireworks devices containing restricted amounts of pyrotechnic composition designed primarily to produce visible or audible effects by combustion. Such 1.4G fireworks that comply with the construction, chemical composition, and labeling regulations of the DOTn for Fireworks, UN 0336, and the U.S. Consumer Product Safety Commission as set forth in CPSC 16 CFR: Parts 1500 and 1507, are not explosive materials for the purpose of this code.~~

~~Fireworks, 1.3G. (Formerly Class B, Special Fireworks.) Large fireworks devices, which are explosive materials, intended for use in fireworks displays and designed to produce audible or visible effects by combustion, deflagration, or detonation. Such 1.3G fireworks include, but are not limited to, firecrackers containing more than 130 milligrams (2 grains) of explosive composition, aerial shells containing more than 40 grams of pyrotechnic composition, and other display pieces that exceed the limits for classification as 1.4G fireworks. Such 1.3G fireworks are also described as Fireworks, UN0335 by the DOTn.~~

~~Smokeless propellants. Solid propellants, commonly referred to as smokeless powders or any propellant classified by DOTn as a smokeless propellant in accordance with "NA3178, Smokeless Powder for Small Arms," used in small arms ammunition, firearms, cannons, rockets, propellant-actuated devices, and similar articles.~~

[I. Change Section 5603.4 to read:

5603.4. Accidents. Accidents involving the use of explosives, explosive materials and fireworks, which result in injuries or property damage, shall be immediately reported by the permit holder to the fire code official and State Fire Marshal.

[J. ~~I.~~] Change Section ~~3305.1~~ 5605.1 to read:

~~3305.1~~ 5605.1. General. The manufacture, assembly and testing of explosives, ammunition, blasting agents and fireworks shall comply with the requirements of this section, Title 59.1, Chapter 11 of the Code of Virginia, and NFPA 495 or NFPA 1124.

Exceptions:

1. The hand loading of small arms ammunition prepared for personal use and not offered for resale.

2. The mixing and loading of blasting agents at blasting sites in accordance with NFPA 495.

3. The use of binary explosives or plosophoric materials in blasting or pyrotechnic special effects applications in accordance with NFPA 495 or NFPA 1126.

[K. ~~J.~~] Add Section ~~3305.1.1~~ 5605.1.1 to read:

~~3305.1.1~~ 5605.1.1. Permits. Permits for the manufacture, assembly and testing of explosives, ammunition, blasting agents and fireworks shall be required as set forth in Section 107.2 and regulated in accordance with this section. A permit to manufacture any explosive material in any quantity shall be prohibited unless such manufacture is authorized by a federal license and conducted in accordance with recognized safety practices.

[L. ~~K.~~] Change Section ~~3306.4~~ 5606.4 to read:

~~3306.4~~ 5606.4. Storage in residences. Propellants for personal use in quantities not exceeding 50 pounds (23 kg) of black powder or 100 pounds (45 kg) of smokeless powder shall be stored in original containers in occupancies limited to ~~Group~~ Groups R-3 and R-5, or 200 pounds (91 kg) of smokeless powder when stored in the manufacturer's original containers in detached Group U structures that are at least 10 feet from inhabited buildings and are accessory to Group R-3 or R-5. In other than Group R-3 or R-5, smokeless powder in quantities exceeding 20 pounds (9 kg) but not exceeding 50 pounds (23 kg) shall be kept in a wooden box or cabinet having walls of at least one inch (25 mm) nominal thickness or equivalent.

[M. ~~L.~~] Delete Sections ~~3306.4.1~~ 5606.4.1, 5606.4.2, and ~~3306.4.2~~ 5606.4.3.

[N. ~~M.~~] Change Section ~~3306.5.1.1~~ 5606.5.1.1 to read:

~~3306.5.1.1~~ 5606.5.1.1. Smokeless propellant. No more than 100 pounds (45 kg) of smokeless propellants, in containers of 8 pounds (3.6 kg) or less capacity, shall be displayed in Group M occupancies.

[O. ~~N.~~] Delete Section ~~3306.5.1.3~~ 5606.5.1.3.

[P. ~~O.~~] Change Section ~~3306.5.2.1~~ 5606.5.2.1 to read:

~~3306.5.2.1~~ 5606.5.2.1 Smokeless propellant. Commercial stocks of smokeless propellants shall be stored as follows:

1. Quantities exceeding 20 pounds (9 kg), but not exceeding 100 pounds (45 kg) shall be stored in portable wooden boxes having walls of at least one inch (25 mm) nominal thickness or equivalent.

2. Quantities exceeding 100 pounds (45 kg), but not exceeding 800 pounds (363 kg), shall be stored in storage cabinets having walls at least one inch (25 mm) nominal thickness or equivalent. Not more than 400 pounds (182 kg) shall be stored in any one cabinet, and cabinets shall be separated by a distance of at least 25 feet (7620 mm) or by a fire partition having a fire-resistance rating of at least one hour.

3. Storage of quantities exceeding 800 pounds (363 kg), but not exceeding 5,000 pounds (2270 kg) in a building shall comply with all of the following:

3.1. The storage is inaccessible to unauthorized personnel.

3.2. Smokeless propellant shall be stored in nonportable storage cabinets having wood walls at least one inch (25 mm) nominal thickness or equivalent and having shelves with no more than three feet (914 mm) of vertical separation between shelves.

3.3. No more than 400 pounds (182 kg) is stored in any one cabinet.

3.4. Cabinets shall be located against walls with at least 40 feet (12 192 mm) between cabinets. The minimum required separation between cabinets may be reduced to 20 feet (6096 mm) provided that barricades twice the height of the cabinets are attached to the wall, midway between each cabinet. The barricades must extend a minimum of 10 feet (3048 mm) outward, be firmly attached to the wall, and be constructed of steel not less than 0.25 inch thick (6.4 mm), two-inch (51 mm) nominal thickness wood, brick, or concrete block.

3.5. Smokeless propellant shall be separated from materials classified as combustible liquids, flammable liquids, flammable solids, or oxidizing materials by a distance of 25 feet (7620 mm) or by a fire partition having a fire-resistance rating of one hour.

3.6. The building shall be equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

4. Smokeless propellants not stored according to Item 1, 2, or 3 above shall be stored in a Type 2 or 4 magazine in accordance with Section 3304 and NFPA 495.

[Q. ~~P.~~] Change Section ~~3307.1~~ 5607.1 to read:

~~3307.1~~ 5607.1. General. Blasting operations shall be conducted only by persons certified by the SFMO as a restricted or unrestricted blaster or shall be supervised on-site by a person properly certified by the SFMO as a restricted or unrestricted blaster.

[R. ~~Q.~~] Add Section ~~3307.16~~ 5607.16 to read:

~~3307.16~~ 5607.16. Blast records. A record of each blast shall be kept and retained for at least five years and shall be [readily] available for inspection by the code official. The record shall [~~contain the following minimum data:~~ be in a format selected by the blaster and shall contain the minimum data and information indicated in Form 5607.16.

~~1. Name of contractor;~~

~~2. Location and time of blast;~~

~~3. Name of certified blaster in charge;~~

~~4. Type of material blasted;~~

~~5. Number of holes bored and spacing;~~

~~6. Diameter and depth of holes;~~

~~7. Type and amount of explosives;~~

~~8. Amount of explosive per delay of 8 milliseconds or greater;~~

~~9. Method of firing and type of circuit;~~

~~10. Direction and distance in feet to nearest dwelling, public building, school, church, commercial or institutional building;~~

~~11. Weather conditions;~~

~~12. Whether or not mats or other precautions were used;~~

~~13. Type of detonator and delay period;~~

~~14. Type and height of stemming; and~~

~~15. Seismograph record when utilized.~~

~~Exception: Subdivisions 8 and 13 of this section are not applicable to restricted blasters.~~

Form 5607.16

Blast (shot) Record

Block 1 General Information				
1	Blast date:	Blast No.:	Blast Time:	Permit No.:
2	Blast location by address including city, county or town:			
3	Blast location by GPS coordinates: □ check box if unknown			
4	Name of Permit Holder:			
5	Name of Blaster in charge (print):			
6	Signature of Blaster in charge:			
7	Certification Number of Blaster in charge:			

-

Block 2 General environmental conditions			
1	Weather (Clear? Cloudy? Overcast?)	Wind direction and speed _____@_____mph	Temperature F° / C°
2	Topography: (Flat? Hilly? Mountainous?)	Distance from blast site to nearest inhabited building:	Distance from nearest inhabited building determined by: □ GPS coordinates □ Measurement □ Estimated
3	Use of nearest inhabited building? (Dwelling? Business? Apartment Building? School?)	Direction from blast site to nearest inhabited building:	Direction from blast site to nearest inhabited building determined by: □ GPS instrument □ Compass □ Estimated
Additional Blaster notations on environmental conditions:			

-

Block 3 Shot layout and precautions taken (N/A = Not Applicable)			
1	No. of holes	Diameter of hole(s)	Depth of hole(s)
2	Were any holes decked? □ Yes □ No	How many holes were decked? □ N/A	How many decks per hole? □ N/A
		(If applicable, indicate on any attached shot pattern drawing which holes were decked and the number of decks for the hole(s).)	
3	Shot pattern □ Check this box if only single hole.	Depth of sub-drilling	Drilling angle
4	Burden	Spacing of holes	Water height
5	Stemming height	Material used for stemming	Check box for flyrock precautions taken □ Mats □ Overburden □ None taken
Additional Blaster notations on shot layout and precautions:			

-

Block 4 Seismic control measures (N/A = Not Applicable)			
1	Was Scaled Distance Formula used? □ Yes □ No	Indicate which Scaled Distance equation was used. N/A □ W(lb)={D(ft)/50}2 □ W(lb)={D(ft)/55}2	Max. Allow. Chg. Wt. per 8 ms based on Scaled Distance. □ N/A

		□ W(lb)={D(ft)/65}2	
2	Was seismograph used? □ Yes □ No	Seismograph manufacturer and model number: □ N/A	Seismograph serial number: □ N/A Seismograph's last calibration date. □ N/A
3	Distance and direction seismograph from blast site □ N/A	Distance determined by: □ N/A □ GPS coordinates □ Estimated □ Measurement	
4	Seismograph □ N/A Geophone Minimum Frequency _____Hz Seismograph Microphone Minimum Frequency _____Hz	Seismograph recordings: □ N/A Transverse _____in/s _____ Hz Vertical _____in/s _____ Hz Longitudinal _____in/s _____ Hz Acoustic _____dB _____ Hz	
5	Seismograph trigger level □ N/A _____ in/s _____dB		
Additional Blaster notations on seismic control measures:			

-

Block 5 Quantity and product		
1	Max. Allow. Chg. Wt. per 8 ms Interval □ Delay not used _____ lbs	Initiation (Check) □ Electric □ Non-electric □ Electronic
2	Max. No. of Holes/Decks per 8 ms interval □ Delay not used _____ lbs	
3	Max. Wt. or sticks of Explosive per hole _____ lbs	Firing device manufacturer and model: □ N/A

	Explosive Product listing (Attach additional pages as needed.)			
4	Manufacturer	Product name, description or brand	Number of units	Unit weight (lb)
5	Total explosive weight in this shot: lbs.			
Additional Blaster notations on product and quantities:				

Block 6 Completion of shot record and general comments	
General comments on shot not included in notes above:	
Date shot report completed:	Time shot report completed:
Printed name and signature of person completing shot report if different from Block 1, Lines 5 and 6.	(Print)
	(Signature)

S. ~~R.~~] Change Section ~~3308.2~~ 5608.2 to read:

~~3308.2~~ 5608.2. Permit application. Prior to issuing permits for a fireworks display, plans for the fireworks display, inspections of the display site and demonstrations of the display operations shall be approved. A plan establishing procedures to follow and actions to be taken in the event that a shell fails to ignite in, or discharge from, a mortar or fails to function over the fallout area or other malfunctions shall be provided to the fire code official.

In addition to the requirements of Section ~~3301.2.3.1~~ 5601.2.3.1, a permit to conduct a fireworks display shall not be issued to any applicant without the applicant identifying on the

application the pyrotechnician who will be in responsible charge of the fireworks display and who is appropriately certified as a pyrotechnician in accordance with Section ~~3301.4.1~~ 5601.4.1.

Exception: Permits are not required for the use or display of permissible fireworks on private property with the consent of the owner of such property.

[T. ~~S.~~] Change Section ~~3308.3~~ 5608.3 to read:

~~3308.3~~ 5608.3. Approved fireworks displays. Approved fireworks displays shall include only the approved fireworks 1.3G, fireworks 1.4G, fireworks 1.4S and pyrotechnic articles 1.4G. The design, setup, conducting or direct on-site supervision of the design, setup and conducting of any fireworks display, either inside a building or outdoors, shall be performed only by persons certified by the SFMO in accordance with Section ~~3301.4.1~~ 5601.4.1 as a pyrotechnician (firework operator) and at least one person properly certified by the SFMO as a pyrotechnician shall be present at the site where the fireworks display is being conducted. The approved fireworks shall be arranged, located, discharged and fired in a manner that will not pose a hazard to property or endanger any person.

Exception: Certification as a pyrotechnician is not required for the use or display of permissible fireworks when conducted on private property with the consent of the owner of such property.

[U. ~~T.~~] Change Section ~~3308.4~~ 5608.4 to read:

~~3308.4~~ 5608.4 Clearance. Spectators, spectator parking areas, and dwellings, buildings or structures shall not be located within the display site. The site for the outdoor land or water display shall have at least 100-ft/in. (31-m/2.4mm) radius of internal mortar [~~distance~~ diameter] of the largest shell to be fired as shown in Table ~~3308.4~~ 5608.4.

Exceptions:

1. This provision shall not apply to pyrotechnic special effects and fireworks displays using Division 1.4G materials before a proximate audience in accordance with NFPA 1126.

2. This provision shall not apply to unoccupied dwellings, buildings and structures with the approval of the building owner and the fire code official.

[V. ~~U.~~] Add Table ~~3308.4~~ 5608.4 to read:

Table ~~3308.4~~ 5608.4.

Distances for Outdoor Fireworks Display Sites: Minimum Separation Distances from Mortars to Spectators for Land and Water Displays.									
Mortar Size[a]		Minimum Secured Diameter of Site		Vertical Mortars[b]		Angled Mortars[c] 1/3 offset		Mortars to Special Hazards[d]	
in.	mm	ft	m	ft	m	ft	m	ft	m

<3	<76	300	92	150	46	100	31	300	92
3	76	600	183	300	92	200	61	600	183
4	102	800	244	400	122	266	81	800	244
5	127	1000	305	500	152	334	102	1000	305
6	152	1200	366	600	183	400	122	1200	366
7	178	1400	427	700	213	467	142	1400	427
8	203	1600	488	800	244	534	163	1600	488
10	254	2000	610	1000	305	667	203	2000	610
12	305	2400	732	1200	366	800	244	2400	732
>12	Requires the approval of the fire official								

[a]Aerial shells, mines, and comets shall be classified and described only in terms of the inside diameter of the mortar from which they are fired (e.g., 3-in. (76-mm) aerial shells, mines and comets are only for use in 3-in. (76mm) mortars).
[b]Where the mortars are positioned vertically, the mortars shall be placed at the approximate center of the display site.
[c]Mortars shall be permitted to be angled during a display to allow for wind and to carry shells away from the main spectator viewing areas. For angled mortars, the minimum secured diameter of the display site does not change. Only the location of the mortars within the secured area changes when the mortars are angled.
[d]Note that this is only the distance to the special hazards. The minimum secured diameter of the display site does not change.

[~~V.~~ W.] Add Sections 5608.4.1 and 5608.4.2 to read:

5608.4.1. Non-splitting, non-bursting comets and mines. For non-splitting or non-bursting comets and mines containing only stars or non-splitting or non-bursting comets, the minimum required radius of the display site shall be 50 feet per inch (15.24 m per 25.4 mm) of the internal mortar diameter of the largest comet or mine to be fired, one-half that shown in Table 5608.4.

5608.4.2. Special distance requirements. The minimum distance requirements of Table 5608.4 shall be adjusted as follows:

1. For chain-fused aerial shells and comets and mines to be fired from mortars, racks, or other holders that are sufficiently strong to prevent their being repositioned in the event of an explosive malfunction of the aerial shells, comets, or mines, the minimum required radius shall be the same as that required in 5608.4 and 5608.4.1. For chain-fused aerial shells and comets and mines to be fired from mortars, racks, or other holders that are not sufficiently strong to prevent their being repositioned in the event of an explosive malfunction of the aerial shells, comets, or mines, or if there is doubt concerning the strength of racks holding chain-fused mortars, based upon the largest mortar in the sequence, the minimum required radius shall be double that required in Sections 5608.4 and 5608.4.1.

2. Distances from the point of discharge of any firework to a health care or detention and correctional facility, or the bulk storage of materials that have flammability, explosive, or toxic hazard shall be at least twice the distances specified in Table 5608.4.

3. The minimum required spectator separation distance for roman candles and cakes that produce aerial shells, comets, or mine effects shall be the same as the minimum required radius specified in Table 5608.4.

4. Aerial shells, comets and mines, and roman candles and cakes shall be permitted to be angled if the dud shells or components are carried away from the main spectator area and either of the following requirements is satisfied:

4.1. The offset specified in Table 5608.4 is followed.

4.2. The separation distance is correspondingly increased in the direction of the angle.

If the offset provided in Table 5608.4 is followed, the mortars or tubes shall be angled so that any dud shells or components fall at a point approximately equal to the offset of the mortars or tubes from the otherwise required discharge point but in the opposite direction.

[13 VAC 5-51-151. IFC Chapter 57 Flammable and Combustible Liquids.

A. Add Section 5701.1.1 to read:

5701.1.1. Other regulations. Provisions of the Virginia State Water Control Board regulations 9VAC25-91 and 9VAC25-580 addressing the maintenance and operational aspects of underground and aboveground storage tanks subject to those regulations are hereby incorporated by reference to be an enforceable part of this code. Where differences occur between the provisions of this code and the incorporated provisions of the State Water Control Board regulations, the provisions of the State Water Control Board regulations shall apply.

Note: For requirements for the installation, repair, upgrade and closure of such tanks, see Section 414.6.2 of the USBC, Part I, Construction.

B. Add the following exception to Section 5704.2.13.1.3 to read:

Exception- : Underground storage tanks subject to the Virginia State Water Control Board regulation 9VAC25-580.]

13VAC5-51-154. IFC Chapter ~~38~~ 61. Liquefied Petroleum Gases.

A. Change Section ~~3801.2~~ 6101.2 to read:

~~3801.2~~ 6101.2. Permits. Permits shall be required as set forth in Section 107.2. Distributors shall not fill an LP-gas container for which a permit is required unless a permit for installation has been issued for that location by the fire code official, except when the container is for temporary use on construction sites.

B. Add Section ~~3806.4~~ 6106.4 to read:

~~3806.4~~ 6106.4. ~~DOT~~ DOTn cylinders filled on site. ~~DOT~~ DOTn cylinders in stationary service that are filled on site and therefore are not under the jurisdiction of ~~DOT~~ DOTn either

shall be requalified in accordance with ~~DOT~~ DOTn requirements or shall be visually inspected within 12 years of the date of manufacture or within five years from May 1, 2008, whichever is later, and within every five years thereafter, in accordance with the following:

1. Any cylinder that fails one or more of the criteria in Item 3 shall not be refilled or continued in service until the condition is corrected.

2. Personnel shall be trained and qualified to perform inspections.

3. Visual inspection shall be performed in accordance with the following:

3.1. The cylinder is checked for exposure to fire, dents, cuts, digs, gouges, and corrosion according to CGA C-6, Standards for Visual Inspection of Steel Compressed Gas Cylinders, except that paragraph 4.2.1(1) of that standard (which requires tare weight certification), shall not be part of the required inspection criteria.

3.2. The cylinder protective collar (where utilized) and the foot ring are intact and are firmly attached.

3.3. The cylinder is painted or coated to retard corrosion.

3.4. The cylinder pressure relief valve indicates no visible damage, corrosion of operating components, or obstructions.

3.5. There is no leakage from the cylinder or its appurtenances that is detectable without the use of instruments.

3.6. The cylinder is installed on a firm foundation and is not in contact with the soil.

3.7. A cylinder that passed the visual inspection shall be marked with the month and year of the examination followed by the letter "E" (example: 10-01E, indicating requalification in October 2001 by the external inspection method).

3.8. The results of the visual inspection shall be documented, and a record of the inspection shall be retained for a five-year period.

Exception: Any inspection procedure outlined in Items 3.1 through 3.8 that would require a cylinder be moved in such a manner that disconnection from the piping system would be necessary shall be omitted, provided the other inspection results do not indicate further inspection is warranted.

C. ~~Add Sections 3809.15 and 3809.15.1 to read:~~

~~3809.15. LP-Gas cylinder exchange for resale. In addition to other applicable requirements of this chapter, facilities operating cylinder exchange stations for LP-gas that are accessible to the public shall comply with the following requirements:~~

~~1. Cylinders shall be secured in a lockable, ventilated metal cabinet or other approved enclosure.~~

~~2. Cylinders shall be accessible only by authorized personnel or by use of an automated exchange system in accordance with Section 3809.15.1.~~

~~3. A sign shall be posted on the entry door of the business operating the cylinder exchange stating "DO NOT BRING LP-GAS CYLINDERS INTO THE BUILDING" or similar approved wording.~~

~~4. An emergency contact information sign shall be posted within 10 feet of the cylinder storage cabinet. The content, lettering, size, color and location of the required sign shall be as required by the fire code official.~~

~~3809.15.1. Automated Cylinder Exchange Stations. Cylinder exchange stations that include an automated vending system for exchanging cylinders shall comply with the following additional requirements:~~

~~1. The vending system shall only permit access to a single cylinder per individual transaction.~~

~~2. Cabinets storing cylinders shall be designed such that cylinders can only be placed inside when they are oriented in the upright position.~~

~~3. Devices operating door releases for access to stored cylinders shall be permitted to be pneumatic, mechanical or electrically powered.~~

~~4. Electrical equipment inside of or within 5 feet of a cabinet storing cylinders, including but not limited to electronics associated with vending operations, shall comply with the requirements for Class 1, Division 2 equipment in accordance with NFPA 70.~~

~~5. A manual override control shall be permitted for use by authorized personnel. On newly installed cylinder exchange stations, the vending system shall not be capable of returning to automatic operation after a manual override until the system has been inspected and reset by authorized personnel.~~

~~6. Inspections shall be conducted by authorized personnel to verify that all cylinders are secured, access doors are closed and the station has no visible damage or obvious defects that necessitate placing the station out of service. The frequency of inspections shall be as specified by the fire code official.~~

~~D.~~ Change Section ~~3811.2~~ 6111.2 to read:

~~3811.2~~ 6111.2. Unattended parking. The unattended parking of LP-gas tank vehicles shall be in accordance with Sections ~~3811.2.1~~ 6111.2.1 and ~~3811.2.2~~ 6111.2.2.

Exception: The unattended outdoor parking of LP-gas tank vehicles may also be in accordance with Section 9.7.2 of NFPA 58.

13VAC5-51-154.5. ~~IFC Chapter 46. Construction Requirements for Existing Buildings.~~ (Repealed.)

~~Delete Chapter 46 in its entirety.~~

13VAC5-51-155. IFC Chapter ~~47~~ 80. Referenced Standards.

Change the referenced standards as follows (standards not shown remain the same):

Standard reference number	Title	Referenced in code section number
CGA C-6 (2001)	Standards for Visual Inspection of Steel Compressed Gas Cylinders	~~3806.4~~ 6106.4
[UL 87A-12	Outline of Investigation for Power-Operated Dispensing Devices for Gasoline and Gasoline/ethanol Blends with Nominal Ethanol Concentrations up to 85 Percent	2306.8.1]
~~UL 1037-99~~	~~Standard for Antitheft Alarms and Devices~~	~~506.1~~
UL 1278-00	Standard for Movable and Wall- or Ceiling-Hung Electric Room Heaters	605.10.1

Virginia Uniform State Building Code

2012 Final Regulations

Part I – Construction

13VAC5-63-10. Chapter 1 Administration; Section 101 General.

A. Section 101.1 Short title. The Virginia Uniform Statewide Building Code, Part I, Construction, may be cited as the Virginia Construction Code or as the VCC. The term "USBC" shall mean the ~~Virginia Construction Code~~ VCC unless the context in which the term is used clearly indicates it to be an abbreviation for the entire Virginia Uniform Statewide Building Code or for a different part of the Virginia Uniform Statewide Building Code.

Note: This code is also known as the ~~2009~~ 2012 edition of the USBC due to the use of the ~~2009~~ 2012 editions of the model codes.

B. Section 101.2 Incorporation by reference. Chapters 2 - 35 of the ~~2009~~ 2012 International Building Code, published by the International Code Council, Inc., are adopted and incorporated by reference to be an enforceable part of the USBC. The term "IBC" means the ~~2009~~ 2012 International Building Code, published by the International Code Council, Inc. Any codes and standards referenced in the IBC are also considered to be part of the incorporation by reference, except that such codes and standards are used only to the prescribed extent of each such reference. In addition, any provisions of the appendices of the IBC specifically identified to be part of the USBC are also considered to be part of the incorporation by reference.

Note 1: The IBC references ~~the whole family of~~ other International Codes and standards including the following major codes:

~~2009~~ 2012 International Plumbing Code (IPC)
~~2009~~ 2012 International Mechanical Code (IMC)
~~2008~~ 2011 NFPA 70
~~2009~~ 2012 International Fuel Gas Code (IFGC)
~~2009~~ 2012 International Energy Conservation Code (IECC)
~~2009~~ 2012 International Residential Code (IRC)

Note 2: The ~~International Residential Code~~ IRC is applicable to the construction of detached one- and two-family dwellings and townhouses as set out in Section 310.

C. Section 101.3 Numbering system. A dual numbering system is used in the USBC to correlate the numbering system of the Virginia Administrative Code with the numbering system of the IBC. IBC numbering system designations are provided in the catchlines of the Virginia Administrative Code sections. Cross references between sections or chapters of the USBC use only the IBC numbering system designations. The term "chapter" is used in the context of the numbering system of the IBC and may mean a chapter in the USBC, a chapter in the IBC or a chapter in a referenced code or standard, depending on the context of the use of the term. The term "chapter" is not used to designate a chapter of the Virginia Administrative Code, unless clearly indicated.

D. Section 101.4 Arrangement of code provisions. The USBC is comprised of the combination of (i) the provisions of Chapter 1, Administration, which are established herein, (ii) Chapters 2 - 35 of the IBC, which are incorporated by reference in Section 101.2, and (iii) the changes to the text of the incorporated chapters of the IBC that are specifically identified. The terminology "changes to the text of the incorporated chapters of the IBC that are specifically identified" shall also be referred to as the "state amendments to the IBC." Such state amendments to the IBC are set out using corresponding chapter and section numbers of the IBC numbering system. In addition, since Chapter 1 of the IBC is not incorporated as part of the USBC, any reference to a provision of Chapter 1 of the IBC in the provisions of Chapters 2 - 35 of the IBC is generally invalid. However, where the purpose of such a reference would clearly correspond to a provision of Chapter 1 established herein, then the reference may be construed to be a valid reference to such corresponding Chapter 1 provision.

E. Section 101.5 Use of terminology and notes. The term "this code," or "the code," where used in the provisions of Chapter 1, in Chapters 2 - 35 of the IBC or in the state amendments to the IBC, means the USBC, unless the context clearly indicates otherwise. The term "this code" or "the code" where used in a code or standard referenced in the IBC, means that code or standard, unless the context clearly indicates otherwise. The use of notes in Chapter 1 is to provide information only and shall not be construed as changing the meaning of any code provision. Notes in the IBC, in the codes and standards referenced in the IBC, and in the state amendments to the IBC, may modify the content of a related provision and shall be considered to be a valid part of the provision, unless the context clearly indicates otherwise.

F. Section 101.6 Order of precedence. The provisions of this code shall be used as follows:

1. The provisions of Chapter 1 of this code supersede any ~~conflicting~~ provisions of Chapters 2 - 35 of the IBC ~~and~~ that address the same subject matter and impose differing requirements.

2. The provisions of Chapter 1 of this code supersede any ~~conflicting~~ provisions of the codes and standards referenced in the IBC that address the same subject matter and impose differing requirements. ~~In addition, the~~

3. The state amendments to the IBC supersede any ~~conflicting~~ provisions of Chapters 2 - 35 of the IBC ~~and~~ that address the same subject matter and impose differing requirements.

4. The state amendments to the IBC supersede any ~~conflicting~~ provisions of the codes and standards referenced in the IBC that address the same subject matter and impose differing requirements. ~~Further, the~~

5. The provisions of Chapters 2 - 35 of the IBC supersede any ~~conflicting~~ provisions of the codes and standards referenced in the IBC that address the same subject matter and impose differing requirements.

G. Section 101.7 Administrative provisions. The provisions of Chapter 1 establish administrative requirements, which include but are not limited to provisions relating to the scope of the code, enforcement, fees, permits, inspections and disputes. Any provisions of Chapters 2 - 35 of the IBC or any provisions of the codes and standards referenced in the IBC that address the same subject matter and impose differing requirements are deleted and replaced by the provisions of Chapter 1. Further, any administrative requirements contained in the state amendments to the

IBC shall be given the same precedence as the provisions of Chapter 1. Notwithstanding the above, where administrative requirements of Chapters 2 - 35 of the IBC or of the codes and standards referenced in the IBC are specifically identified as valid administrative requirements in Chapter 1 of this code or in the state amendments to the IBC, then such requirements are not deleted and replaced.

Note: The purpose of this provision is to eliminate overlap, conflicts and duplication by providing a single standard for administrative, procedural and enforcement requirements of this code.

H. Section 101.8 Definitions. The definitions of terms used in this code are contained in Chapter 2 along with specific provisions addressing the use of definitions. Terms may be defined in other chapters or provisions of the code and such definitions are also valid.

Note: The order of precedence outlined in Section 101.6 may be determinative in establishing how to apply the definitions in the IBC and in the referenced codes and standards.

13VAC5-63-20. Section 102 Purpose and scope.

A. Section 102.1 Purpose. In accordance with § 36-99 of the Code of Virginia, the purpose of the USBC is to protect the health, safety and welfare of the residents of the Commonwealth of Virginia, provided that buildings and structures should be permitted to be constructed at the least possible cost consistent with recognized standards of health, safety, energy conservation and water conservation, including provisions necessary to prevent overcrowding, rodent or insect infestation, and garbage accumulation; and barrier-free provisions for the physically handicapped and aged.

B. Section 102.2 Scope. This section establishes the scope of the USBC in accordance with § 36-98 of the Code of Virginia. The USBC shall supersede the building codes and regulations of the counties, municipalities and other political subdivisions and state agencies. This code also shall supersede the provisions of local ordinances applicable to single-family residential construction that (i) regulate dwelling foundations or crawl spaces, (ii) require the use of specific building materials or finishes in construction, or (iii) require minimum surface area or numbers of windows; however, this code shall not supersede proffered conditions accepted as a part of a rezoning application, conditions imposed upon the grant of special exceptions, special or conditional use permits or variances, conditions imposed upon a clustering of single-family homes and preservation of open space development through standards, conditions, and criteria established by a locality pursuant to subdivision 8 of § 15.2-2242 of the Code of Virginia or subdivision A 12 of § 15.2-2286 of the Code of Virginia, or land use requirements in airport or highway overlay districts, or historic districts created pursuant to § 15.2-2306 of the Code of Virginia, or local flood plain regulations adopted as a condition of participation in the National Flood Insurance Program.

Note: Requirements relating to functional design are contained in Section [~~103.11~~ 103.10] of this code.

C. Section 102.2.1 Invalidity of provisions. To the extent that any provisions of this code are in conflict with Chapter 6 (§ 36-97 et seq.) of Title 36 of the Code of Virginia or in conflict with

the scope of the USBC, those provisions are considered to be invalid to the extent of such conflict.

D. Section 102.3 Exemptions. The following are exempt from this code:

1. Equipment, related wiring, and poles and towers supporting the related wiring installed by a provider of publicly regulated utility service or a franchised cable television operator and electrical equipment and related wiring used for radio, broadcast or cable television, telecommunications or information service transmission. The exemption shall apply only if under applicable federal and state law the ownership and control of the equipment and wiring is by the service provider or its affiliates. Such exempt equipment and wiring shall be located on either rights-of-way or property for which the service provider has rights of occupancy and entry; however, the structures, including their service equipment, housing or supporting such exempt equipment and wiring shall be subject to the USBC. The installation of equipment and wiring exempted by this section shall not create an unsafe condition prohibited by the USBC.

2. Manufacturing and processing machines that do not produce or process hazardous materials regulated by this code, including all of the following service equipment associated with the manufacturing or processing machines.

2.1. Electrical equipment connected after the last disconnecting means.

2.2. Plumbing piping and equipment connected after the last shutoff valve or backflow device and before the equipment drain trap.

2.3. Gas piping and equipment connected after the outlet shutoff valve.

Manufacturing and processing machines that produce or process hazardous materials regulated by this code are only required to comply with the code provisions regulating the hazardous materials.

3. Parking lots and sidewalks, ~~which~~ that are not part of an accessible route.

4. Nonmechanized playground or recreational equipment such as swing sets, sliding boards, climbing bars, jungle gyms, skateboard ramps, and similar equipment where no admission fee is charged for its use or for admittance to areas where the equipment is located.

5. Industrialized buildings subject to the Virginia Industrialized Building Safety Regulations (13VAC5-91) and manufactured homes subject to the Virginia Manufactured Home Safety Regulations (13VAC5-95); except as provided for in Section ~~424~~ 425.

6. Farm buildings and structures, except for a building or a portion of a building located on a farm that is operated as a restaurant as defined in § 35.1-1 of the Code of Virginia and licensed as such by the Virginia Board of Health pursuant to Chapter 2 (§ 35.1-11 et seq.) of Title 35.1 of the Code of Virginia. However, farm buildings and structures lying within a flood plain or in a mudslide-prone area shall be subject to flood-proofing regulations or mudslide regulations, as applicable.

7. Federally owned buildings and structures unless federal law specifically requires a permit from the locality. Underground storage tank installations, modifications and removals shall comply with this code in accordance with federal law.

8. Off-site manufactured intermodal freight containers, moving containers and storage containers placed on site temporarily or permanently for use as a storage container.

9. Automotive lifts.

13VAC5-63-30. Section 103 Application of code.

A. Section 103.1 General. In accordance with § 36-99 of the Code of Virginia, the USBC shall prescribe building regulations to be complied with in the construction and rehabilitation of buildings and structures, and the equipment therein.

B. Section 103.2 When applicable to new construction. Construction for which a permit application is submitted to the local building department on or after the effective date of the ~~2009~~ 2012 edition of the code shall comply with the provisions of this code, except for permit applications submitted during a one-year period ~~after~~ beginning on the effective date of the ~~2009~~ 2012 edition of the code. The applicant for a permit during such one-year period shall be permitted to choose whether to comply with the provisions of this code or the provisions of the edition of the code in effect immediately prior to the ~~2009~~ 2012 edition. This provision shall also apply to subsequent amendments to this code based on the effective date of such amendments. In addition, when a permit has been properly issued under a previous edition of this code, this code shall not require changes to the approved construction documents, design or construction of such a building or structure, provided the permit has not been suspended or revoked.

C. Section 103.3 Change of occupancy. No change of occupancy shall be made in any structure when the current USBC requires a greater degree of accessibility, structural strength, fire protection, means of egress, ventilation or sanitation. When such a greater degree is required, the owner or the owner's agent shall ~~make~~ comply with the following:

1. When involving Group I-2 or I-3, written application shall be made to the local building department for a new certificate of occupancy and ~~shall obtain~~ the new certificate of occupancy shall be obtained prior to the new use of the structure. When impractical to achieve compliance with this code for the new occupancy classification, the building official shall consider modifications upon application and as provided for in Section 106.3. In addition, the applicable accessibility provisions of Section 1012.8 of Part II of the Virginia Uniform Statewide Building Code, also known as the "Virginia Rehabilitation Code," or the "VRC" shall be met.

Exception: This section shall not be construed to permit noncompliance with any applicable flood load or flood-resistant construction requirements of this code.

2. In other than Group I-2 or I-3, the provisions of the VRC for change of occupancy shall be met.

D. Section 103.4 Additions. Additions to buildings and structures shall comply with the requirements of this code for new construction ~~and an~~ or shall comply with the VRC. An existing

building or structure plus additions shall comply with the height and area provisions of Chapter 5 and the applicable provisions of Chapter 9. Further, this code shall not require changes to the design or construction of any portions of the building or structure not altered or affected by an addition, unless the addition has the effect of lowering the current level of safety.

~~Exception~~ Exceptions:

1. This section shall not be construed to permit noncompliance with any applicable flood load or flood-resistant construction requirements of this code.

2. When this code is used for compliance, existing structural elements carrying gravity loads shall be permitted to comply with Section 1103 of the International Existing Building Code.

E. Section 103.5 Reconstruction, alteration or repair in Group R-5 occupancies. The following criteria is applicable to reconstruction, alteration or repair of Group R-5 buildings or structures:

1. Any reconstruction, alteration or repair shall not adversely affect the performance of the building or structure, or cause the building or structure to become unsafe or lower existing levels of health and safety.

2. Parts of the building or structure not being reconstructed, altered or repaired shall not be required to comply with the requirements of this code applicable to newly constructed buildings or structures.

3. The installation of material or equipment, or both, that is neither required nor prohibited shall only be required to comply with the provisions of this code relating to the safe installation of such material or equipment.

4. Material or equipment, or both, may be replaced in the same location with material or equipment of a similar kind or capacity.

Exceptions:

1. This section shall not be construed to permit noncompliance with any applicable flood load or flood-resistant construction requirements of this code.

2. Reconstructed decks, balconies, porches and similar structures located 30 inches (762 mm) or more above grade shall meet the current code provisions for structural loading capacity, connections and structural attachment. This requirement excludes the configuration and height of handrails and guardrails.

3. Compliance with the VRC shall be an acceptable alternative to compliance with this section at the discretion of the owner or owner's agent.

F. Section 103.5.1 Equipment changes. Upon the replacement or new installation of any fuel-burning appliances or equipment in existing Group R-5 occupancies, an inspection or inspections shall be conducted to ensure that the connected vent or chimney systems comply with the following:

1. Vent or chimney systems are sized in accordance with the IRC.

2. Vent or chimney systems are clean, free of any obstruction or blockages, defects or deterioration and are in operable condition. Where not inspected by the local building department, persons performing such changes or installations shall certify to the building official that the requirements of Items 1 and 2 of this section are met.

~~F.~~ G. Section 103.6~~. Use of rehabilitation code~~ Reconstruction, alteration and repair in other occupancies. ~~Compliance with Part II of the Virginia Uniform Statewide Building Code, also known as the "Virginia Rehabilitation Code," shall be an acceptable alternative to compliance with this code for the rehabilitation of such existing buildings and structures within the scope of that code. For the purposes of this section, the term "rehabilitation" shall be as defined in the Virginia Rehabilitation Code~~ Reconstruction, alteration and repair in occupancies other than Group R-5 shall comply with the VRC.

~~G.~~ H. Section 103.7~~.~~ Retrofit requirements. The local building department shall enforce the provisions of Section ~~3413~~ 1701 of the VRC, which require certain existing buildings to be retrofitted with fire protection systems and other safety equipment. Retroactive fire protection system requirements contained in the International Fire Code (IFC) shall not be applicable unless required for compliance with the provisions of Section ~~3413~~ 1701 of the VRC.

~~H.~~ I. Section 103.8 Nonrequired equipment. The following criteria for nonrequired equipment is in accordance with § 36-103 of the Code of Virginia. Building owners may elect to install partial or full fire alarms or other safety equipment that was not required by the edition of the USBC in effect at the time a building was constructed without meeting current requirements of the code, provided the installation does not create a hazardous condition. Permits for installation shall be obtained in accordance with this code. In addition, as a requirement of this code, when such nonrequired equipment is to be installed, the building official shall notify the appropriate fire official or fire chief.

~~I.~~ J. Section 103.8.1 Reduction in function or discontinuance of nonrequired fire protection systems. When a nonrequired fire protection system is to be reduced in function or discontinued, it shall be done in such a manner so as not to create a false sense of protection. Generally, in such cases, any features visible from interior areas shall be removed, such as sprinkler heads, smoke detectors or alarm panels or devices, but any wiring or piping hidden within the construction of the building may remain. Approval of the proposed method of reduction or discontinuance shall be obtained from the building official.

~~J. Section 103.9 Equipment changes. Upon the replacement or new installation of any fuel-burning appliances or equipment in existing buildings, an inspection or inspections shall be conducted to ensure that the connected vent or chimney systems comply with the following:~~

~~1. Vent or chimney systems are sized in accordance with either the International Residential Code, the International Mechanical Code or the International Fuel Gas Code, depending on which is applicable based on the fuel source and the occupancy classification of the structure.~~

~~2. Vent or chimney systems are clean, free of any obstruction or blockages, defects or deterioration and are in operable condition.~~

~~Where not inspected by the local building department, persons performing such changes or installations shall certify to the building official that the requirements of Items 1 and 2 of this section are met.~~

K. Section ~~103.10~~ [~~103.8~~ 103.9] Use of certain provisions of referenced codes. The following provisions of the IBC and of other indicated codes or standards are to be considered valid provisions of this code. Where any such provisions have been modified by the state amendments to the IBC, then the modified provisions apply.

1. Special inspection requirements in Chapters 2 - 35.

~~2. Chapter 34, Existing Structures, except that Section 3412, Compliance Alternatives, shall not be used to comply with the retrofit requirements identified in Section 103.7 and shall not be construed to permit noncompliance with any applicable flood load or flood-resistant construction requirements of this code.~~

~~3.~~ 2. Testing requirements and requirements for the submittal of construction documents in any of the ICC codes referenced in Chapter 35 and in the IRC.

~~4.~~ 3. Section R301.2 of the ~~International Residential Code~~ IRC authorizing localities to determine climatic and geographic design criteria.

~~5.~~ 4. Flood load or flood-resistant construction requirements in the IBC or the ~~International Residential Code~~ IRC, including, but not limited to, any such provisions pertaining to flood elevation certificates that are located in Chapter 1 of those codes. Any required flood elevation certificate pursuant to such provisions shall be prepared by a land surveyor licensed in Virginia or an RDP.

~~6.~~ 5. Section R101.2 of the IRC.

[6. Section N1101.6 of the IRC and Sections C101.5.2 and R101.5.2 of the IECC.]

L. Section [~~103.11~~ 103.10] Functional design. The following criteria for functional design is in accordance with § 36-98 of the Code of Virginia. The USBC shall not supersede the regulations of other state agencies that require and govern the functional design and operation of building related activities not covered by the USBC, including but not limited to (i) public water supply systems, (ii) waste water treatment and disposal systems, and (iii) solid waste facilities~~, nor~~. Nor shall state agencies be prohibited from requiring, pursuant to other state law, that buildings and equipment be maintained in accordance with provisions of this code. In addition, as established by this code, the building official may refuse to issue a permit until the applicant has supplied certificates of functional design approval from the appropriate state agency or agencies. For purposes of coordination, the locality may require reports to the building official by other departments or agencies indicating compliance with their regulations applicable to the functional design of a building or structure as a condition for issuance of a building permit or certificate of occupancy. Such reports shall be based upon review of the plans or inspection of the project as determined by the locality. All enforcement of these conditions shall not be the responsibility of the building official, but rather the agency imposing the condition.

Note: Identified state agencies with functional design approval are listed in the "Related Laws Package," which is available from DHCD.

M. Section [~~103.12~~ 103.11] Amusement devices and inspections. In accordance with § 36-98.3 of the Code of Virginia, to the extent they are not superseded by the provisions of § 36-98.3 of the Code of Virginia and the VADR, the provisions of the USBC shall apply to amusement devices. In addition, as a requirement of this code, inspections for compliance with the VADR shall be conducted either by local building department personnel or private inspectors provided such persons are certified as amusement device inspectors under the VCS.

N. Section [~~103.13~~ 103.12] State buildings and structures. This section establishes the application of the USBC to state-owned buildings and structures in accordance with § 36-98.1 of the Code of Virginia. The USBC shall be applicable to all state-owned buildings and structures, with the exception that §§ 2.2-1159 [~~, 2.2-1160 and~~ through] 2.2-1161 of the Code of Virginia shall provide the standards for ready access to and use of state-owned buildings by the physically handicapped.

Any state-owned building or structure for which preliminary plans were prepared or on which construction commenced after the initial effective date of the USBC, shall remain subject to the provisions of the USBC that were in effect at the time such plans were completed or such construction commenced. Subsequent reconstruction, renovation or demolition of such building or structure shall be subject to the pertinent provisions of this code.

Acting through the Division of Engineering and Buildings, the Virginia Department of General Services shall function as the building official for state-owned buildings. The department shall review and approve plans and specifications, grant modifications, and establish such rules and regulations as may be necessary to implement this section. It shall provide for the inspection of state-owned buildings and enforcement of the USBC and standards for access by the physically handicapped by delegating inspection and USBC enforcement duties to the State Fire Marshal's Office, to other appropriate state agencies having needed expertise, and to local building departments, all of which shall provide such assistance within a reasonable time and in the manner requested. State agencies and institutions occupying buildings shall pay to the local building department the same fees as would be paid by a private citizen for the services rendered when such services are requested by the department. The department may alter or overrule any decision of the local building department after having first considered the local building department's report or other rationale given for its decision. When altering or overruling any decision of a local building department, the department shall provide the local building department with a written summary of its reasons for doing so.

Notwithstanding any provision of this code to the contrary, roadway tunnels and bridges owned by the Virginia Department of Transportation shall be exempt from this code. The Virginia Department of General Services shall not have jurisdiction over such roadway tunnels, bridges and other limited access highways; provided, however, that the Department of General Services shall have jurisdiction over any occupied buildings within any Department of Transportation rights-of-way that are subject to this code.

Except as provided in subdivision D of § 23-38.109 ~~D~~ of the Code of Virginia, and notwithstanding any provision of this code to the contrary, at the request of a public institution of higher education, the Virginia Department of General Services, as further set forth in this

provision, shall authorize that institution of higher education to contract with a building official of the locality in which the construction is taking place to perform any inspection and certifications required for the purpose of complying with this code. The department shall publish administrative procedures that shall be followed in contracting with a building official of the locality. The authority granted to a public institution of higher education under this provision to contract with a building official of the locality shall be subject to the institution meeting the conditions prescribed in subdivision B of § 23-38.88 ~~B~~ of the Code of Virginia.

Note: In accordance with § 36-98.1 of the Code of Virginia, roadway tunnels and bridges shall be designed, constructed and operated to comply with fire safety standards based on nationally recognized model codes and standards to be developed by the Virginia Department of Transportation in consultation with the State Fire Marshal and approved by the Virginia Commonwealth Transportation Board. Emergency response planning and activities related to the standards approved by the Commonwealth Transportation Board shall be developed by the Department of Transportation and coordinated with the appropriate local officials and emergency service providers. On an annual basis, the Department of Transportation shall provide a report on the maintenance and operability of installed fire protection and detection systems in roadway tunnels and bridges to the State Fire Marshal.

O. Section [~~103.13.1~~ 103.12.1] Certification of state enforcement personnel. State enforcement personnel shall comply with the applicable requirements of Section 105 for certification, periodic maintenance training, and continuing education.

13VAC5-63-40. Section 104 Enforcement, generally.

A. Section 104.1 Scope of enforcement. This section establishes the requirements for enforcement of the USBC in accordance with § 36-105 of the Code of Virginia. Enforcement of the provisions of the USBC for construction and rehabilitation shall be the responsibility of the local building department. Whenever a county or municipality does not have such a building department, the local governing body shall enter into an agreement with the local governing body of another county or municipality or with some other agency, or a state agency approved by DHCD for such enforcement. For the purposes of this section, towns with a population of less than 3,500 may elect to administer and enforce the USBC; however, where the town does not elect to administer and enforce the code, the county in which the town is situated shall administer and enforce the code for the town. In the event such town is situated in two or more counties, those counties shall administer and enforce the USBC for that portion of the town situated within their respective boundaries.

~~Upon~~ However, upon a finding by the local building department, following a complaint by a tenant of a residential ~~rental~~ dwelling unit that is the subject of such complaint, that there may be a violation of the unsafe structures provisions of Part III of the Virginia Uniform Statewide Building Code, also known as the "Virginia Maintenance Code," or the "VMC," the local building department shall enforce such provisions.

If the local building department receives a complaint that a violation of the ~~Virginia Maintenance Code~~ VMC exists that is an immediate and imminent threat to the health or safety of the owner ~~or~~, tenant, or occupants of ~~a residential dwelling unit or a nearby residential dwelling unit, and~~ any building or structure, or the owner, occupant, or tenant or any nearby building or structure, and the owner, occupant, or tenant of the ~~residential dwelling unit~~ building or structure that is the

subject of the complaint has refused to allow the local building official or his agent to have access to the subject ~~dwelling~~ building or structure, the local building official or his agent may present sworn testimony to a magistrate or a court of competent jurisdiction and request that the magistrate or court grant the local building official or his agent an inspection warrant to enable the building official or his agent to enter the subject ~~dwelling~~ building or structure for the purpose of determining whether violations of the ~~Virginia Maintenance Code~~ VMC exist. The local building official or his agent shall make a reasonable effort to obtain consent from the owner, occupant, or tenant of the subject ~~dwelling~~ building or structure prior to seeking the issuance of an inspection warrant under this section.

The local governing body shall, however, inspect and enforce the provisions of the ~~Virginia Maintenance Code~~ VMC for elevators, escalators and related conveyances, except for elevators in single-family and two-family homes and townhouses. Such inspection and enforcement shall be carried out by an agency or department designated by the local governing body.

B. Section 104.2 Interagency coordination. When any inspection functions under this code are assigned to a local agency other than the local building department, such agency shall coordinate its reports of inspection with the local building department.

~~C. 104.3 Transfer of ownership. If the local building department has initiated an enforcement action against the owner of a building or structure and such owner subsequently transfers the ownership of the building or structure to an entity in which the owner holds an ownership interest greater than 50%, the pending enforcement action shall continue to be enforced against the owner.~~

13VAC5-63-50. Section 105 Local building department.

A. Section 105.1 Appointment of building official. Every local building department shall have a building official as the executive official in charge of the department. The building official shall be appointed in a manner selected by the local governing body. After permanent appointment, the building official shall not be removed from office except for cause after having been afforded a full opportunity to be heard on specific and relevant charges by and before the appointing authority. DHCD shall be notified by the appointing authority within 30 days of the appointment or release of a permanent or acting building official.

Note: Building officials are subject to sanctions in accordance with the VCS.

B. Section 105.1.1 Qualifications of building official. The building official shall have at least five years of building experience as a licensed professional engineer or architect, building, fire or trade inspector, contractor, housing inspector or superintendent of building, fire or trade construction or at least five years of building experience after obtaining a degree in architecture or engineering, with at least three years in responsible charge of work. Any combination of education and experience that would confer equivalent knowledge and ability shall be deemed to satisfy this requirement. The building official shall have general knowledge of sound engineering practice in respect to the design and construction of structures, the basic principles of fire prevention, the accepted requirements for means of egress and the installation of elevators and other service equipment necessary for the health, safety and general welfare of the occupants and the public. The local governing body may establish additional qualification requirements.

C. Section 105.1.2 Certification of building official. An acting or permanent building official shall be certified as a building official in accordance with the VCS within one year after being appointed as acting or permanent building official.

Exception: A building official in place prior to April 1, 1983, shall not be required to meet the certification requirements in this section while continuing to serve in the same capacity in the same locality.

D. Section 105.1.3 Noncertified building official. Except for a building official exempt from certification under the exception to Section 105.1.2, any acting or permanent building official who is not certified as a building official in accordance with the VCS shall attend the core module of the Virginia Building Code Academy or an equivalent course in an individual or regional code academy accredited by DHCD within 180 days of appointment. This requirement is in addition to meeting the certification requirement in Section 105.1.2.

E. Section 105.1.4 Requirements for periodic maintenance and continuing education. Building officials shall attend periodic maintenance training as designated by DHCD. In addition to the periodic maintenance training required above, building officials shall attend 16 hours of continuing education every two years as approved by DHCD. If a building official possesses more than one BHCD certificate, the 16 hours shall satisfy the continuing education requirement for all BHCD certificates.

F. Section 105.2 Technical assistants. The building official, subject to any limitations imposed by the locality, shall be permitted to utilize technical assistants to assist the building official in the enforcement of the USBC. DHCD shall be notified by the building official within 60 days of the employment of, contracting with or termination of all technical assistants.

Note: Technical assistants are subject to sanctions in accordance with the VCS.

G. Section 105.2.1 Qualifications of technical assistants. A technical assistant shall have at least three years of experience and general knowledge in at least one of the following areas: building construction; building, fire or housing inspections; plumbing, electrical or mechanical trades; or fire protection, elevator or property maintenance work. Any combination of education and experience that would confer equivalent knowledge and ability shall be deemed to satisfy this requirement. The locality may establish additional qualification requirements.

H. Section 105.2.2 Certification of technical assistants. A technical assistant shall be certified in the appropriate subject area within 18 months after becoming a technical assistant. When required by local policy to have two or more certifications, a technical assistant shall obtain the additional certifications within three years from the date of such requirement.

Exception: A technical assistant in place prior to March 1, 1988, shall not be required to meet the certification requirements in this section while continuing to serve in the same capacity in the same locality.

I. Section 105.2.3 Requirements for periodic maintenance and continuing education. Technical assistants shall attend periodic maintenance training as designated by DHCD. In addition to the periodic maintenance training required above, technical assistants shall attend 16 hours of continuing education every two years as approved by DHCD. If a technical assistant possesses

more than one BHCD certificate, the 16 hours shall satisfy the continuing education requirement for all BHCD certificates.

J. Section 105.3 Conflict of interest. The standards of conduct for building officials and technical assistants shall be in accordance with the provisions of the State and Local Government Conflict of Interests Act, Chapter 31 (§ 2.2-3100 et seq.) of Title 2.2 of the Code of Virginia.

K. Section 105.4 Records. The local building department shall retain a record of applications received, permits, certificates, notices and orders issued, fees collected and reports of inspection in accordance with The Library of Virginia's General Schedule Number Six.

13VAC5-63-60. Section 106 Powers and duties of the building official.

A. Section 106.1 Powers and duties, generally. The building official shall enforce this code as set out herein and as interpreted by the State Review Board.

B. Section 106.2 Delegation of authority. The building official may delegate powers and duties except where such authority is limited by the local government. However, such limitations of authority by the local government are not applicable to the third-party inspector policy required by Section 113.7.1 nor shall such limitations of authority by the local government have the effect of altering the provisions of this code or creating building regulations. When such delegations are made, the building official shall be responsible for assuring that they are carried out in accordance with the provisions of this code.

C. Section 106.3 Issuance of modifications. Upon written application by an owner or an owner's agent, the building official may approve a modification of any provision of the USBC provided the spirit and functional intent of the code are observed and public health, welfare and safety are assured. The decision of the building official concerning a modification shall be made in writing and the application for a modification and the decision of the building official concerning such modification shall be retained in the permanent records of the local building department.

Note: The USBC references nationally recognized model codes and standards. Future amendments to such codes and standards are not automatically included in the USBC; however the building official should give them due consideration in deciding whether to approve a modification.

D. Section 106.3.1 Substantiation of modification. The building official may require or may consider a statement from an RDP or other person competent in the subject area of the application as to the equivalency of the proposed modification. In addition, the building official may require the application to include construction documents sealed by an RDP.

E. Section 106.3.2 Use of performance code. Compliance with the provisions of a nationally recognized performance code when approved as a modification shall be considered to constitute compliance with this code. All documents submitted as part of such consideration shall be retained in the permanent records of the local building department.

13VAC5-63-70. Section 107 Fees.

A. Section 107.1 Authority for charging fees. In accordance with § 36-105 of the Code of Virginia, fees may be levied by the local governing body in order to defray the cost of enforcement of the USBC.

B. Section 107.1.1 Fee schedule. The local governing body shall establish a fee schedule incorporating unit rates, which may be based on square footage, cubic footage, estimated cost of construction or other appropriate criteria. A permit or any amendments to an existing permit shall not be issued until the designated fees have been paid, except that the building official may authorize the delayed payment of fees.

C. Section 107.1.2 Refunds. When requested in writing by a permit holder, the locality shall provide a fee refund in the case of the revocation of a permit or the abandonment or discontinuance of a building project. The refund shall not be required to exceed an amount which correlates to work not completed.

[D. Section 107.1.3 Fees for generators used with amusement devices. Fees for generators and associated wiring used with amusement devices shall only be charged under the Virginia Amusement Device Regulations (13VAC5-31).

~~D.~~ E.] Section 107.2 Code academy fee levy. In accordance with subdivision 7 of § 36-137 of the Code of Virginia, the local building department shall collect a 2.0% levy of fees charged for permits issued under this code and transmit it quarterly to DHCD to support training programs of the Virginia Building Code Academy. Localities that maintain individual or regional training academies accredited by DHCD shall retain such levy.

13VAC5-63-80. Section 108 Application for permit.

A. Section 108.1 When applications are required. Application for a permit shall be made to the building official and a permit shall be obtained prior to the commencement of any of the following activities, except that applications for emergency construction, alterations or equipment replacement shall be submitted by the end of the first working day that follows the day such work commences. In addition, the building official may authorize work to commence pending the receipt of an application or the issuance of a permit.

1. Construction or demolition of a building or structure. Installations or alterations involving (i) the removal or addition of any wall, partition or portion thereof, (ii) any structural component, (iii) the repair or replacement of any required component of a fire or smoke rated assembly, (iv) the alteration of any required means of egress system, (v) water supply and distribution system, sanitary drainage system or vent system, (vi) electric wiring, (vii) fire protection system, mechanical systems, or fuel supply systems, or (viii) any equipment regulated by the USBC.

2. For change of occupancy, application for a permit shall be made when a new certificate of occupancy is required under Section 103.3.

3. Movement of a lot line that increases the hazard to or decreases the level of safety of an existing building or structure in comparison to the building code under which such building or structure was constructed.

4. Removal or disturbing of any asbestos containing materials during the construction or demolition of a building or structure, including additions.

B. Section 108.2 Exemptions from application for permit. Notwithstanding the requirements of Section 108.1, application for a permit and any related inspections shall not be required for the following; however, this section shall not be construed to exempt such activities from other applicable requirements of this code. In addition, when an owner or an owner's agent requests that a permit be issued for any of the following, then a permit shall be issued and any related inspections shall be required.

1. Installation of wiring and equipment that (i) operates at less than 50 volts, (ii) is for network powered broadband communications systems, or (iii) is exempt under Section 102.3(1), except when any such installations are located in a plenum, penetrate fire rated or smoke protected construction or are a component of any of the following:

1.1. Fire alarm system.

1.2. Fire detection system.

1.3. Fire suppression system.

1.4. Smoke control system.

1.5. Fire protection supervisory system.

1.6. Elevator fire safety control system.

1.7. Access or egress control system or delayed egress locking or latching system.

1.8. Fire damper.

1.9. Door control system.

2. One story detached ~~accessory~~ structures used as tool and storage sheds, playhouses or similar uses, provided the ~~floor~~ building area does not exceed ~~200~~ 256 square feet ~~(18 m^2~~ (23.78 m^2) and the structures are not classified as a Group F-1 or H occupancy.

3. Detached prefabricated buildings housing the equipment of a publicly regulated utility service, provided the floor area does not exceed 150 square feet (14 m^2).

4. Tents or air-supported structures, or both, that cover an area of 900 square feet (84 m^2) or less, including within that area all connecting areas or spaces with a common means of egress or entrance, provided such tents or structures have an occupant load of 50 or less persons.

5. Fences ~~and privacy walls not part of a building, structure or~~ of any height unless required for pedestrian safety as provided for by Section 3306, or used for the barrier for a swimming pool~~,~~.

6. Concrete or masonry walls, provided such ~~fences and privacy~~ walls do not exceed six feet in height above the finished grade. Ornamental ~~post~~ column caps shall not be considered to contribute to the height of the ~~fence or privacy~~ wall and shall be permitted to extend above the six feet height measurement.

~~6.~~ 7. Retaining walls supporting less than ~~two~~ three feet of unbalanced fill~~. This exemption shall not apply to any wall~~ that are not constructed for the purpose of impounding Class I, II or III-A liquids or supporting a surcharge other than ordinary unbalanced fill.

~~7.~~ 8. Swimming pools that have a surface area not greater than 150 square feet (13.95 m^2), do not exceed 5,000 gallons (19 000 L) and are less than 24 inches (610 mm) deep.

~~8.~~ 9. Signs under the conditions in Section H101.2 of Appendix H.

~~9.~~ 10. Replacement of above-ground existing LP-gas containers of the same capacity in the same location and associated regulators when installed by the serving gas supplier.

[11. Flagpoles 30 feet (9144 mm) or less in height.

12. Construction work deemed by the building official to be minor and ordinary and which does not adversely affect public health or general safety.]

~~10.~~ [~~11.~~ 13.] Ordinary repairs that include the following:

~~10.1.~~ [~~11.1.~~ 13.1.] Replacement of windows and doors with windows and doors of similar operation and opening dimensions that do not require changes to the existing framed opening and that are not required to be fire rated in Group R-2 where serving a single dwelling unit and in Groups R-3, R-4 and R-5.

~~10.2.~~ [~~11.2.~~ 13.2.] Replacement of plumbing fixtures and well pumps in all groups without alteration of the water supply and distribution systems, sanitary drainage systems or vent systems.

~~10.3.~~ [~~11.3.~~ 13.3.] Replacement of general use snap switches, dimmer and control switches, 125 volt-15 or 20 ampere receptacles, luminaries (lighting fixtures) and ceiling (paddle) fans in Group R-2 where serving a single dwelling unit and in Groups R-3, R-4 and R-5.

~~10.4.~~ [~~11.4.~~ 13.4.] Replacement of mechanical appliances provided such equipment is not fueled by gas or oil in Group R-2 where serving a single family dwelling and in Groups R-3, R-4 and R-5.

~~10.5.~~ [~~11.5.~~ 13.5.] Replacement of an unlimited amount of roof covering or siding in Groups R-3, R-4 or R-5 provided the building or structure is not in an area where the design (3 second gust) wind speed is greater than 100 miles per hour (160 km/hr) and replacement of 100 square feet (9.29 m^2) or less of roof covering in all groups and all wind zones.

~~10.6.~~ [~~11.6.~~ 13.6.] Replacement of 100 square feet (9.29 m^2) or less of roof decking in Groups R-3, R-4 or R-5 unless the decking to be replaced was required at the time or original construction to be fire-retardant-treated or protected in some other way to form a fire-rated wall termination.

~~10.7.~~ [~~11.7.~~ 13.7.] Installation or replacement of floor finishes in all occupancies.

~~10.8.~~ [~~11.8.~~ 13.8.] Replacement of Class C interior wall or ceiling finishes installed in Groups A, E and I and replacement of all classes of interior wall or ceiling finishes in other groups.

~~10.9.~~ [~~11.9.~~ 13.9.] Installation ~~of~~ or replacement of cabinetry or trim.

~~10.10.~~ [~~11.10.~~ 13.10.] Application of paint or wallpaper.

~~10.11.~~ [~~11.11.~~ 13.11.] Other repair work deemed by the building official to be minor and ordinary which does not adversely affect public health or general safety.

[~~12.~~ 14.] Crypts, mausoleums and columbaria structures not exceeding 1500 square feet (139.35 m^2) in area if the building or structure is not for occupancy and used solely for the interment of human or animal remains and is not subject to special inspections.

Exception: Application for a permit may be required by the building official for the installation of replacement siding, roofing and windows in buildings within a historic district designated by a locality pursuant to § 15.2-2306 of the Code of Virginia.

C. Section 108.3 Applicant information, processing by mail. Application for a permit shall be made by the owner or lessee of the relevant property or the agent of either or by the RDP, contractor or subcontractor associated with the work or any of their agents. The full name and address of the owner, lessee and applicant shall be provided in the application. If the owner or lessee is a corporate body, when and to the extent determined necessary by the building official, the full name and address of the responsible officers shall also be provided.

A permit application may be submitted by mail and such permit applications shall be processed by mail, unless the permit applicant voluntarily chooses otherwise. In no case shall an applicant be required to appear in person.

The building official may accept applications for a permit through electronic submissions provided the information required by this section is obtained.

D. Section 108.4 Prerequisites to obtaining permit. In accordance with § 54.1-1111 of the Code of Virginia, any person applying to the building department for the construction, removal or improvement of any structure shall furnish prior to the issuance of the permit either (i) satisfactory proof to the building official that he is duly licensed or certified under the terms or Chapter 11 (§ 54.1-1000 et seq.) of Title 54.1 of the Code of Virginia to carry out or superintend the same or (ii) file a written statement, supported by an affidavit, that he is not subject to licensure or certification as a contractor or subcontractor pursuant to Chapter 11 of Title 54.1 of the Code of Virginia. The applicant shall also furnish satisfactory proof that the taxes or license

fees required by any county, city, or town have been paid so as to be qualified to bid upon or contract for the work for which the permit has been applied.

E. Section 108.5 Mechanics' lien agent designation. In accordance with § 36-98.01 of the Code of Virginia, a building permit issued for any one-family or two-family residential dwelling shall at the time of issuance contain, at the request of the applicant, the name, mailing address, and telephone number of the mechanics' lien agent as defined in § 43-1 of the Code of Virginia. If the designation of a mechanics' lien agent is not so requested by the applicant, the building permit shall at the time of issuance state that none has been designated with the words "None Designated."

Note: In accordance with § 43-4.01A of the Code of Virginia, a permit may be amended after it has been initially issued to name a mechanics' lien agent or a new mechanics' lien agent.

F. Section 108.6 Application form, description of work. The application for a permit shall be submitted on a form or forms supplied by the local building department. The application shall contain a general description and location of the proposed work and such other information as determined necessary by the building official.

G. Section 108.7 Amendments to application. An application for a permit may be amended at any time prior to the completion of the work governed by the permit. Additional construction documents or other records may also be submitted in a like manner. All such submittals shall have the same effect as if filed with the original application for a permit and shall be retained in a like manner as the original filings.

H. Section 108.8 Time limitation of application. An application for a permit for any proposed work shall be deemed to have been abandoned six months after the date of filing unless such application has been pursued in good faith or a permit has been issued, except that the building official is authorized to grant one or more extensions of time if a justifiable cause is demonstrated.

13VAC5-63-90. Section 109 Construction documents.

A. Section 109.1 Submittal of documents. Construction documents shall be submitted with the application for a permit. The number of sets of such documents to be submitted shall be determined by the locality. Construction documents for one- and two-family dwellings may have floor plans reversed provided an accompanying site plan is approved.

Exception: Construction documents do not need to be submitted when the building official determines the proposed work is of a minor nature.

Note: Information on the types of construction required to be designed by an RDP is included in the "Related Laws Package" available from DHCD.

B. Section 109.2 Site plan. When determined necessary by the building official, a site plan shall be submitted with the application for a permit. The site plan shall show to scale the size and location of all proposed construction, including any associated wells, septic tanks or drain fields. The site plan shall also show to scale the size and location of all existing structures on the site, the distances from lot lines to all proposed construction, the established street grades and the

proposed finished grades. When determined necessary by the building official, the site plan shall contain the elevation of the lowest floor of any proposed buildings. The site plan shall also be drawn in accordance with an accurate boundary line survey. When the application for a permit is for demolition, the site plan shall show all construction to be demolished and the location and size of all existing structures that are to remain on the site.

Note: Site plans are generally not necessary for alterations, renovations, repairs or the installation of equipment.

C. Section 109.3 Engineering details. When determined necessary by the building official, construction documents shall include adequate detail of the structural, mechanical, plumbing or electrical components. Adequate detail may include computations, stress diagrams or other essential technical data and when proposed buildings are more than two stories in height, adequate detail may specifically be required to include where floor penetrations will be made for pipes, wires, conduits, and other components of the electrical, mechanical and plumbing systems and how such floor penetrations will be protected to maintain the required structural integrity or fire-resistance rating, or both. All engineered documents, including relevant computations, shall be sealed by the RDP responsible for the design.

D. Section 109.4 Examination of documents. The building official shall examine or cause to be examined all construction documents or site plans, or both, within a reasonable time after filing. If such documents or plans do not comply with the provisions of this code, the permit applicant shall be notified in writing of the reasons, which shall include any adverse construction document review comments or determinations that additional information or engineering details need to be submitted. The review of construction documents for new one- and two-family dwellings for determining compliance with the technical provisions of this code not relating to the site, location or soil conditions associated with the dwellings shall not be required when identical construction documents for identical dwellings have been previously approved in the same locality under the same edition of the code and such construction documents are on file with the local building department.

E. Section 109.4.1 Expedited construction document review. The building official may accept reports from an approved person or agency that the construction documents have been examined and conform to the requirements of the USBC and may establish requirements for the person or agency submitting such reports. In addition, where such reports have been submitted, the building official may expedite the issuance of the permit.

F. Section 109.5 Approval of construction documents. The approval of construction documents shall be limited to only those items within the scope of the USBC. Either the word “Approved” shall be stamped on all required sets of approved construction documents or an equivalent endorsement in writing shall be provided. One set of the approved construction documents shall be retained for the records of the local building department and one set shall be kept at the building site and shall be available to the building official at all reasonable times.

G. Section 109.6 Phased approval. The building official is authorized to issue a permit for the construction of foundations or any other part of a building or structure before the construction documents for the whole building or structure have been submitted, provided that adequate information and detailed statements have been filed complying with pertinent requirements of this code. The holder of such permit for the foundation or other parts of a building or structure

shall proceed at the holder's own risk with the building operation and without assurance that a permit for the entire structure will be granted.

13VAC5-63-100. Section 110 Permits.

A. Section 110.1 Approval and issuance of permits. The building official shall examine or cause to be examined all applications for permits or amendments to such applications within a reasonable time after filing. If the applications or amendments do not comply with the provisions of this code or all pertinent laws and ordinances, the permit shall not be issued and the permit applicant shall be notified in writing of the reasons for not issuing the permit. If the application complies with the applicable requirements of this code, a permit shall be issued as soon as practicable. The issuance of permits shall not be delayed in an effort to control the pace of construction of new detached one- or two-family dwellings.

B. Section 110.2 Types of permits. Separate or combined permits may be required for different areas of construction such as building construction, plumbing, electrical, and mechanical work, or for special construction as determined appropriate by the locality. In addition, permits for two or more buildings or structures on the same lot may be combined. Annual permits may also be issued for any construction regulated by this code. The annual permit holder shall maintain a detailed record of all alterations made under the annual permit. Such record shall be available to the building official and shall be submitted to the local building department if requested by the building official.

C. Section 110.3 Asbestos inspection in buildings to be renovated or demolished; exceptions. In accordance with § 36-99.7 of the Code of Virginia, the local building department shall not issue a building permit allowing a building for which an initial building permit was issued before January 1, 1985, to be renovated or demolished until the local building department receives certification from the owner or his agent that the affected portions of the building have been inspected for the presence of asbestos by an individual licensed to perform such inspections pursuant to § 54.1-503 of the Code of Virginia and that no asbestos-containing materials were found or that appropriate response actions will be undertaken in accordance with the requirements of the Clean Air Act National Emission Standard for the Hazardous Air Pollutant (NESHAPS) (40 CFR Part 61, Subpart M), and the asbestos worker protection requirements established by the U.S. Occupational Safety and Health Administration for construction workers (29 CFR 1926.1101). Local educational agencies that are subject to the requirements established by the Environmental Protection Agency under the Asbestos Hazard Emergency Response Act (AHERA) shall also certify compliance with 40 CFR Part 763 and subsequent amendments thereto.

To meet the inspection requirements above, except with respect to schools, asbestos inspection of renovation projects consisting only of repair or replacement of roofing, floorcovering, or siding materials may be satisfied by a statement that the materials to be repaired or replaced are assumed to contain friable asbestos and that asbestos installation, removal, or encapsulation will be accomplished by a licensed asbestos contractor.

The provisions of this section shall not apply to single-family dwellings or residential housing with four or fewer units unless the renovation or demolition of such buildings is for commercial or public development purposes. The provisions of this section shall not apply if the combined amount of regulated asbestos-containing material involved in the renovation or demolition is less

than 260 linear feet on pipes or less than 160 square feet on other facility components or less than 35 cubic feet off facility components where the length or area could not be measured previously.

An abatement area shall not be reoccupied until the building official receives certification from the owner that the response actions have been completed and final clearances have been measured. The final clearance levels for reoccupancy of the abatement area shall be 0.01 or fewer asbestos fibers per cubic centimeter if determined by Phase Contrast Microscopy analysis (PCM) or 70 or fewer structures per square millimeter if determined by Transmission Electron Microscopy analysis (TEM).

D. Section 110.4 Fire apparatus access road requirements. The permit applicant shall be informed of any requirements for providing or maintaining fire apparatus access roads prior to the issuance of a building permit.

E. Section 110.5 Signature on and posting of permits; limitation of approval. The signature of the building official or authorized representative shall be on or affixed to every permit. A copy of the permit shall be posted on the construction site for public inspection until the work is completed. Such posting shall include the street or lot number, if one has been assigned, to be readable from a public way. In addition, each building or structure to which a street number has been assigned shall, upon completion, have the number displayed so as to be readable from the public way.

A permit shall be considered authority to proceed with construction in accordance with this code, the approved construction documents, the permit application and any approved amendments or modifications. The permit shall not be construed to otherwise authorize the omission or amendment of any provision of this code.

F. Section 110.6 Abandonment of work. A building official shall be permitted to revoke a permit if work on the site authorized by the permit is not commenced within six months after issuance of the permit, or if the authorized work on the site is suspended or abandoned for a period of six months after the permit is issued; however, permits issued for plumbing, electrical and mechanical work shall not be revoked if the building permit is still in effect. It shall be the responsibility of the permit applicant to prove to the building official that authorized work includes substantive progress, characterized by approved inspections as specified in Section 113.3 of at least one inspection within a period of six months or other evidence that would indicate substantial work has been performed. Upon written request, the building official may grant one or more extensions of time, not to exceed one year per extension.

G. Section 110.7 Single-family dwelling permits. The building official shall be permitted to require a three year time limit to complete construction of new detached single-family dwellings, additions to detached single-family dwellings and residential accessory structures. The time limit shall begin from the issuance date of the permit. The building official may grant extensions of time if the applicant can demonstrate substantive progress, characterized by approved inspections as specified in Section 113.3 of at least one inspection within a period of six months or other evidence that would indicate substantial work has been performed.

H. Section 110.8 Revocation of a permit. The building official may revoke a permit or approval issued under this code in the case of any false statement, misrepresentation of fact, abandonment of work, failure to complete construction as required by Section 110.7 or incorrect information

supplied by the applicant in the application or construction documents on which the permit or approval was based.

13VAC5-63-110. Section 111 RDP services.

A. Section 111.1 When required. In accordance with § 54.1-410 of the Code of Virginia and under the general authority of this code, the local building department shall establish a procedure to ensure that construction documents under Section 109 are prepared by an RDP in any case in which the exemptions contained in § 54.1-401, 54.1-402 or 54.1-402.1 of the Code of Virginia are not applicable or in any case where the building official determines it necessary. When required under § 54.1-402 of the Code of Virginia or when required by the building official, or both, construction documents shall bear the name and address of the author and his occupation.

Note: Information on the types of construction required to be designed by an RDP is included in the "Related Laws Package" available from DHCD.

B. Section 111.2 Special inspection requirements. Special inspections shall be conducted when required by Section 1704. Individuals or agencies, or both, conducting special inspections shall meet the qualification requirements of Sections 1703 and ~~1704.1~~ 1704.2.1. The permit applicant shall submit a completed statement of special inspections with the permit application. The building official shall review, and if satisfied that the requirements have been met, approve the statement of special inspections as required in Sections ~~1704.1.1~~ 1704.2.3 and 1705 as a requisite to the issuance of a building permit. The building official may require interim inspection reports. The building official shall receive, and if satisfied that the requirements have been met, approve a final report of special inspections as specified in Section ~~1704.1.2~~ 1704.2.4. All fees and costs related to the special inspections shall be the responsibility of the building owner.

13VAC5-63-120. Section 112 Workmanship, materials and equipment.

A. Section 112.1 General. It shall be the duty of any person performing work covered by this code to comply with all applicable provisions of this code and to perform and complete such work so as to secure the results intended by the USBC. Damage to regulated building components caused by violations of this code or by the use of faulty materials or installations shall be considered as separate violations of this code and shall be subject to the applicable provisions of Section 115.

B. Section 112.2 Alternative methods or materials. In accordance with § 36-99 of the Code of Virginia, where practical, the provisions of this code are stated in terms of required level of performance so as to facilitate the prompt acceptance of new building materials and methods. When generally recognized standards of performance are not available, this section and other applicable requirements of this code provide for acceptance of materials and methods whose performance is substantially equal in safety to those specified on the basis of reliable test and evaluation data presented by the proponent. In addition, as a requirement of this code, the building official shall require that sufficient technical data be submitted to substantiate the proposed use of any material, equipment, device, assembly or method of construction.

C. Section 112.3 Documentation and approval. In determining whether any material, equipment, device, assembly or method of construction complies with this code, the building official shall approve items listed by nationally recognized testing laboratories ~~(NRTL)~~, when such items are

listed for the intended use and application, and in addition, may consider the recommendations of RDPs. Approval shall be issued when the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code and that the material, equipment, device, assembly or method of construction offered is, for the purpose intended, at least the equivalent of that prescribed by the code. Such approval is subject to all applicable requirements of this code and the material, equipment, device, assembly or method of construction shall be installed in accordance with the conditions of the approval and their listings. In addition, the building official may revoke such approval whenever it is discovered that such approval was issued in error or on the basis of incorrect information, or where there are repeated violations of the USBC.

D. Section 112.3.1 Conditions of listings. Where conflicts between this code and conditions of the listing or the manufacturer's installation instructions occur, the provisions of this code shall apply.

Exception: Where a code provision is less restrictive than the conditions of the listing of the equipment or appliance or the manufacturer's installation instructions, the conditions of the listing and the manufacturer's installation instructions shall apply.

E. Section 112.4 Used material and equipment. Used materials, equipment and devices may be approved provided they have been reconditioned, tested or examined and found to be in good and proper working condition and acceptable for use by the building official.

~~F. Section 112.5 Defective materials. Notwithstanding any provision of this code to the contrary, where action has been taken and completed by the BHCD under § 36-99 D of the Code of Virginia establishing new performance standards for identified defective materials, this section sets forth the new performance standards addressing the prospective use of such materials and establishes remediation standards for the removal of any defective materials already installed, which, when complied with, enables the building official to certify that the building is deemed to comply with the edition of the USBC under which the building was originally constructed with respect to the remediation of the defective materials. Subsections F through X of this section expire on August 29, 2013.~~

~~G. Section 112.5.1 Drywall, performance standard. All newly installed gypsum wallboard shall not be defective drywall as defined in Section 112.5.1.1.1.~~

~~H. Section 112.5.1.1 Remediation standards. The following provisions establish remediation standards where defective drywall was installed in buildings.~~

~~I. Section 112.5.1.1.1 Definition. For the purposes of this section the term "defective drywall" shall mean gypsum wallboard that (i) contains elemental sulfur exceeding 10 parts per million that when exposed to heat or humidity, or both, emits volatile sulfur compounds in quantities that cause observable corrosion on electrical wiring, plumbing pipes, fuel gas lines, or HVAC equipment, or any components of the foregoing or (ii) has been designated by the U.S. Consumer Product Safety Commission as a product with a product defect that constitutes a substantial product hazard within the meaning of § 15(a)(2) of the Consumer Product Safety Act (15 USC § 2064(a)(2)).~~

~~J. Section 112.5.1.1.2 Permit. Application for a permit shall be made to the building official and a permit shall be obtained prior to the commencement of remediation work undertaken to remove defective drywall from a building and for the removal, replacement, or repair of corroded electrical, plumbing, mechanical, or fuel gas equipment and components.~~

~~K. Section 112.5.1.1.3 Protocol. Where remediation of defective drywall is undertaken, the following standards shall be met. The building official shall be permitted to consider and approve modifications to these standards in accordance with Section 106.3.~~

~~L. Section 112.5.1.1.3.1 Drywall. Drywall in the building, whether defective or nondefective, shall be removed and discarded, including fasteners that held any defective drywall to prevent small pieces of drywall from remaining under fasteners.~~

~~Exceptions:~~

~~1. Nondefective drywall not subject to the corrosive effects of any defective drywall shall be permitted to be left in place in buildings where the defective drywall is limited to a defined room or space or isolated from the rest of the building and the defective drywall can be positively identified. If the room or space containing the defective drywall also contains any nondefective drywall, the nondefective drywall in that room or space shall also be removed.~~

~~2. In multi-family buildings where defective drywall was not used in the firewalls between units and there are no affected building systems behind the firewalls, the firewalls shall be permitted to be left in place.~~

~~M. Section 112.5.1.1.3.2 Insulation and other building components. Insulation in walls and ceilings shall be removed and discarded. Carpet and vinyl flooring shall be removed and discarded. Woodwork, trim, cabinets, and tile or wood floors may be left in place or may be reused.~~

~~Exceptions:~~

~~1. Closed-cell foam insulation is permitted to be left in place if testing for off-gassing from defective drywall is negative, unless its removal is required to gain access.~~

~~2. Insulation, carpet, or vinyl flooring in areas not exposed to defective drywall or to the effects of defective drywall, may be left in place or reused.~~

~~N. Section 112.5.1.1.3.3 Electrical wiring, equipment, devices, and components. All electrical wiring regulated by this code shall be permitted to be left in place, but removal or cleaning of exposed ends of the wiring to reveal clean or uncorroded surfaces is required. All electrical equipment, devices, and components of the electrical system of the building regulated by this code shall be removed and discarded. This shall include all smoke detectors.~~

~~Exceptions:~~

~~1. Electrical equipment, devices, or components in areas not exposed to the corrosive effects of defective drywall shall be permitted to be left in place or reused. Electrical equipment,~~

~~devices, or components in areas exposed to the corrosive effects of defective drywall shall be cleaned, repaired, or replaced.~~

~~2. Cord and plug connected appliances are not subject to this code and, therefore, cannot be required to be removed or replaced.~~

~~Note: All low voltage wiring associated with security systems, door bells, elevator controls, and other such components shall be removed and replaced or repaired.~~

~~O. Section 112.5.1.1.3.4 Plumbing and fuel gas piping, fittings, fixtures, and equipment. All copper fuel gas piping and all equipment utilizing fuel gas with copper, silver, or aluminum components shall be removed and discarded. All copper plumbing pipes and fittings shall be removed and discarded. Plumbing fixtures with copper, silver, or aluminum components shall be removed and discarded.~~

~~Exception: Plumbing or fuel gas piping, fittings, fixtures, equipment, or components in areas not exposed to the corrosive effects of defective drywall shall be permitted to be left in place or reused.~~

~~P. Section 112.5.1.1.3.5 Mechanical systems. All heating, air-conditioning, and ventilation system components, including, but not limited to, ductwork, air-handling units, furnaces, heat pumps, refrigerant lines, and thermostats and associated wiring, shall be removed and discarded.~~

~~Exception: Mechanical system components in areas not exposed to the corrosive effects of defective drywall shall be permitted to be left in place or reused.~~

~~Q. Section 112.5.1.1.3.6 Cleaning. Following the removal of all materials and components in accordance with Sections 112.5.1.1.3.1 through 112.5.1.1.3.5, the building shall be thoroughly cleaned to remove any particulate matter and dust.~~

~~R. Section 112.5.1.1.3.7 Airing out. Following cleaning in accordance with Section 112.5.1.1.3.6, the building shall be thoroughly aired out with the use of open windows and doors and fans.~~

~~S. Section 112.5.1.1.3.8 Pre-rebuilding clearance testing. Following the steps outlined above for removal of all materials and components, cleaning and airing out, a pre-rebuilding clearance test shall be conducted with the use of copper or silver coupons and the methodology outlined in the April 2, 2010, joint report by the Consumer Products Safety Commission and the Department of Housing and Urban Development entitled "Interim Remediation Guidance for Homes with Corrosion from Problem Drywall" or with the use of a copper probe and dosimeter. The clearance testing shall confirm that all airborne compounds associated with the defective drywall are at usual environmental background levels. The clearance testing report, certifying compliance, shall be submitted to the building official.~~

~~Notes:~~

~~1. Where the building is served by a well and prior to conducting clearance tests, all outlets in piping served by the well should be capped or otherwise plugged to prevent contamination of the air sample.~~

~~2. To prevent siphoning and evaporation of the trap seals, fixtures should be capped or otherwise plugged to prevent sewer gases from contaminating the air sample.~~

~~T. Section 112.5.1.1.3.9 Testing agencies and personnel. Agencies and personnel performing pre-rebuilding or post-rebuilding clearance testing shall be independent of those responsible for all other remediation work and the agencies and personnel shall be appropriately certified or accredited by the Council of Engineering and Scientific Specialty Boards, the American Indoor Air Quality Council, or the World Safety Organization.~~

~~Exception: Testing agencies and personnel shall be accepted if certified by an RDP or if the agency employs an RDP to be in responsible charge of the work.~~

~~U. Section 112.5.1.1.3.10 Rebuilding standards. The rebuilding of the building shall comply with the edition of the USBC that was in effect when the building was originally built.~~

~~V. Section 112.5.1.1.3.11 Post-rebuilding clearance testing. A post-rebuilding clearance test prior to reoccupancy of the building or structure shall be conducted with the use of copper or silver coupons and the methodology outlined in the April 2, 2010, joint report by the Consumer Products Safety Commission and by the Department of Housing and Urban Development entitled "Interim Remediation Guidance for Homes with Corrosion from Problem Drywall" or with the use of a copper probe and dosimeter. The clearance testing shall confirm that all airborne compounds associated with the defective drywall are at usual environmental background levels. The clearance testing report certifying compliance shall be submitted to the building official.~~

~~Notes:~~

~~1. Where the building is served by a well and prior to conducting clearance tests, all outlets in piping served by the well should be capped or otherwise plugged to prevent contamination of the air sample.~~

~~2. To prevent siphoning and evaporation of the trap seals, fixtures should be capped or otherwise plugged to prevent sewer gases from contaminating the air sample.~~

~~W. Section 112.5.1.1.4 Final approval by the building official. Once remediation has been completed in accordance with this section, a certificate or letter of approval shall be issued by the building official. The certificate or letter shall state that the remediation and rebuilding is deemed to comply with this code.~~

~~X. Section 112.5.1.1.4.1 Approval of remediation occurring prior to these standards. The building official shall issue a certificate or letter of approval for remediation of defective drywall that occurred prior to the effective date of these standards provided post-rebuilding clearance testing has been performed in accordance with Section 112.5.1.1.3.11, by agencies and personnel complying with Section 112.5.1.1.3.9, and the clearance testing confirms that all airborne compounds associated with the defective drywall are at usual environmental background levels. The clearance testing report certifying compliance shall be submitted to the building official.~~

F. Section 112.5 Defective materials. Notwithstanding any provision of this code to the contrary, where action has been taken and completed by the BHCD under § 36-99 D of the Code of Virginia establishing new performance standards for identified defective materials, this section sets forth the new performance standards addressing the prospective use of such materials and establishes remediation standards for the removal of any defective materials already installed, which, when complied with, enables the building official to certify that the building is deemed to comply with the edition of the USBC under which the building was originally constructed with respect to the remediation of the defective materials.

G. Section 112.5.1 Drywall, performance standard. All newly installed gypsum wallboard shall not be defective drywall as defined in Section 112.5.1.1.1.

H. Section 112.5.1.1 Remediation standards. The following provisions establish remediation standards where defective drywall was installed in buildings.

I. Section 112.5.1.1.1 Definition. For the purposes of this section the term "defective drywall" shall mean gypsum wallboard that (i) contains elemental sulfur exceeding 10 parts per million that when exposed to heat or humidity, or both, emits volatile sulfur compounds in quantities that cause observable corrosion on electrical wiring, plumbing pipes, fuel gas lines, or HVAC equipment, or any components of the foregoing or (ii) has been designated by the U.S. Consumer Product Safety Commission as a product with a product defect that constitutes a substantial product hazard within the meaning of § 15(a)(2) of the Consumer Product Safety Act (15 USC § 2064(a)(2)).

J. Section 112.5.1.1.2 Permit. Application for a permit shall be made to the building official and a permit shall be obtained prior to the commencement of remediation work undertaken to remove defective drywall from a building and for the removal, replacement, or repair of corroded electrical, plumbing, mechanical, or fuel gas equipment and components.

K. Section 112.5.1.1.3 Protocol. Where remediation of defective drywall is undertaken, the following standards shall be met. The building official shall be permitted to consider and approve modifications to these standards in accordance with Section 106.3.

L. Section 112.5.1.1.3.1 Drywall. Drywall in the building, whether defective or nondefective, shall be removed and discarded, including fasteners that held any defective drywall to prevent small pieces of drywall from remaining under fasteners.

Exceptions:

1. Nondefective drywall not subject to the corrosive effects of any defective drywall shall be permitted to be left in place in buildings where the defective drywall is limited to a defined room or space or isolated from the rest of the building and the defective drywall can be positively identified. If the room or space containing the defective drywall also contains any nondefective drywall, the nondefective drywall in that room or space shall also be removed.

2. In multi-family buildings where defective drywall was not used in the firewalls between units and there are no affected building systems behind the firewalls, the firewalls shall be permitted to be left in place.

M. Section 112.5.1.1.3.2 Insulation and other building components. Insulation in walls and ceilings shall be removed and discarded. Carpet and vinyl flooring shall be removed and discarded. Woodwork, trim, cabinets, and tile or wood floors may be left in place or may be reused.

Exceptions:

1. Closed-cell foam insulation is permitted to be left in place if testing for off-gassing from defective drywall is negative, unless its removal is required to gain access.

2. Insulation, carpet, or vinyl flooring in areas not exposed to defective drywall or to the effects of defective drywall, may be left in place or reused.

N. Section 112.5.1.1.3.3 Electrical wiring, equipment, devices, and components. All electrical wiring regulated by this code shall be permitted to be left in place, but removal or cleaning of exposed ends of the wiring to reveal clean or uncorroded surfaces is required. All electrical equipment, devices, and components of the electrical system of the building regulated by this code shall be removed and discarded. This shall include all smoke detectors.

Exceptions:

1. Electrical equipment, devices, or components in areas not exposed to the corrosive effects of defective drywall shall be permitted to be left in place or reused. Electrical equipment, devices, or components in areas exposed to the corrosive effects of defective drywall shall be cleaned, repaired, or replaced.

2. Cord and plug connected appliances are not subject to this code and, therefore, cannot be required to be removed or replaced.

Note: All low voltage wiring associated with security systems, door bells, elevator controls, and other such components shall be removed and replaced or repaired.

O. Section 112.5.1.1.3.4 Plumbing and fuel gas piping, fittings, fixtures, and equipment. All copper fuel gas piping and all equipment utilizing fuel gas with copper, silver, or aluminum components shall be removed and discarded. All copper plumbing pipes and fittings shall be removed and discarded. Plumbing fixtures with copper, silver, or aluminum components shall be removed and discarded.

Exception: Plumbing or fuel gas piping, fittings, fixtures, equipment, or components in areas not exposed to the corrosive effects of defective drywall shall be permitted to be left in place or reused.

P. Section 112.5.1.1.3.5 Mechanical systems. All heating, air-conditioning, and ventilation system components, including, but not limited to, ductwork, air-handling units, furnaces, heat pumps, refrigerant lines, and thermostats and associated wiring, shall be removed and discarded.

Exception: Mechanical system components in areas not exposed to the corrosive effects of defective drywall shall be permitted to be left in place or reused.

Q. Section 112.5.1.1.3.6 Cleaning. Following the removal of all materials and components in accordance with Sections 112.5.1.1.3.1 through 112.5.1.1.3.5, the building shall be thoroughly cleaned to remove any particulate matter and dust.

R. Section 112.5.1.1.3.7 Airing out. Following cleaning in accordance with Section 112.5.1.1.3.6, the building shall be thoroughly aired out with the use of open windows and doors and fans.

S. Section 112.5.1.1.3.8 Pre-rebuilding clearance testing. Following the steps outlined above for removal of all materials and components, cleaning and airing out, a pre-rebuilding clearance test shall be conducted with the use of copper or silver coupons and the methodology outlined in the April 2, 2010, joint report by the Consumer Products Safety Commission and the Department of Housing and Urban Development entitled "Interim Remediation Guidance for Homes with Corrosion from Problem Drywall" or with the use of a copper probe and dosimeter. The clearance testing shall confirm that all airborne compounds associated with the defective drywall are at usual environmental background levels. The clearance testing report, certifying compliance, shall be submitted to the building official.

Notes:

1. Where the building is served by a well and prior to conducting clearance tests, all outlets in piping served by the well should be capped or otherwise plugged to prevent contamination of the air sample.

2. To prevent siphoning and evaporation of the trap seals, fixtures should be capped or otherwise plugged to prevent sewer gases from contaminating the air sample.

T. Section 112.5.1.1.3.9 Testing agencies and personnel. Agencies and personnel performing pre-rebuilding or post-rebuilding clearance testing shall be independent of those responsible for all other remediation work and the agencies and personnel shall be appropriately certified or accredited by the Council of Engineering and Scientific Specialty Boards, the American Indoor Air Quality Council, or the World Safety Organization.

Exception: Testing agencies and personnel shall be accepted if certified by an RDP or if the agency employs an RDP to be in responsible charge of the work.

U. Section 112.5.1.1.3.10 Rebuilding standards. The rebuilding of the building shall comply with the edition of the USBC that was in effect when the building was originally built.

V. Section 112.5.1.1.3.11 Post-rebuilding clearance testing. A post-rebuilding clearance test prior to reoccupancy of the building or structure shall be conducted with the use of copper or silver coupons and the methodology outlined in the April 2, 2010, joint report by the Consumer Products Safety Commission and by the Department of Housing and Urban Development entitled "Interim Remediation Guidance for Homes with Corrosion from Problem Drywall" or with the use of a copper probe and dosimeter. The clearance testing shall confirm that all airborne compounds associated with the defective drywall are at usual environmental background levels. The clearance testing report certifying compliance shall be submitted to the building official.

Notes:

1. Where the building is served by a well and prior to conducting clearance tests, all outlets in piping served by the well should be capped or otherwise plugged to prevent contamination of the air sample.

2. To prevent siphoning and evaporation of the trap seals, fixtures should be capped or otherwise plugged to prevent sewer gases from contaminating the air sample.

W. Section 112.5.1.1.4 Final approval by the building official. Once remediation has been completed in accordance with this section, a certificate or letter of approval shall be issued by the building official. The certificate or letter shall state that the remediation and rebuilding is deemed to comply with this code.

X. Section 112.5.1.1.4.1 Approval of remediation occurring prior to these standards. The building official shall issue a certificate or letter of approval for remediation of defective drywall that occurred prior to the effective date of these standards provided post-rebuilding clearance testing has been performed in accordance with Section 112.5.1.1.3.11, by agencies and personnel complying with Section 112.5.1.1.3.9, and the clearance testing confirms that all airborne compounds associated with the defective drywall are at usual environmental background levels. The clearance testing report certifying compliance shall be submitted to the building official.

13VAC5-63-130. Section 113 Inspections.

A. Section 113.1 General. In accordance with § 36-105 of the Code of Virginia, any building or structure may be inspected at any time before completion, and shall not be deemed in compliance until approved by the inspecting authority. Where the construction cost is less than $2,500, however, the inspection may, in the discretion of the inspecting authority, be waived. The building official shall coordinate all reports of inspections for compliance with the USBC, with inspections of fire and health officials delegated such authority, prior to the issuance of an occupancy permit.

B. Section 113.1.1 Equipment required. Any ladder, scaffolding or test equipment necessary to conduct or witness a requested inspection shall be provided by the permit holder.

C. Section 113.1.2 Duty to notify. When construction reaches a stage of completion that requires an inspection, the permit holder shall notify the building official.

D. Section 113.1.3 Duty to inspect. Except as provided for in Section 113.7, the building official shall perform the requested inspection in accordance with Section 113.6 when notified in accordance with Section 113.1.2.

E. Section 113.2 Prerequisites. The building official may conduct a site inspection prior to issuing a permit. When conducting inspections pursuant to this code, all personnel shall carry proper credentials.

F. Section 113.3 Minimum inspections. The following minimum inspections shall be conducted by the building official when applicable to the construction or permit:

1. Inspection of footing excavations and reinforcement material for concrete footings prior to the placement of concrete.

2. Inspection of foundation systems during phases of construction necessary to assure compliance with this code.

3. Inspection of preparatory work prior to the placement of concrete.

4. Inspection of structural members and fasteners prior to concealment.

5. Inspection of electrical, mechanical and plumbing materials, equipment and systems prior to concealment.

6. Inspection of energy conservation material prior to concealment.

7. Final inspection.

G. Section 113.4 Additional inspections. The building official may designate additional inspections and tests to be conducted during the construction of a building or structure and shall so notify the permit holder.

H. Section 113.5 In-plant and factory inspections. When required by the provisions of this code, materials, equipment or assemblies shall be inspected at the point of manufacture or fabrication. The building official shall require the submittal of an evaluation report of such materials, equipment or assemblies. The evaluation report shall indicate the complete details of the assembly including a description of the assembly and its components, and describe the basis upon which the assembly is being evaluated. In addition, test results and other data as necessary for the building official to determine conformance with the USBC shall be submitted. For factory inspections, an identifying label or stamp permanently affixed to materials, equipment or assemblies indicating that a factory inspection has been made shall be acceptable instead of a written inspection report, provided the intent or meaning of such identifying label or stamp is properly substantiated.

I. Section 113.6 Approval or notice of defective work. The building official shall either approve the work in writing or give written notice of defective work to the permit holder. Upon request of the permit holder, the notice shall reference the USBC section that serves as the basis for the defects and such defects shall be corrected and reinspected before any work proceeds that would conceal such defects. A record of all reports of inspections, tests, examinations, discrepancies and approvals issued shall be maintained by the building official and shall be communicated promptly in writing to the permit holder. Approval issued under this section may be revoked whenever it is discovered that such approval was issued in error or on the basis of incorrect information, or where there are repeated violations of the USBC. Notices issued pursuant to this section shall be permitted to be communicated electronically provided the notice is reasonably calculated to get to the permit holder.

J. Section 113.7 Approved inspection agencies. The building official may accept reports of inspections and tests from individuals or inspection agencies approved in accordance with the building official's written policy required by Section 113.7.1. The individual or inspection agency shall meet the qualifications and reliability requirements established by the written

policy. Under circumstances where the building official is unable to make the inspection or test required by Section 113.3 or 113.4 within two working days of a request or an agreed upon date or if authorized for other circumstances in the building official's written policy, the building official shall accept reports for review. The building official shall approve the report from such approved individuals or agencies unless there is cause to reject it. Failure to approve a report shall be in writing within two working days of receiving it stating the reason for the rejection. Reports of inspections conducted by approved third-party inspectors or agencies shall be in writing, shall indicate if compliance with the applicable provisions of the USBC have been met and shall be certified by the individual inspector or by the responsible officer when the report is from an agency.

Note: Photographs, videotapes or other sources of pertinent data or information may be considered as constituting such reports and tests.

K. Section 113.7.1 Third-party inspectors. Each building official charged with the enforcement of the USBC shall have a written policy establishing the minimum acceptable qualifications for third-party inspectors. The policy shall include the format and time frame required for submission of reports, any prequalification or preapproval requirements before conducting a third-party inspection and any other requirements and procedures established by the building official.

L. Section 113.7.2 Qualifications. In determining third-party inspector qualifications, the building official may consider such items as DHCD inspector certification, other state or national certifications, state professional registrations, related experience, education and any other factors that would demonstrate competency and reliability to conduct inspections.

M. Section 113.8 Final inspection. Upon completion of a building or structure and before the issuance of a certificate of occupancy, a final inspection shall be conducted to ensure that any defective work has been corrected and that all work complies with the USBC and has been approved, including any work associated with modifications under Section 106.3. <u>The building official shall be permitted to require the electrical service to a building or structure to be energized prior to conducting the final inspection.</u> The approval of a final inspection shall be permitted to serve as the new certificate of occupancy required by Section 116.1 in the case of additions or alterations to existing buildings or structures that already have a certificate of occupancy.

13VAC5-63-140. Section 114 Stop work orders.

A. Section 114.1 Issuance of order. When the building official finds that work on any building or structure is being executed contrary to the provisions of this code or any pertinent laws or ordinances, or in a manner endangering the general public, a written stop work order may be issued. The order shall identify the nature of the work to be stopped and be given either to the owner of the property involved, to the owner's agent or to the person performing the work. Following the issuance of such an order, the affected work shall cease immediately. The order shall state the conditions under which such work may be resumed.

B. Section 114.2 Limitation of order. A stop work order shall apply only to the work identified in the order, provided that other work on the building or structure may be continued if not concealing the work covered by the order.

13VAC5-63-150. Section 115 Violations.

A. Section 115.1 Violation a misdemeanor; civil penalty. In accordance with § 36-106 of the Code of Virginia, it shall be unlawful for any owner or any other person, firm or corporation, on or after the effective date of any code provisions, to violate any such provisions. Any locality may adopt an ordinance that establishes a uniform schedule of civil penalties for violations of specified provisions of the code that are not abated or remedied promptly after receipt of a notice of violation from the local enforcement officer.

Note: See the full text of § 36-106 of the Code of Virginia for additional requirements and criteria pertaining to legal action relative to violations of the code.

B. Section 115.2 Notice of violation. The building official shall issue a written notice of violation to the responsible party if any violations of this code or any directives or orders of the building official have not been corrected or complied with in a reasonable time. The notice shall reference the code section upon which the notice is based and direct the discontinuance and abatement of the violation or the compliance with such directive or order. The notice shall be issued by either delivering a copy to the responsible party by mail to the last known address or delivering the notice in person or by leaving it in the possession of any person in charge of the premises, or by posting the notice in a conspicuous place if the person in charge of the premises cannot be found. The notice of violation shall indicate the right of appeal by referencing the appeals section. When the owner of the building or structure, or the permit holder for the construction in question, or the tenants of such building or structure, are not the responsible party to whom the notice of violation is issued, then a copy of the notice shall also be delivered to the such owner, permit holder or tenants.

C. Section 115.2.1 Notice not to be issued under certain circumstances. When violations are discovered more than two years after the certificate of occupancy is issued or the date of initial occupancy, whichever occurred later, or more than two years after the approved final inspection for an alteration or renovation, a notice of violation shall only be issued upon advice from the legal counsel of the locality that action may be taken to compel correction of the violation. When compliance can no longer be compelled by prosecution under § 36-106 of the Code of Virginia, the building official, when requested by the building owner, shall document in writing the existence of the violation noting the edition of the USBC the violation is under.

D. Section 115.3 Further action when violation not corrected. If the responsible party has not complied with the notice of violation, the building official shall submit a written request to the legal counsel of the locality to institute the appropriate legal proceedings to restrain, correct or abate the violation or to require the removal or termination of the use of the building or structure involved. In cases where the locality so authorizes, the building official may issue or obtain a summons or warrant. Compliance with a notice of violation notwithstanding, the building official may request legal proceedings be instituted for prosecution when a person, firm or corporation is served with three or more notices of violation within one calendar year for failure to obtain a required construction permit prior to commencement of work subject to this code.

Note: See § 19.2-8 of the Code of Virginia concerning the statute of limitations for building code prosecutions.

E. Section 115.4 Penalties and abatement. Penalties for violations of the USBC shall be as set out in § 36-106 of the Code of Virginia. The successful prosecution of a violation of the USBC shall not preclude the institution of appropriate legal action to require correction or abatement of a violation.

F. Section 115.5 Transfer of ownership. In accordance with § 36-105 of the Code of Virginia, if the local building department has initiated an enforcement action against the owner of a building or structure and such owner subsequently transfers the ownership of the building or structure to an entity in which the owner holds an ownership interest greater than 50%, the pending enforcement action shall continue to be enforced against the owner.

13VAC5-63-160. Section 116 Certificates of occupancy.

A. Section 116.1 General; when to be issued. A certificate of occupancy indicating completion of the work for which a permit was issued shall be obtained prior to the occupancy of any building or structure, except as provided for in this section generally and as specifically provided for in Section 113.8 for additions or alterations. The certificate shall be issued after completion of the final inspection and when the building or structure is in compliance with this code and any pertinent laws or ordinances, or when otherwise entitled. The building official shall, however, issue a certificate of occupancy within five working days after being requested to do so, provided the building or structure meets all of the requirements for a certificate.

Exception: A certificate of occupancy is not required for an accessory structure as defined in the ~~International Residential Code~~ IRC.

B. Section 116.1.1 Temporary certificate of occupancy. Upon the request of a permit holder, a temporary certificate of occupancy may be issued before the completion of the work covered by a permit, provided that such portion or portions of a building of structure may be occupied safely prior to full completion of the building or structure without endangering life or public safety.

C. Section 116.2 Contents of certificate. A certificate of occupancy shall specify the following:

1. The edition of the USBC under which the permit is issued.

2. The group classification and occupancy in accordance with the provisions of Chapter 3.

3. The type of construction as defined in Chapter 6.

4. If an automatic sprinkler system is provided and whether or not such system was required.

5. Any special stipulations and conditions of the building permit and if any modifications were issued under the permit, there shall be a notation on the certificate that modifications were issued.

6. Group R-5 occupancies complying with Section R320.2 of the IRC shall have a notation of compliance with that section on the certificate.

D. Section 116.3 Suspension or revocation of certificate. A certificate of occupancy may be revoked or suspended whenever the building official discovers that such certificate was issued in

error or on the basis of incorrect information, or where there are repeated violations of the USBC after the certificate has been issued or when requested by the code official under Section 105.7 of the ~~Virginia Maintenance Code~~ VMC. The revocation or suspension shall be in writing and shall state the necessary corrections or conditions for the certificate to be reissued or reinstated in accordance with Section 116.3.1.

E. Section 116.3.1 Reissuance of reinstatement of certificate of occupancy. When a certificate of occupancy has been revoked or suspended, it shall be reissued or reinstated upon correction of the specific condition or conditions cited as the cause of the revocation or suspension and the revocation or suspension of a certificate of occupancy shall not be used as justification for requiring a building or structure to be subject to a later edition of the code than that under which such building or structure was initially constructed.

F. Section 116.4 Issuance of certificate for pre-USBC buildings or structures. When a building or structure was constructed prior to being subject to the initial edition of the USBC and the local building department does not have a certificate of occupancy for the building or structure, the owner or owner's agent may submit a written request for a certificate to be created. The building official, after receipt of the request, shall issue a certificate provided a determination is made that there are no current violations of the ~~Virginia Maintenance Code~~ VMC or the Virginia Statewide Fire Prevention Code (13VAC5-51) and the occupancy classification of the building or structure has not changed. Such buildings and structures shall not be prevented from continued use.

Exception: When no certificate exists, but the local building department has records indicating that a certificate did exist, then the building official may either verify in writing that a certificate did exist or issue a certificate based upon the records.

13VAC5-63-170. Section 117 Temporary and moved buildings and structures; demolition.

A. Section 117.1 Temporary building and structures. The building official is authorized to issue a permit for temporary buildings or structures. Such permits shall be limited as to time of service, but shall not be permitted for more than one year, except that upon the permit holder's written request, the building official may grant one or more extensions of time, not to exceed one year per extension. The building official is authorized to terminate the approval and order the demolition or removal of temporary buildings or structures during the period authorized by the permit when determined necessary.

B. Section 117.1.1 Temporary uses within existing buildings and structures. The building official shall review and may approve conditions or modifications for temporary uses, including hypothermia and hyperthermia shelters, that may be necessary as long as the use meets the spirit and functional intent intended by this code. The building official is authorized to terminate the approval and order the discontinuance of the temporary use during the period authorized by the permit when determined necessary. The building official shall notify the appropriate fire official or fire chief of the approved temporary use.

~~B.~~ C. Section 117.2 Moved buildings and structures. Any building or structure moved into a locality or moved to a new location within a locality shall not be occupied or used until a certification of occupancy is issued for the new location. Such moved buildings or structures shall be required to comply with the requirements of this code for a newly constructed building or structure unless meeting all of the following requirements relative to the new location:

1. There is no change in the occupancy classification from its previous location.

2. The building or structure was in compliance with all state and local requirements applicable to it in its previous location and is in compliance with all state and local requirements applicable if originally constructed in the new location.

3. The building or structure did not become unsafe during the moving process due to structural damage or for other reasons.

4. Any alterations, reconstruction, renovations or repairs made pursuant to the move are in compliance with applicable requirements of ~~this code~~ the VRC.

~~C.~~ D. Section 117.3 Demolition of buildings and structures. Prior to the issuance of a permit for the demolition of any building or structure, the owner or the owner's agent shall provide certification to the building official that all service connections of utilities have been removed, sealed or plugged satisfactorily and a release has been obtained from the associated utility company. The certification shall further provide that written notice has been given to the owners of adjoining lots and any other lots that may be affected by the temporary removal of utility wires or the temporary disconnection or termination of other services or facilities relative to the demolition. In addition, the requirements of Chapter 33 of the IBC for any necessary retaining walls or fences during demolition shall be applicable and when a building or structure is demolished or removed, the established grades shall be restored.

13VAC5-63-180. Section 118 ~~Buildings and~~ Unsafe buildings or structures ~~becoming unsafe during construction~~.

A. Section 118.1 Applicability. This section applies to unsafe buildings ~~and~~ or structures ~~for which a construction permit has been issued under this code and construction has not been completed or a certificate of occupancy has not been issued, or both. In addition, this section applies to any building or structure that is under construction or that was constructed without obtaining the required permits under this edition or any edition of the USBC~~.

Note: Existing buildings and structures other than those under construction or subject to this section are subject to the ~~Virginia Maintenance Code that~~ VMC, which also has requirements for unsafe conditions.

B. Section 118.2 Repair or removal of unsafe buildings or structures. Any unsafe building or structure ~~subject to this section that is either deteriorated, improperly maintained, of faulty construction, deficient in adequate exit facilities, a fire hazard or dangerous to life or the public welfare, or both, or any combination of the foregoing, is an unsafe building or structure and~~ shall be made safe through compliance with this code or shall be taken down and removed if determined necessary by the building official.

C. Section 118.3 Inspection report ~~and notice of unsafe building or structure~~. The building official shall inspect any reported unsafe building or structure ~~reported to be unsafe~~ and shall prepare a report to be filed in the records of the local building department. In addition to a description of any unsafe conditions found, the report shall include the occupancy classification

of the building or structure and the nature and extent of any damages caused by collapse or failure of any building components. ~~If the~~

D. Section 118.4 Notice of unsafe building or structure. When a building or structure is determined by the building official to be an unsafe building or structure, a written notice of unsafe building or structure shall be issued ~~in person~~ by personal service to the owner ~~and any permit holder~~, the owner's agent, or the person in control of such building or structure. The notice shall ~~describe any unsafe conditions and~~ specify ~~any repairs or improvements~~ the corrections necessary to ~~make the building or structure safe, or alternatively, when determined necessary by the building official, require the unsafe building or structure, or any portion of it, to be taken down and removed. The notice shall stipulate a~~ comply with this code and specify the time period within which the repairs must occur, or if the notice specifies that the unsafe building or structure is required to be demolished, the notice shall specify the time period ~~for the repair or~~ within which demolition ~~of the unsafe building or structure and contain a statement requiring the person receiving the notice to determine whether to accept or reject the terms of the notice. If any persons to which the notice of unsafe building or structure is to be issued cannot be found after diligent search, as equivalent service, the notice shall be sent by registered or certified mail to the last known address of such persons and a copy of the notice posted in a conspicuous place on the premises~~ must occur.

Note: Whenever possible, the notice should also be given to any tenants or occupants of the unsafe building or structure.

~~D.~~ E. Section ~~118.4~~ 118.4.1 Vacating ~~the~~ unsafe building or structure. If ~~any portion of an unsafe building or structure has collapsed or fallen, or if~~ the building official determines there is actual and immediate danger ~~of any portion collapsing or falling, and~~ to the occupants or public, or when life is endangered by the occupancy of ~~the~~ an unsafe building or structure, the building official shall be authorized to order the occupants to immediately vacate the unsafe building or structure. When an unsafe building or structure is ordered to be vacated, the building official shall post a notice at each entrance that reads as follows:

"This Building (or Structure) is Unsafe and its Occupancy (or Use) is Prohibited by the Building Official."

After posting, occupancy or use of the building or unsafe structure shall be prohibited except when authorized to enter to conduct inspections, make required repairs or as necessary to demolish the building or structure.

~~E.~~ F. Section 118.5 Posting of notice. If the notice is unable to be issued by personal service as required by Section 118.4, then the notice shall be sent by registered or certified mail to the last known address of the responsible party and a copy of the notice shall be posted in a conspicuous place on the premises.

G. Section 118.6 Posting of placard. In the case of an unsafe building or structure, if the notice is not complied with, a placard with the following wording shall be posted at the entrance to the structure:

"This Building (or Structure) is Unfit for Habitation and its Use or occupancy has been prohibited by the building official."

After an unsafe building or structure is placarded, entering the unsafe building or structure shall be prohibited except as authorized by the building official to make inspections, to perform required repairs, or to demolish the unsafe building or structure. In addition, the placard shall not be removed until the unsafe building or structure is determined by the building official to be safe to occupy. The placard shall not be defaced.

H. Section 118.7 Emergency repairs and demolition. To the extent permitted by the locality, the building official may authorize emergency repairs to unsafe buildings or structures when it is determined that there is an immediate danger of any portion of the unsafe building or structure collapsing or falling and when life is endangered. Emergency repairs may also be authorized when there is a code violation resulting in ~~the immediate,~~ a serious and imminent threat to the life and safety of the occupants or public. The building official shall be permitted to authorize the necessary work to make the unsafe building or structure temporarily safe whether or not legal action to compel compliance has been instituted.

In addition, whenever an owner of an unsafe building or structure fails to comply with a notice to demolish issued under Section ~~118.3~~ 118.4 in the time period stipulated, the building official shall be permitted to cause the unsafe building or structure to be demolished. In accordance with §§ 15.2-906 and 15.2-1115 of the Code of Virginia, the legal counsel of the locality may be requested to institute appropriate action against the property owner to recover the costs associated with any such emergency repairs or demolition and every such charge that remains unpaid shall constitute a lien against the property on which the emergency repairs or demolition were made and shall be enforceable in the same manner as provided in Articles 3 (§ 58.1-3940 et seq.) and 4 (§ 58.1-3965 et seq.) of Chapter 39 of Title 58.1 of the Code of Virginia.

Note: Building officials and local governing bodies should be aware that other statutes and court decisions may impact on matters relating to demolition, in particular whether newspaper publication is required if the owner cannot be located and whether the demolition order must be delayed until the owner has been given the opportunity for a hearing.

I. Section 118.8 Closing of streets. When necessary for public safety, the building official shall be permitted to order the temporary closing of sidewalks, streets, public ways, or premises adjacent to unsafe buildings or structures and prohibit the use of such spaces.

13VAC5-63-190. Section 119 Appeals.

A. Section 119.1 Establishment of appeals board. In accordance with § 36-105 of the Code of Virginia, there shall be established within each local building department a LBBCA. Whenever a county or a municipality does not have such a LBBCA, the local governing body shall enter into an agreement with the local governing body of another county or municipality or with some other agency, or a state agency approved by DHCD for such appeals resulting therefrom. Fees may be levied by the local governing body in order to defray the cost of such appeals. In addition, as an authorization in this code, separate LBBCAs may be established to hear appeals of different enforcement areas such as electrical, plumbing or mechanical requirements. Each such LBBCA shall comply with the requirements of this section. The locality is responsible for maintaining a duly constituted LBBCA prepared to hear appeals within the time limits established in this section. The LBBCA shall meet as necessary to assure a duly constituted

board, appoint officers as necessary and receive such training on the code as may be appropriate or necessary from staff of the locality.

B. Section 119.2 Membership of board. The LBBCA shall consist of at least five members appointed by the locality for a specific term of office established by written policy. Alternate members may be appointed to serve in the absence of any regular members and as such, shall have the full power and authority of the regular members. Regular and alternate members may be reappointed. Written records of current membership, including a record of the current chairman and secretary shall be maintained in the office of the locality. In order to provide continuity, the terms of the members may be of different length so that less than half will expire in any one-year period. ~~The LBBCA shall meet at least once annually to assure a duly constituted board, appoint officers as necessary, and receive such training on the code as may be appropriate or necessary from staff of the locality.~~

C. Section 119.3 Officers and qualifications of members. The LBBCA shall annually select one of its regular members to serve as chairman. When the chairman is not present at an appeal hearing, the members present shall select an acting chairman. The locality or the chief executive officer of the locality shall appoint a secretary to the LBBCA to maintain a detailed record of all proceedings. Members of the LBBCA shall be selected by the locality on the basis of their ability to render fair and competent decisions regarding application of the USBC and shall to the extent possible, represent different occupational or professional fields relating to the construction industry. At least one member should be an experienced builder; at least one member should be an RDP, and at least one member should be an experienced property manager. Employees or officials of the locality shall not serve as members of the LBBCA.

D. Section 119.4 Conduct of members. No member shall hear an appeal in which that member has a conflict of interest in accordance with the State and Local Government Conflict of Interests Act (§ 2.2-3100 et seq. of the Code of Virginia). Members shall not discuss the substance of an appeal with any other party or their representatives prior to any hearings.

E. Section 119.5 Right of appeal; filing of appeal application. Any person aggrieved by the local building department's application of the USBC or the refusal to grant a modification to the provisions of the USBC may appeal to the LBBCA. The applicant shall submit a written request for appeal to the LBBCA within 30 calendar days of the receipt of the decision being appealed. The application shall contain the name and address of the owner of the building or structure and in addition, the name and address of the person appealing, when the applicant is not the owner. A copy of the building official's decision shall be submitted along with the application for appeal and maintained as part of the record. The application shall be marked by the LBBCA to indicate the date received. Failure to submit an application for appeal within the time limit established by this section shall constitute acceptance of a building official's decision.

Note: To the extent that a decision of a building official pertains to amusement devices there may be a right of appeal under the VADR.

F. Section 119.6 Meetings and postponements. The LBBCA shall meet within 30 calendar days after the date of receipt of the application for appeal, except that a period of up to 45 calendar days shall be permitted where the LBBCA has regularly scheduled monthly meetings. A longer time period shall be permitted if agreed to by all the parties involved in the appeal. A notice indicating the time and place of the hearing shall be sent to the parties in writing to the addresses

listed on the application at least 14 calendar days prior to the date of the hearing, except that a lesser time period shall be permitted if agreed to by all the parties involved in the appeal. When a quorum of the LBBCA is not present at a hearing to hear an appeal, any party involved in the appeal shall have the right to request a postponement of the hearing. The LBBCA shall reschedule the appeal within 30 calendar days of the postponement, except that a longer time period shall be permitted if agreed to by all the parties involved in the appeal.

G. Section 119.7 Hearings and decision. All hearings before the LBBCA shall be open meetings and the appellant, the appellant's representative, the locality's representative and any person whose interests are affected by the building official's decision in question shall be given an opportunity to be heard. The chairman shall have the power and duty to direct the hearing, rule upon the acceptance of evidence and oversee the record of all proceedings. The LBBCA shall have the power to uphold, reverse or modify the decision of the official by a concurring vote of a majority of those present. Decisions of the LBBCA shall be final if no further appeal is made. The decision of the LBBCA shall be by resolution signed by the chairman and retained as part of the record of the appeal. Copies of the resolution shall be sent to all parties by certified mail. In addition, the resolution shall contain the following wording:

"Any person who was a party to the appeal may appeal to the State Review Board by submitting an application to such Board within 21 calendar days upon receipt by certified mail of this resolution. Application forms are available from the Office of the State Review Board, 600 East Main Street, Richmond, Virginia 23219, (804) 371-7150."

H. Section 119.8 Appeals to the State Review Board. After final determination by the LBBCA in an appeal, any person who was a party to the appeal may further appeal to the State Review Board. In accordance with § 36-98.2 of the Code of Virginia for state-owned buildings and structures, appeals by an involved state agency from the decision of the building official for state-owned buildings or structures shall be made directly to the State Review Board. The application for appeal shall be made to the State Review Board within 21 calendar days of the receipt of the decision to be appealed. Failure to submit an application within that time limit shall constitute an acceptance of the building official's decision. For appeals from a LBBCA, a copy of the building official's decision and the resolution of the LBBCA shall be submitted with the application for appeal to the State Review Board. Upon request by the office of the State Review Board, the LBBCA shall submit a copy of all pertinent information from the record of the appeal. In the case of appeals involving state-owned buildings or structures, the involved state agency shall submit a copy of the building official's decision and other relevant information with the application for appeal to the State Review Board. Procedures of the State Review Board are in accordance with Article 2 (§ 36-108 et seq.) of Chapter 6 of Title 36 of the Code of Virginia. Decisions of the State Review Board shall be final if no further appeal is made.

13VAC5-63-200. Chapter 2 Definitions~~: Section 202 Definitions~~.

A. Add the following definitions to Section 202 of the IBC to read:

Aboveground liquid fertilizer storage tank (ALFST). A device that contains an accumulation of liquid fertilizer (i) constructed of nonearthen materials, such as concrete, steel or plastic, that provide structural support; (ii) having a capacity of 100,000 gallons (378 500 L) or greater; and (iii) the volume of which is more than 90% above the surface of the ground. The term does not

include any wastewater treatment or wastewater storage tank, utility or industry pollution control equipment.

Building regulations. Any law, rule, resolution, regulation, ordinance or code, general or special, or compilation thereof, heretofore or hereafter enacted or adopted by the Commonwealth or any county or municipality, including departments, boards, bureaus, commissions, or other agencies thereof, relating to construction, reconstruction, alteration, conversion, repair, maintenance, or use of structures and buildings and installation of equipment therein. The term does not include zoning ordinances or other land use controls that do not affect the manner of construction or materials to be used in the erection, alteration or repair of a building or structure.

Change of occupancy. A change in the use or occupancy of any building or structure ~~which~~ that would place the building or structure in a different division of the same group of occupancies or in a different group of occupancies; or a change in the purpose or level of activity within a building or structure that involves a change in application of the requirements of this code.

Construction. The construction, reconstruction, alteration, repair, or conversion of buildings and structures.

Day-night average sound level (Ldn). ~~See Section 1202.1~~ A 24-hour energy average sound level expressed in dBA, with a 10 decibel penalty applied to noise occurring between 10 p.m. and 7 a.m.

DHCD. The Virginia Department of Housing and Community Development.

Emergency communication equipment. ~~See Section 902.1~~ Emergency communication equipment, includes but is not limited to, two-way radio communications, signal booster, bi-directional amplifiers, radiating cable systems or internal multiple antenna, or a combination of the foregoing.

Emergency public safety personnel. ~~See Section 902.1~~ Emergency public safety personnel includes firefighters, emergency medical personnel, law-enforcement officers and other emergency public safety personnel routinely called upon to provide emergency assistance to members of the public in a wide variety of emergency situations, including, but not limited to, fires, medical emergencies, violent crimes and terrorist attacks.

Equipment. Plumbing, heating, electrical, ventilating, air-conditioning and refrigeration equipment, elevators, dumbwaiters, escalators, and other mechanical additions or installations.

Farm building or structure. A building or structure not used for residential purposes, located on property where farming operations take place, and used primarily for any of the following uses or combination thereof:

1. Storage, handling, production, display, sampling or sale of agricultural, horticultural, floricultural or silvicultural products produced in the farm.

2. Sheltering, raising, handling, processing or sale of agricultural animals or agricultural animal products.

3. Business or office uses relating to the farm operations.

4. Use of farm machinery or equipment or maintenance or storage of vehicles, machinery or equipment on the farm.

5. Storage or use of supplies and materials used on the farm.

6. Implementation of best management practices associated with farm operations.

Hospice facility. An institution, place, or building owned or operated by a hospice provider and licensed by the Virginia Department of Health as a hospice facility to provide room, board, and palliative and supportive medical and other health services to terminally ill patients and their families, including respite and symptom management, on a 24-hour basis to individuals requiring such care pursuant to the orders of a physician.

Industrialized building. A combination of one or more sections or modules, subject to state regulations and including the necessary electrical, plumbing, heating, ventilating and other service systems, manufactured off-site and transported to the point of use for installation or erection, with or without other specified components, to comprise a finished building. Manufactured homes shall not be considered industrialized buildings for the purpose of this code.

~~Hospice facility. See Section 308.3.1.~~

LBBCA. Local board of building code appeals.

Liquid fertilizer. A fluid in which a fertilizer is in true solution. This term does not include anhydrous ammonia or a solution used in pollution control.

Local building department. The agency or agencies of any local governing body charged with the administration, supervision, or enforcement of this code, approval of construction documents, inspection of buildings or structures, or issuance of permits, licenses, certificates or similar documents.

Local governing body. The governing body of any city, county or town in this Commonwealth.

Locality. A city, county or town in this Commonwealth.

Manufactured home. A structure subject to federal regulation, which is transportable in one or more sections; is eight body feet or more in width and 40 body feet or more in length in the traveling mode, or is 320 or more square feet when erected on site; is built on a permanent chassis; is designed to be used as a single-family dwelling, with or without a permanent foundation, when connected to the required utilities; and includes the plumbing, heating, air-conditioning, and electrical systems contained in the structure.

Marina. Any installation, operating under public or private ownership, that has a structure providing dockage or moorage for boats, other than paddleboats or rowboats, and provides, through sale, rental, fee, or on a free basis, any equipment, supply, or service, including fuel, electricity, or water, for the convenience of the public or its lessees, renters, or users of its

facilities. A dock or pier with or without slips that exclusively serves a single-family residential lot for the use of the owner of the lot is not a marina.

Night club. Any building in which the main use is a place of public assembly that provides exhibition, performance or other forms of entertainment; serves alcoholic beverages; and provides music and space for dancing.

[Permissible fireworks. Any sparklers, fountains, Pharaoh's serpents, caps for pistols, or pinwheels commonly known as whirligigs or spinning jennies.

Short-term holding area. An area containing a holding cell or cells, or a holding room or rooms, including associated rooms or spaces where the occupants are restrained or detained by the use of security measures not under the occupant's control for less than 24 hours.]

Skirting. A weather-resistant material used to enclose the space from the bottom of the manufactured home to grade.

Slip. A berth or space where a boat may be secured to a fixed or floating structure, including a dock, finger pier, boat lift or mooring buoy.

Sound transmission class (STC) rating. ~~See Section 1202.1~~ A single number characterizing the sound reduction performance of a material tested in accordance with ASTM E90-90, "Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions."

State regulated care facility (SRCF). A building with an occupancy in Group R-2, R-3, R-4 or R-5 occupied by persons in the care of others where program oversight is provided by the Virginia Department of Social Services, the Virginia Department of Behavioral Health and Developmental Services, the Virginia Department of Education or the Virginia Department of Juvenile Justice.

State Review Board. The Virginia State Building Code Technical Review Board as established under § 36-108 of the Code of Virginia.

Technical assistant. Any person employed by or under an extended contract to a local building department or local enforcing agency for enforcing the USBC, including but not limited to inspectors and plans reviewers. For the purpose of this definition, an extended contract shall be a contract with an aggregate term of 18 months or longer.

~~Technical production area. See Section 410.2.~~

Tenable environmental. An environment in which the products of combustion, including smoke, toxic gases, particulates, and heat, are limited or otherwise restricted in order to maintain the impact on occupants, including those in the area of fire origin, to a level that is not life threatening, and permits the rescue of occupants for a limited time.

Unsafe building or structure. Any building or structure that is under construction and has not received a permanent certificate of occupancy, final inspection, or for which a permit was never issued or has expired and has been determined by the building official to be of faulty construction that is so damaged, decayed, dilapidated, structurally unsafe or of such faulty

construction or unstable foundation that partial or complete collapse is likely; or any unfinished construction that does not have a valid permit or the permit has been revoked, and the condition of the unfinished construction presents an immediate serious and imminent threat to the life and safety of the occupants or the public.

VADR. The Virginia Amusement Device Regulations (13VAC5-31).

VCS. The Virginia Certification Standards (13VAC5-21).

Working day. A day other than Saturday, Sunday or a legal local, state or national holiday.

B. Change the following definitions in Section 202 of the IBC to read:

24-hour basis. The actual time that a person is an occupant within a facility for the purpose of receiving care. It shall not include a facility that is open for 24 hours and is capable of providing care to someone visiting the facility during any segment of the 24 hours.

Ambulatory health care facility. Buildings or portions thereof that are licensed by the Virginia Department of Health as outpatient surgical hospitals.

Automatic fire-extinguishing system. An approved system of devices and equipment that automatically detects a fire and discharges an approved fire-extinguishing agent onto or in the area of a fire and includes among other systems an automatic sprinkler system, unless otherwise expressly stated.

Building. A combination of materials, whether portable or fixed, having a roof to form a structure for the use or occupancy by persons, or property. The word “building” shall be construed as though followed by the words “or part or parts thereof” unless the context clearly requires a different meaning. “Building” shall not include roadway tunnels and bridges owned by the Virginia Department of Transportation, which shall be governed by construction and design standards approved by the Virginia Commonwealth Transportation Board.

For application of this code, each portion of a building that is completely separated from other portions by fire walls complying with Section 706 shall be considered as a separate building (see Section 503.1).

Custodial care. Assistance with day-to-day living tasks, such as assistance with cooking, taking medication, bathing, using toilet facilities, and other tasks of daily living. In other than in hospice facilities, custodial care includes occupants that have the ability to respond to emergency situations and evacuate at a slower rate or who have mental and psychiatric complications, or both.

Group home. A facility for social rehabilitation or substance abuse or mental health problems that contains a group housing arrangement that provides custodial care but does not provide medical care.

Owner. The owner or owners of the freehold of the premises or lesser estate therein, a mortgagee or vendee in possession, assignee of rents, receiver, executor, trustee or lessee in control of a building or structure.

Registered Design Professional (RDP). An architect or professional engineer, licensed to practice architecture or engineering, as defined under § 54.1-400 of the Code of Virginia.

Swimming pool. An aquatic vessel as defined in the International Swimming Pool and Spa Code (ISPSC).

Structure. An assembly of materials forming a construction for occupancy or use including stadiums, gospel and circus tents, reviewing stands, platforms, stagings, observation towers, radio towers, water tanks, storage tanks (underground and aboveground), trestles, piers, wharves, swimming pools, amusement devices, storage bins, and other structures of this general nature but excluding water wells. The word "structure" shall be construed as though followed by the words "or part or parts thereof" unless the context clearly requires a different meaning. "Structure" shall not include roadway tunnels and bridges owned by the Virginia Department of Transportation, which shall be governed by construction and design standards approved by the Virginia Commonwealth Transportation Board.

C. Delete the following definitions from Section 202 of the IBC:

Agricultural~~,~~ building.

Existing structure (For Chapter 34).

~~Fly gallery.~~

~~Gridiron.~~

13VAC5-63-210. Chapter 3 Use and occupancy classification.

A. Change Section 303.6 of the IBC to read:

303.6 Assembly Group A-5. Assembly uses intended for participation in or viewing outdoor activities including, but not limited to:

Amusement park structures

Bleachers

Grandstands

Stadiums

Swimming pools

B. Change exception 13 of Section 307.1 of the IBC to read:

13. The storage of black powder, smokeless propellant and small arms primers in Groups M, R-3 and R-5 and special industrial explosive devices in Groups B, F, M and S, provided such

storage conforms to the quantity limits and requirements prescribed in the ~~International Fire Code~~ IFC, as amended in Section 307.9.

[C. Change the "Consumer fireworks" row and add a new "Permissible fireworks" row to Table 307.1(1) of the IBC to read:

Consumer fireworks	1.4G	H-3	125[e,l]	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Permissible fireworks	1.4G	H-3	125[d,e,l]	N/A	N/A	N/A	N/A	N/A	N/A	N/A

~~B.~~ [~~C.~~ D.] Add Section 307.9 to the IBC to read:

307.9 Amendments. The following changes shall be made to the ~~International Fire Code~~ IFC for the use of Exception 13 in Section 307.1:

1. Change the following definition in Section 202 of the IFC to read:

Smokeless propellants. Solid propellants, commonly referred to as smokeless powders, or any propellants classified by DOTn as smokeless propellants in accordance with NA3178 (Smokeless Powder for Small Arms), used in small arms ammunition, firearms, cannons, rockets, propellant-actuated devices, and similar articles.

2. Change Section 314.1 of the IFC to read as follows:

314.1 General. Indoor displays constructed within any building or structure shall comply with Sections 314.2 through 314.5.

~~2.~~ 3. Add new Section 314.5 to the IFC to read as follows:

314.5 Smokeless powder and small arms primers. Vendors shall not store, display or sell smokeless powder or small arms primers during trade shows inside exhibition halls except as follows:

1. The amount of smokeless powder each vender may store is limited to the storage arrangements and storage amounts established in Section ~~3306.5.2.1~~ 5506.5.2.1.

2. Smokeless powder shall remain in the manufacturer's original sealed container and the container shall remain sealed while inside the building. The repackaging of smokeless powder shall not be performed inside the building. Damaged containers shall not be repackaged inside the building and shall be immediately removed from the building in such manner to avoid spilling any powder.

3. There shall be at least 50 feet separation between vendors and 20 feet from any exit.

4. Small arms primers shall be displayed and stored in the manufacturer's original packaging and in accordance with the requirements of Section ~~3306.5.2.3~~ 5506.5.2.3.

~~3.~~ 4. Change Exception 4 and add Exceptions 10 and 11 to Section ~~3301.1~~ 5501.1 of the IFC as follows:

4. The possession, storage and use of not more than 15 pounds (6.75 kg) of commercially manufactured sporting black powder, 20 pounds (9 kg) of smokeless powder and any amount of small arms primers for hand loading of small arms ammunition for personal consumption.

10. The display of small arms primers in Group M when in the original manufacturer's packaging.

11. The possession, storage and use of not more than 50 pounds (23 kg) of commercially manufactured sporting black powder, 100 pounds (45 kg) of smokeless powder, and small arms primers for hand loading of small arms ammunition for personal consumption in Group R-3 or R-5, or 200 pounds (91 kg) of smokeless powder when stored in the manufacturer's original containers in detached Group U structures at least 10 feet (3048 mm) from inhabited buildings and are accessory to Group R-3 or R-5.

~~4. Change the definition of Smokeless Propellants in Section 3302.1 of the IFC as follows:~~

~~SMOKELESS PROPELLANTS. Solid propellants, commonly referred to as smokeless powders, or any propellants classified by DOTn as smokeless propellants in accordance with NA3178 (Smokeless Powder for Small Arms), used in small arms ammunition, firearms, cannons, rockets, propellant-actuated devices and similar articles.~~

5. Change Section ~~3306.4~~ 5506.4 of the IFC to read as follows:

~~3306.4~~ 5506.4 Storage in residences. Propellants for personal use in quantities not exceeding 50 pounds (23 kg) of black powder or 100 pounds (45 kg) of smokeless powder shall be stored in original containers in occupancies limited to Group R-3 and R-5 or 200 pounds (91 kg) of smokeless powder when stored in the manufacturer's original containers in detached Group U structures at least 10 feet (3048 mm) from inhabited buildings and are accessory to Group R-3 or R-5. In other than Group R-3 or R-5, smokeless powder in quantities exceeding 20 pounds (9 kg) but not exceeding 50 pounds (23 kg) shall be kept in a wooden box or cabinet having walls of at least one inch (25 mm) nominal thickness or equivalent.

6. Delete Sections ~~3306.4.1~~ 5506.4.1 and ~~3306.4.2~~ 5506.4.2 of the IFC.

7. Change Section ~~3306.5.1.1~~ 5506.5.1.1 of the IFC to read as follows:

~~3306.5.1.1~~ 5506.5.1.1 Smokeless propellant. No more than 100 pounds (45 kg) of smokeless propellants in containers of eight pounds (3.6 kg) or less capacity shall be displayed in Group M occupancies.

8. Delete Section ~~3306.5.1.3~~ 5506.5.1.3 of the IFC.

9. Change Section ~~3306.5.2.1~~ 5506.5.2.1 of the IFC as follows:

~~3306.5.2.1~~ 5506.5.2.1 Smokeless propellant. Commercial stocks of smokeless propellants shall be stored as follows:

1. Quantities exceeding 20 pounds (9 kg), but not exceeding 100 pounds (45 kg) shall be stored in portable wooden boxes having walls of at least one inch (25 mm) nominal thickness or equivalent.

2. Quantities exceeding 100 pounds (45 kg), but not exceeding 800 pounds (363 kg), shall be stored in storage cabinets having walls at least one inch (25 mm) nominal thickness or equivalent. Not more than 400 pounds (182 kg) shall be stored in any one cabinet, and cabinets shall be separated by a distance of at least 25 feet (7620 mm) or by a fire partition having a fire-resistance rating of at least one hour.

3. Storage of quantities exceeding 800 pounds (363 kg), but not exceeding 5,000 pounds (2270 kg) in a building shall comply with all of the following:

3.1. The storage is inaccessible to unauthorized personnel.

3.2. Smokeless propellant shall be stored in nonportable storage cabinets having wood walls at least one inch (25 mm) nominal thickness or equivalent and having shelves with no more than 3 feet (914 mm) of vertical separation between shelves.

3.3. No more than 400 pounds (182 kg) is stored in any one cabinet.

3.4. Cabinets shall be located against walls with at least 40 feet (12 192 mm) between cabinets. The minimum required separation between cabinets may be reduced to 20 feet (6096 mm) provided that barricades twice the height of the cabinets are attached to the wall, midway between each cabinet. The barricades must extend a minimum of 10 feet (3048 mm) outward, be firmly attached to the wall, and be constructed of steel not less than 0.25 inch thick (6.4 mm), 2-inch (51 mm) nominal thickness wood, brick, or concrete block.

3.5. Smokeless propellant shall be separated from materials classified as combustible liquids, flammable liquids, flammable solids, or oxidizing materials by a distance of 25 feet (7620 mm) or by a fire partition having a fire-resistance rating of 1 hour.

3.6. The building shall be equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

4. Smokeless propellants not stored according to Item 1, 2, or 3 above shall be stored in a Type 2 or 4 magazine in accordance with Section 3304 and NFPA 495.

~~C. Change~~ [~~D.~~ E.] Add the following to the list of terms in Section 308.2 of the IBC ~~to read~~:

Hospice facility.

[~~E.~~ F.] Change Section 308.3 of the IBC to read:

~~308.2~~ 308.3 Institutional Group I-1. This occupancy shall include buildings, structures or ~~parts~~ portions thereof ~~housing~~ for more than 16 persons, excluding staff, who reside on a 24-

hour basis~~, who because of age, mental disability or other reasons, live~~ in a supervised ~~residential~~ environment ~~that provides personal~~ and receive custodial care ~~services~~. ~~The occupants are capable of responding to an emergency situation without physical assistance from staff.~~ Buildings of Group I-1, other than assisted living facilities licensed by the Virginia Department of Social Services, shall be classified as the occupancy condition indicated in Section 308.3.1. Assisted living facilities licensed by the Virginia Department of Social Services shall be classified as one of the occupancy conditions indicated in Section 308.3.1 or 308.3.2. This group shall include, but not be limited to, the following:

Alcohol and drug centers

Assisted living facilities

Congregate care facilities

Group homes

Halfway houses

Residential board and care facilities

Social rehabilitation facilities

[~~Exception: In Group I-1 occupancies classified as the occupancy condition indicated in Section 308.3.1, not more than five of the residents may require physical assistance from staff to respond to an emergency situation when all residents that may require the physical assistance reside on a single level of exit discharge.~~]

~~A facility such as the above with five or fewer persons shall be classified as a Group R-3 or shall comply with the International Residential Code in accordance with Section 101.2. A facility such as above, housing at least six and not more than 16 persons, shall be classified as Group R-4.~~

[~~F.~~ G.] Change Sections 308.3.1 and 308.3.2 of the IBC to read:

308.3.1 Condition 1. This occupancy condition shall include buildings in which all persons receiving custodial care who, without any assistance, are capable of responding to an emergency situation to complete building evacuation. [Not more than five of the residents may require physical assistance from staff to respond to an emergency situation when all residents that may require the physical assistance reside on a single level of exit discharge.]

308.3.2 Condition 2. This occupancy condition shall include buildings in which there are persons receiving custodial care who require assistance by not more than one staff member while responding to an emergency situation to complete building evacuation. [Five of the residents may require physical assistance from more than one staff member to respond to an emergency.]

[~~G.~~ H.] Add Sections 308.3.3 and 308.3.4 to the IBC to read:

308.3.3 Six to 16 persons receiving custodial care. A facility housing not fewer than six and not more than 16 persons receiving custodial care shall be classified as Group R-4.

308.3.4 Five or fewer persons receiving custodial care. A facility with five or fewer persons receiving custodial care shall be classified as Group R-3 or shall comply with the IRC provided an automatic sprinkler system is installed in accordance with Section 903.3.1.3 or with Section P2904 of the IRC.

~~D.~~ [~~H.~~ I.] Change Section ~~308.3~~ 308.4 of the IBC to read:

~~308.3~~ 308.4 Group I-2. This occupancy shall include buildings and structures used for medical~~, surgical, psychiatric, nursing or custodial~~ care on a 24-hour basis for more than five persons who are ~~not capable~~ incapable of self-preservation. This group shall include, but not be limited to, the following:

~~Child care facilities~~

Convalescent facilities

Detoxification facilities

Foster care facilities

Hospice facilities

Hospitals

~~Mental hospitals~~

Nursing homes

Psychiatric hospitals

Exception: Hospice facilities occupied by 16 or less occupants, excluding staff, are permitted to be classified as Group R-4.

~~E. Add the following definition to Section 308.3.1 of the IBC:~~

~~Hospice facility. An institution, place, or building owned or operated by a hospice provider and licensed by the Virginia Department of Health as a hospice facility to provide room, board, and palliative and supportive medical and other health services to terminally ill patients and their families, including respite and symptom management, on a 24-hour basis to individuals requiring such care pursuant to the orders of a physician.~~

~~F. Change~~ [~~I.~~ J.] Add an exception to Section ~~308.5.2~~ 308.6 of the IBC to read:

~~308.5.2 Child care facility. A facility other than family day homes under Section 310.4 that provides supervision and personal care on less than a 24-hour basis for more than five children 2-1/2 years of age or less shall be classified as Group I-4.~~

Exception: ~~A child day care facility that provides care for more than five but no more than 100 children 2-1/2 years or less of age, where the rooms in which the children are cared for are located on a level of exit discharge serving such rooms and each of these child care rooms has an exit door directly to the exterior, shall be classified as Group E~~ Family day homes under Section 310.9.

~~G.~~ [~~J.~~ K.] Change ~~occupancy classifications "R-1" and "R-4" and add new occupancy classification "R-5" to~~ Section ~~310~~ 310.3 of the IBC to read:

310.3 Residential Group R-1. Residential occupancies containing sleeping units where the occupants are primarily transient in nature, including:

Boarding houses (transient) with more than 10 occupants

Congregate living facilities (transient) with more than 10 occupants

Hotels (transient)

Motels (transient)

~~Congregate living facilities (transient) with 10 or fewer occupants are permitted to comply with the construction requirements for Group R-3.~~

Exceptions:

1. Nonproprietor occupied bed and breakfast and other transient boarding facilities not more than three stories above grade plane in height with a maximum of 10 occupants total are permitted to be classified as either Group R-3 or Group R-5 provided that smoke alarms are installed in compliance with Section ~~907.2.10.1.2~~ 907.2.11.2 for Group R-3 or Section ~~313.1~~ R314 of the ~~International Residential Code~~ IRC for Group R-5.

2. Proprietor occupied bed and breakfast and other transient boarding facilities not more than three stories above grade plane in height, that are also occupied as the residence of the proprietor, with a maximum of five guest room sleeping units provided for the transient occupants are permitted to be classified as either Group R-3 or R-5 provided that smoke alarms are installed in compliance with Section ~~907.2.10.1.2~~ 907.2.11.2 for Group R-3 or Section ~~313.1~~ R314 of the ~~International Residential Code~~ IRC for Group R-5.

[~~K.~~ L.] Change Section 310.6 of the IBC to read:

310.6 Residential Group R-4 ~~Residential occupancies~~. This occupancy shall include buildings ~~arranged for occupancy as residential care/assisted living facilities including~~, structures or portions thereof for more than five but not more than 16 ~~occupants~~ persons, excluding staff ~~and buildings arranged for occupancy as~~, who reside on a 24-hour basis in a supervised environment and receive custodial care. Buildings of Group R-4, other than assisted living facilities licensed by the Virginia Department of Social Services, shall be classified as the occupancy condition indicated in Section 310.6.1. Assisted living facilities

licensed by the Virginia Department of Social Services shall be classified as one of the occupancy conditions indicated in Sections 310.6.1 or 310.6.2. This group shall include, but not be limited to, the following:

Alcohol and drug centers

Assisted living facilities

Congregate care facilities

Group homes

Halfway houses

Residential board and care facilities

Social rehabilitation facilities

This occupancy shall also include hospice facilities with not more than 16 occupants, excluding staff.

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in this code~~, or shall comply with the IRC provided the building is protected by an automatic sprinkler system installed in accordance with Section 903.2.7~~.

Exceptions:

1. Group homes licensed by the Virginia Department of Behavioral Health and Developmental Services that house no more than eight persons with one or more resident counselors shall be classified as Group R-2, R-3, R-4 or R-5. Not more than five of the persons may require physical assistance from staff to respond to an emergency situation.

2. In Group R-4 occupancies classified as the occupancy condition indicated in Section 310.6.1, other than in hospice facilities, not more than five of the residents may require physical assistance from staff to respond to an emergency situation when all residents who may require the physical assistance from staff reside on a single level of exit discharge and other than using a ramp, a change of elevation using steps or stairs is not within the path of egress to an exit door.

3. Assisted living facilities licensed by the Virginia Department of Social Services that house no more than eight persons, with one or more resident counselors, and all of the residents are capable of responding to an emergency situation without physical assistance from staff, may be classified as Group R-2, R-3 or R-5.

4. Assisted living facilities licensed by the Virginia Department of Social Services that house no more than eight persons, with one or more resident counselors, may be classified as Group R-5 when in compliance with all of the following:

4.1. The building is protected by an automatic sprinkler system installed in accordance with Section 903.3 or Section P2904 of the IRC.

4.2. Not more than five of the residents may require physical assistance from staff to respond to an emergency situation.

4.3. All residents who may require physical assistance from staff to respond to an emergency situation reside on a single level of exit discharge and other than using a ramp, a change in elevation using steps or stairs is not within the path of egress to an exit door.

5. Hospice facilities with five or fewer occupants are permitted to comply with the IRC provided the building is protected by an automatic sprinkler system in accordance with IRC Section P2904 or IBC Section 903.3.

[~~L.~~ M.] Add Sections 310.6.1 and 310.6.2 to the IBC to read:

310.6.1 Condition 1. This occupancy condition shall include buildings in which all persons receiving custodial care who, without any assistance, are capable of responding to an emergency situation to complete building evacuation and hospice facilities. [In other than in hospice facilities, not more then five of the residents may require physical assistance from staff to respond to an emergency situation when all residents that may require the physical assistance reside on a single level of exit discharge.]

310.6.2 Condition 2. This occupancy condition shall include buildings in which there are persons receiving custodial care who require assistance by not more than one staff member while responding to an emergency situation to complete building evacuation. [Five of the residents may require physical assistance from more than one staff member to respond to an emergency.]

[~~M.~~ N.] Add Section 310.7 to the IBC to read:

310.7 Residential Group R-5. Residential occupancies in detached one- and two-family dwellings, townhouses and accessory structures within the scope of the ~~International Residential Code, also referred to as the "~~IRC.~~"~~

~~H. Change the definition of "Residential care/assisted living facilities" in Section 310.2 of the IBC to read:~~

~~Residential care/assisted living facilities. Any congregate residential setting that provides or coordinates personal and health care services, 24-hour supervision and assistance for the maintenance or care of four or more adults who are aged, infirm or disabled and who are cared for in a primarily residential setting, and provides for the protection, general supervision and oversight of the physical and mental well-being of aged, infirmed or disabled individuals. Residents are capable of self-evacuation.~~

~~I.~~ [~~N.~~ O.] Add Section ~~310.3~~ 310.8 to the IBC to read:

~~310.3~~ 310.8 Group R-5. The construction of Group R-5 structures shall comply with the IRC. The amendments to the IRC set out in Section ~~310.6~~ 310.11 shall be made to the IRC for its use as part of this code. In addition, all references to ~~Section 101.2 in the IBC relating to the construction of such structures subject to~~ the IRC in the IBC shall be considered to be references to this section.

~~J.~~ [~~O.~~ P.] Add Section ~~310.3.1~~ 310.8.1 to the IBC to read:

~~310.3.1~~ 310.8.1 Additional requirements. Methods of construction, materials, systems, equipment or components for Group R-5 structures not addressed by prescriptive or performance provisions of the IRC shall comply with applicable IBC requirements.

~~K.~~ [~~P.~~ Q.] Add Section ~~310.4~~ 310.9 to the IBC to read:

~~310.4~~ 310.9 Family day homes. Family day homes where program oversight is provided by the Virginia Department of Social Services shall be classified as Group R-2, R-3 or R-5.

Note: Family day homes may generally care for up to 12 children. See the DHCD Related Laws Package for additional information.

~~L.~~ [~~Q.~~ R.] Add Section ~~310.5~~ 310.10 to the IBC to read:

~~310.5~~ 310.10 Radon-resistant construction in ~~Group~~ Groups R-3 and R-4 structures. ~~Group~~ Groups R-3 and R-4 structures shall be subject to the radon-resistant construction requirements in Appendix F of the IRC in localities enforcing such requirements pursuant to Section ~~R325~~ R324 of the IRC.

~~M.~~ [R. S.] Add Section ~~310.6~~ 310.11 to the IBC to read:

~~310.6~~ 310.11 Amendments to the IRC. The following changes shall be made to the IRC for its use as part of this code:

1. Add the following definitions to read:

Nonpotable fixtures and outlets. Fixtures and outlets that are not dependent on potable water for the safe operation to perform their intended use. Such fixtures and outlets may include, but are not limited to water closets, urinals, irrigation, mechanical equipment, and hose connections to perform operations, such as vehicle washing and lawn maintenance.

Nonpotable water systems. Water systems for the collection, treatment, storage, distribution, and use or reuse of nonpotable water. Nonpotable systems include reclaimed water, rainwater, and gray water systems.

Rainwater. Natural precipitation, including snow melt, from roof surfaces only.

Stormwater. Precipitation that is discharged across the land surface or through conveyances to one or more waterways and that may include stormwater runoff, snow melt runoff, and surface runoff and drainage.

2. Change the following definition to read:

Gray water. Water discharged from lavatories, bathtubs, showers, clothes washers, and laundry trays.

3. Change Section R301.2.1 to read:

R301.2.1 Wind ~~limitations~~ design criteria. Buildings and portions thereof shall be ~~limited by~~ constructed in accordance with the wind provisions of this code using the basic wind speed~~, as defined~~ in Table R301.2(1)~~, and construction methods in accordance with this code. Basic wind speeds shall be determined from Figure R301.2(4). Where different construction methods and structural materials are used for various portions of a building, the applicable requirements of this section for each portion shall apply. Where loads for wall coverings, curtain walls, roof coverings, exterior windows, skylights, garage doors and exterior doors are not otherwise specified, the loads listed in Table R301.2(2) adjusted for height and exposure using Table R301.2(3) shall be used to determine design load performance requirements for wall coverings, curtain walls, roof coverings, exterior windows, skylights, garage doors and exterior doors. Asphalt shingles shall be designed for wind speeds in accordance with Section R905.2.6~~ as determined from Figure R301.2(4)A. The structural provisions of this code for wind loads are not permitted where wind design is required as specified in Section R301.2.1.1. Where different construction methods and structural materials are used for various portions of a building, the applicable requirements of this section for each portion shall apply. Where not otherwise specified, the wind loads listed in Table R301.2(2) adjusted for height and exposure using Table R301.2(3) shall be used to determine design load performance requirements for wall coverings, curtain walls, roof coverings, exterior windows, skylights, garage doors and exterior doors. Asphalt shingles shall be designed for wind speeds in accordance with Section R905.2.4. A continuous load path shall be provided to transmit the applicable uplift forces in Section R802.11.1 from the roof assembly to the foundation. Wind speeds for localities in special wind regions, near mountainous terrain, and near gorges shall be based on elevation. Areas at 4,000 feet in elevation or higher shall use 110 V mph (48.4 m/s) and areas under 4,000 feet in elevation shall use 90 V mph (39.6 m/s). Gorge areas shall be based on the highest recorded speed per locality or in accordance with local jurisdiction requirements determined in accordance with Section ~~6.5.4~~ 26.5.1 of ASCE 7.

~~2. Change Section R301.2.1.1 to read:~~

~~R301.2.1.1 Design criteria. Construction in regions where the basic wind speeds from Figure R301.2(4) equal or exceed 110 miles per hour (49 m/s) shall be designed in accordance with one of the following methods. The elements of design not addressed by those documents in items 1 through 4 shall be in accordance with this code.~~

~~1. American Forest and Paper Association (AF&PA) Wood Frame Construction Manual for One- and Two-Family Dwellings (WFCM); or~~

~~2. International Code Council (ICC) Standard for Residential Construction in High Wind Regions (ICC-600); or~~

~~3. Minimum Design Loads for Buildings and Other Structures (ASCE-7); or~~

~~4. American Iron and Steel Institute (AISI), Standard for Cold-Formed Steel Framing-Prescriptive Method for One- and Two-Family Dwellings (AISI S230).~~

~~5. Concrete construction shall be designed in accordance with the provisions of this code.~~

~~6. Structural insulated panel (SIP) walls shall be designed in accordance with the provisions of this code.~~

~~3. Change Section R301.2.2.1.1 to read:~~

~~R301.2.2.1.1 Alternate determination of seismic design category. The Seismic Design Categories and corresponding Short Period Design Spectral Response Accelerations, S_{DS} shown in Figure R301.2(2) are based on soil Site Class D, as defined in Section 1613.5.2 of the International Building Code. If soil conditions are other than Site Class D, the Short Period Design Spectral Response Accelerations, S_{DS}, for a site can be determined according to Section 1613.5 of the International Building Code. The value of S_{DS} determined according to Section 1613.5 of the International Building Code is permitted to be used to set the seismic design category according to Table R301.2.2.1.1, and to interpolate between values in Tables R602.10.3(3), R603.7 and other seismic design requirements of this code.~~

~~4. Delete Section R301.2.2.3 and all subsections.~~

~~5. Delete Section R301.2.2.4.~~

~~6. Change the exception to Item 1 of Section R301.3 to read:~~

~~Exception: For wood-framed wall buildings with bracing in accordance with Section R602.10, the wall stud clear height used to determine the maximum permitted story height may be increased to 12 feet (3658 mm) without requiring an engineered design for the building wind and seismic force resisting systems.~~

~~7.~~ 4. Add Exception 6 to Section R302.1 to read:

6. Decks and open porches.

~~8. Change the last column and add footnote "a" to Table R302.1 as shown:~~

~~Minimum Fire Separation Distance~~
~~<5 feet[a]~~
~~≥5 feet[a]~~

-	~~≥2 feet to 5 feet[a]~~
-	~~5 feet[a]~~
-	~~<3 feet~~
-	~~3 feet~~
-	~~5 feet[a]~~
-	~~<5 feet[a]~~
-	~~5 feet[a]~~

~~[a]The minimum fire separation distance shall be reduced to three feet in developments which are fully sprinklered as provided for in Sections R313.1 or R313.2.~~

~~9.~~ 5. Change the exception in Section R302.2 to require a common two-hour fire-resistance-rated wall instead of a one-hour fire-resistance-rated wall, unless the townhouse development is fully sprinklered as provided for in Section R313.1, in which case a common one-hour fire-resistive-rated wall shall be permitted between townhouses.

~~10.~~ 6. Add the following sentence to the end of Section R302.3 to read:

Dwelling unit separation wall assemblies that are constructed on a lot line shall be constructed as required in Section R302.2 for townhouses.

7. Change Section R302.5.1 to read:

R302.5.1 Opening protection. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 1-3/8 inches (35 mm) thickness, solid or honeycomb-core steel doors not less than 1-3/8 inches (35 mm) thick, or 20-minute fire-rated doors.

~~11.~~ 8. Add an exception to Section ~~R303.8~~ R303.9 to read:

Exception: Seasonal structures not used as a primary residence for more than 90 days per year, unless rented, leased or let on terms expressed or implied to furnish heat, shall not be required to comply with this section.

~~12.~~ 9. Add Section ~~R303.8.1~~ R303.9.1 to read:

~~R303.8.1~~ R303.9.1 Nonowner occupied required heating. Every dwelling unit or portion thereof which is to be rented, leased or let on terms either expressed or implied to furnish heat to the occupants thereof shall be provided with facilities in accordance with Section ~~R303.8~~ R303.9 during the period from October 15 to May 1.

~~13.~~ 10. Add Section ~~R303.9~~ R303.10 to read:

~~R303.9~~ R303.10 Insect screens. Every door, window and other outside opening required for ventilation purposes shall be supplied with approved tightly fitted screens of not less than 16 mesh per inch (16 mesh per 25 mm) and every screen door used for insect control shall have a self-closing device.

~~14.~~ 11. Add Section R306.5 to read:

R306.5 Water supply sources and sewage disposal systems. The water and drainage system of any building or premises where plumbing fixtures are installed shall be connected to a public or private water supply and a public or private sewer system. As provided for in Section [~~103.11~~ 103.10] of Part I of the Virginia Uniform Statewide Building Code (13VAC5-63), for functional design, water supply sources and sewage disposal systems are regulated and approved by the Virginia Department of Health and the Virginia Department of Environmental Quality.

Note: See also the Memorandums of Agreement in the "Related Laws Package," which is available from the Virginia Department of Housing and Community Development.

~~15.~~ 12. Change Section R310.1 to read:

R310.1 Emergency escape and rescue required. Basements, habitable attics, and ~~each~~ every sleeping room designated on the construction documents shall have at least one ~~openable~~ operable emergency escape and rescue opening. ~~Such opening shall be directly to the exterior of the building or to a deck, screen porch or egress court, all of which shall provide access to a public street, public alley or yard.~~ Where basements contain one or more sleeping rooms, emergency egress and rescue openings shall be required in each sleeping room. Where emergency escape and rescue openings are provided~~,~~ they shall have a sill height of not more than 44 inches (1118 mm) ~~above~~ measured from the finished floor to the bottom of the clear opening. Where a door opening having a threshold below the adjacent ground elevation serves as an emergency escape and rescue opening and is provided with a bulkhead enclosure, the bulkhead enclosure shall comply with Section R310.3. The net clear opening dimensions required by this section shall be obtained by the normal operation of the emergency escape and rescue opening from the inside, except that tilt-out or removable sash designed windows shall be permitted to be used. Emergency escape and rescue openings with a finished height below the adjacent ground elevation shall be provided with a window well in accordance with Section R310.2. Emergency escape and rescue openings shall open directly into a public way, or to a yard or court that opens to a public way.

Exceptions:

1. Dwelling units equipped throughout with an approved automatic sprinkler system installed in accordance with NFPA 13, 13R, or 13D or Section P2904.

2. Basements used only to house mechanical equipment and not exceeding total floor area of 200 square feet (18.58 m^2).

~~16.~~ 13. Change Section R310.1.1 to read:

R310.1.1 Minimum opening area. All emergency escape and rescue openings shall have a minimum net clear opening of 5.7 square feet (0.530 m^2), including the tilting

or removal of the sash as the normal operation to comply with ~~sections~~ Sections R310.1.2 and R310.1.3.

Exception: Grade floor openings shall have a minimum net clear opening of 5 square feet (0.465 m^2).

[14. Add Section R311.2.1 to read:

R311.2.1 Interior passage. Where a dwelling unit has both a kitchen and a living or entertainment area on the same level as the egress door required by Section R311.2, an interior passage route shall be provided from such egress door to the kitchen and the living or entertainment area and to at least one bedroom and at least one bathroom containing a water closet, lavatory and bathtub or shower, where such rooms are provided on that same level. Any doors or cased openings along such interior passage route providing access to the areas identified above shall comply with the following.

1. Cased openings shall provide a minimum 34-inch clear width.

2. Doors shall be, at a minimum, nominal 34-inch doors.

Exceptions:

1. Where a door or cased opening, and its associated molding or trim, is at the end and facing the length of a hallway and the width of the hallway is not wide enough to accommodate such doors or cased openings.

2. Closet doors or cased openings.

3. Pantry door or cased openings.

4. Bathrooms accessed directly from a bedroom that is not required to comply with this section.

15. Change the exception in Section R311.3.1 to read:

Exception: The landing or floor on the exterior side shall not be more than 8-1/4 inches (210 mm) below the top of the threshold provided the door does not swing over the landing or floor.]

~~17.~~ [~~14.~~ 16.] Change Section ~~R311.7.4.1~~ R311.7.5.1 to read:

~~R311.7.4.1 Riser height~~ R311.7.5.1 Risers. The maximum riser height shall be 8-1/4 inches (210 mm). The riser shall be measured vertically between the leading edges of the adjacent treads. The greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm). Risers shall be vertical or sloped from the underside of the nosing of the tread above at an angle not more than 30 degrees (0.51 rad) from the vertical. Open risers are permitted provided that the opening between treads does not permit the passage of a 4-inch-diameter (102 mm) sphere.

Exception: The opening between adjacent treads is not limited on stairs with a total rise of 30 inches (762 mm) or less.

~~18.~~ [~~15.~~ 17.] Change Section ~~R311.7.4.2~~ R311.7.5.2 to read:

~~R311.7.4.2 Tread depth~~ R311.7.5.2 Treads. The minimum tread depth shall be 9 inches (229 mm). The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's leading edge. The greatest tread depth within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm). ~~Consistently shaped winders at the walkline shall be allowed within the same flight of stairs as rectangular treads and do not have to be within 3/8 inch (9.5 mm) of the rectangular tread depth. Winder treads shall have a minimum tread depth of 10 inches (254 mm) measured between the vertical planes of the foremost projection of adjacent treads at the intersection with the walkline. Winder treads shall have a minimum tread depth of 6 inches (152 mm) at any point within the clear width of the stair. Within any flight of stairs, the largest winder tread depth at the walkline shall not exceed the smallest winder tread by more than 3/8 inch (9.5 mm).~~

~~19.~~ [~~16.~~ 18.] Change Section ~~R311.7.6~~ R311.7.7 to read:

~~R311.7.6~~ R311.7.7 Stairway walking surface. The walking surface of treads and landings of stairways shall be level or sloped no steeper than one unit vertical in 48 inches horizontal (~~two-percent~~ 2% slope).

[~~17.~~ 19.] Change Section R312.2.1 to read:

R312.2.1 Window sills. In dwelling units, where the opening of an operable window is located more than 72 inches (1829 mm) above the finished grade or surface below, the lowest part of the clear opening of the window shall be a minimum of 18 inches (457 mm) above the finished floor of the room in which the window is located. Operable sections of windows shall not permit openings that allow passage of a 4-inch-diameter (102 mm) sphere where such openings are located within 18 inches (457 mm) of the finished floor.

Exceptions:

1. Windows whose openings will not allow a 4-inch-diameter (102 mm) sphere to pass through the opening when the opening is in its largest opened position.

2. Openings that are provided with window fall prevention devices that comply with ASTM F 2090.

3.Windows that are provided with window opening control devices that comply with Section R312.2.2.

[20. ~~18.~~] Replace Section R313 with the following:

Section R313.

Automatic Fire Sprinkler Systems.

R313.1 Townhouse automatic fire sprinkler systems. Notwithstanding the requirements of Section 103.8, where installed, an automatic residential fire sprinkler system for townhouses shall be designed and installed in accordance with NFPA 13D or Section P2904.

Exception: An automatic residential fire sprinkler system shall not be required when additions or alterations are made to existing townhouses that do not have an automatic residential fire sprinkler system installed.

R313.2 One-family and two-family dwellings automatic fire sprinkler systems. Notwithstanding the requirements of Section 103.8, where installed, an automatic residential fire sprinkler system shall be designed and installed in accordance with NFPA 13D or Section P2904.

Exception: An automatic residential fire sprinkler system shall not be required for additions or alterations to existing buildings that are not already provided with an automatic residential fire sprinkler system.

[21. ~~19.~~] Change Section R314.2 to read:

R314.2 Smoke detection systems. Household fire alarm systems installed in accordance with NFPA 72 that include smoke alarms, or a combination of smoke detector and audible notification device installed as required by this section for smoke alarms, shall be permitted. The household fire alarm system shall provide the same level of smoke detection and alarm as required by this section for smoke alarms. Where a household fire warning system is installed using a combination of smoke detector and audible notification device(s), the system shall become a permanent fixture of the dwelling unit.

Exception: Where smoke alarms are provided meeting the requirements of Section R314.4.

[22. ~~20.~~] Delete Section R314.3.1.

[23. ~~21.~~] Delete Section ~~R315.2~~ R315.3.

[24. ~~22.~~] Change Section ~~R315.2~~ R315.4 to read:

~~R315.3~~ R315.4 Alarm requirements. Single station carbon monoxide alarms shall be hard wired, plug-in or battery type; listed as complying with UL 2034; and installed in accordance with this code and the manufacturer's installation instructions.

[25. Add Exception 3 to Section R317.1.4 to read:

3. Deck posts supported by concrete piers or metal pedestals projecting a minimum of 1 inch (25.4 mm) above a concrete floor or 6 inches (152 mm) above exposed earth.

~~23.~~ 26.] Add Section R320.2 to read:

R320.2 Universal design features for accessibility in dwellings. Dwellings constructed under the IRC not subject to Section R320.1 may comply with Section 1109.16 of the USBC and be approved by the local building department as dwellings containing universal design features for accessibility.

~~25.~~ [~~24.~~ 27.] Add Section R324 Radon-Resistant Construction.

~~26.~~ [~~25.~~ 28.] Add Section R324.1 to read:

R324.1 Local enforcement of radon requirements. Following official action under Article 7 (§ 15.2-2280 et seq.) of Chapter 22 of Title 15.2 of the Code of Virginia by a locality in areas of high radon potential, as indicated by Zone 1 on the U.S. EPA Map of Radon Zones (IRC Figure AF101), such locality shall enforce the provisions contained in Appendix F.

Exception: Buildings or portions thereof with crawl space foundations which are ventilated to the exterior, shall not be required to provide radon-resistant construction.

~~27.~~ [~~26.~~ 29.] Add Section R325 Swimming Pools~~, Spas and Hot Tubs~~.

~~28.~~ [~~27.~~ 30.] Add Section R325.1 to read:

R325.1 ~~Use of Appendix G for swimming~~ Swimming pools~~, spas and hot tubs~~. In addition to other applicable provisions of this code, swimming pools, ~~spas and hot tubs~~ as defined in the USBC, shall comply with the applicable provisions ~~in Appendix G~~ of the ISPSC.

~~29.~~ [~~28.~~ 31.] Add Section R326 Patio Covers.

~~30.~~ [~~29.~~ 32.] Add Section R326.1 to read:

R326.1 Use of Appendix H for patio covers. Patio covers shall comply with the provisions in Appendix H.

~~31.~~ [~~30.~~ 33.] Add Section R327 Sound Transmission.

~~32.~~ [~~31.~~ 34.] Add Section R327.1 to read:

R327.1 Sound transmission between dwelling units. Construction assemblies separating dwelling units shall provide airborne sound insulation as required in Appendix K.

~~33.~~ [~~32.~~ 35.] Add Section R327.2 to read:

R327.2 Airport noise attenuation. This section applies to the construction of the exterior envelope of detached one-family and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories high with separate means or egress within airport noise zones when enforced by a locality pursuant to § 15.2-2295 of the Code of Virginia. The exterior envelope of such structures shall comply with Section 1207.4 of the state amendments to the IBC.

~~34. Add Section R328 Gray Water and Rain Water Recycling Systems.~~

~~35. Add Section R328.1 to read:~~

~~R328.1 Use of Appendix O for gray water and rain water recycling systems. In addition to other applicable provisions of this code, gray water recycling systems and rain water recycling systems shall comply with the provisions in Appendix O. In the use of Appendix O for rain water recycling systems, the term "rain water" shall be substituted for the term "gray water." Gray water recycling systems and rain water recycling systems shall be separate systems and shall not be interconnected.~~

[36. ~~33.~~]Add Section R329 Fire Extinguishers.

[37. ~~34.~~] Add Section R329.1 to read:

R329.1 Kitchen areas. Other than where the dwelling is equipped with an approved sprinkler system in accordance with Section R313, a fire extinguisher having a rating of 2-A:10-B:C or an approved equivalent type of fire extinguisher shall be installed in the kitchen area.

[38. ~~35.~~] Change Section R401.3 to read:

R401.3 Drainage. Surface drainage shall be diverted to a storm sewer conveyance or other approved point of collection that does not create a hazard to the dwelling unit. Lots shall be graded to drain surface water away from foundation walls. The grade shall fall a minimum of six inches (152 mm) within the first 10 feet (3048 mm).

Exception: Where lot lines, walls, slopes or other physical barriers prohibit six inches (152 mm) of fall within 10 feet (3048 mm), drains or swales shall be constructed to ensure drainage away from the structure. Impervious surfaces within 10 feet (3048 mm) of the building foundation shall be sloped a minimum of 2.0% away from the building.

[39. ~~36.~~] Change Section R403.1 to read:

R403.1 General. All exterior walls shall be supported on continuous solid or fully grouted masonry or concrete footings, wood foundations, or other approved structural systems ~~which~~ that shall be of sufficient design to accommodate all loads according to Section R301 and to transmit the resulting loads to the soil within the limitations as determined from the character of the soil. Footings shall be supported on undisturbed natural soils or engineered fill.

[~~Exception:~~ Exceptions:

1.] One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, not exceeding 256 square feet (23.7824 m^2) of building area, provided all of the following conditions are met:

[~~1.~~ 1.1.] The building eave height is 10 feet or less.

[~~2.~~ 1.2.] The maximum height from the finished floor level to grade does not exceed 18 inches.

[~~3.~~ 1.3.] The supporting structural elements in direct contact with the ground shall be placed level on firm soil and when such elements are wood they shall be approved pressure preservative treated suitable for ground contact use.

[~~4.~~ 1.4.] The structure is anchored to withstand wind loads as required by this code.

[~~5.~~ 1.5.] The structure shall be of light-frame construction whose vertical and horizontal structural elements are primarily formed by a system of repetitive wood or light gauge steel framing members, with walls and roof of light weight material, not slate, tile, brick or masonry.

[2. Footings are not required for ramps serving dwelling units in Group R-3 and R-5 occupancies where the height of the entrance is no more than 30 inches (762 mm) above grade.

~~40. Change Exceptions 2 and 3 in Section R403.1.6 to read:~~

~~2. Walls 24 inches (610 mm) total length or shorter connecting offset braced wall panels shall be anchored to the foundation with a minimum of one anchor bolt located in the center third of the plate section.~~

~~3. Connection of walls 12 inches (305 mm) total length or shorter connecting offset braced wall panels to the foundation without anchor bolts shall be permitted.~~

~~41. Delete Item 5 of Section R403.1.6.1.~~

~~42.~~ [~~37.~~ 40.] Add Section R408.3.1 to read:

R408.3.1 Termite inspection. Where an unvented crawl space is installed and meets the criteria in Section R408, the vertical face of the sill plate shall be clear and unobstructed and an inspection gap shall be provided below the sill plate along the top of any interior foundation wall covering. The gap shall be a minimum of one inch (25.4 mm) and a maximum of two inches (50.8 mm) in width and shall extend throughout all parts of any foundation that is enclosed. Joints between the sill plate and the top of any interior wall covering may be sealed.

Exceptions:

1. In areas not subject to damage by termites as indicated by Table R301.2(1).

2. Where other approved means are provided to inspect for potential damage.

Where pier and curtain foundations are installed as depicted in Figure R404.1.5(1), the inside face of the rim joist and sill plate shall be clear and unobstructed except for construction joints which may be sealed.

Exception: Fiberglass or similar insulation may be installed if easily removable.

~~43. Change Section R502.2.1 to read:~~

~~R502.2.1 Framing at braced wall panels. A load path for lateral forces shall be provided between floor framing and braced wall panels located above or below a floor, as specified in Sections R602.3.5 and R602.10.8.~~

[41. Change the indicated rows of Table R502.3.1(1) to read:

Joist Spacing (inches)	Species and Grade	Dead Load = 10 psf				Dead load = 20 psf			
		2x6	2x8	2x10	2x12	2x6	2x8	2x10	2x12
		Maximum floor joist spans							
		(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)
12	Southern Pine SS	12-3	16-2	20-8	25-1	12-3	16-2	20-8	25-1
	Southern Pine #1	11-10	15-7	19-10	24-2	11-10	15-7	18-7	22-0
	Southern Pine #2	11-3	14-11	18-1	21-4	10-9	13-8	16-2	19-1
	Southern Pine #3	9-2	11-6	14-0	16-6	8-2	10-3	12-6	14-9
16	Southern Pine SS	11-2	14-8	18-9	22-10	11-2	14-8	18-9	22-10
	Southern Pine #1	10-9	14-2	18-0	21-4	10-9	13-9	16-1	19-1
	Southern Pine #2	10-3	13-3	15-8	18-6	9-4	11-10	14-0	16-6
	Southern Pine #3	7-11	10-0	12-1	14-4	7-1	8-11	10-10	12-10
19.2	Southern Pine SS	10-6	13-10	17-8	21-6	10-6	13-10	17-8	21-6
	Southern Pine #1	10-1	13-4	16-5	19-6	9-11	12-7	14-8	17-5
	Southern Pine #2	9-6	12-1	14-4	16-10	8-6	10-10	12-10	15-1
	Southern Pine #3	7-3	9-1	11-0	13-1	6-5	8-2	9-10	11-8
24	Southern Pine SS	9-9	12-10	16-5	19-11	9-9	12-10	16-5	19-8
	Southern Pine #1	9-4	12-4	14-8	17-5	8-10	11-3	13-1	15-7
	Southern Pine #2	8-6	10-10	12-10	15-1	7-7	9-8	11-5	13-6
	Southern Pine #3	6-5	8-2	9-10	11-8	5-9	7-3	8-10	10-5

42. Change the indicated rows of Table R502.3.1(2) to read:

Joist Spacing (inches)	Species and Grade	Dead Load = 10 psf				Dead load = 20 psf			
		2x6	2x8	2x10	2x12	2x6	2x8	2x10	2x12
		Maximum floor joist spans							
		(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)
12	Southern Pine SS	11-2	148	18-9	22-10	11-2	14-8	18-9	22-10
	Southern Pine #1	10-9	14-2	18-0	21-11	10-9	14-2	16-11	20-1

	Southern Pine #2	10-3	13-6	16-2	19-1	9-10	12-6	14-9	17-5
	Southern Pine #3	8-2	10-3	12-6	14-9	7-5	9-5	11-5	13-6
16	Southern Pine SS	10-2	13-4	17-0	20-9	10-2	13-4	17-0	20-9
	Southern Pine #1	9-9	12-10	16-1	19-1	9-9	12-7	14-8	17-5
	Southern Pine #2	9-4	11-10	14-0	16-6	8-6	10-10	12-10	15-1
	Southern Pine #3	7-1	8-11	10-10	12-10	6-5	8-2	9-10	11-8
19.2	Southern Pine SS	9-6	12-7	16-0	19-6	9-6	12-7	16-0	19-6
	Southern Pine #1	9-2	12-1	14-8	17-5	9-0	11-5	13-5	15-11
	Southern Pine #2	8-6	10-10	12-10	15-1	7-9	9-10	11-8	13-9
	Southern Pine #3	6-5	8-2	9-10	11-8	5-11	7-5	9-0	10-8
24	Southern Pine SS	8-10	11-8	14-11	18-1	8-10	11-8	14-11	18-0
	Southern Pine #1	8-6	11-3	13-1	15-7	8-1	10-3	12-0	14-3
	Southern Pine #2	7-7	9-8	11-5	13-6	7-0	8-10	10-5	12-4
	Southern Pine #3	5-9	7-3	8-10	10-5	5-3	6-8	8-1	9-6

43. Change footnote “b” in Table R502.3.3(1) to read:

b. Spans are based on minimum design properties for No. 2 Grade lumber of Douglas fir-larch, hem-fir, and spruce-pine-fir for repetitive (three or more) members. No. 1 or better grade lumber shall be used for southern pine.

44. Change footnote “a” in Table R502.3.3(2) to read:

a. Spans are based on minimum design properties for No. 2 Grade lumber of Douglas fir-larch, hem-fir, and spruce-pine-fir for repetitive (three or more) members. No. 1 or better grade lumber shall be used for southern pine.

45. Change Section R502.5 top read:

R502.5 Allowable girder and header spans. The allowable spans of girders and headers fabricated of dimension lumber shall not exceed the values set forth in Tables R502.5(1) through R502.5(3).

46. Change the title and footnote “b” of Table R502.5(1) to read:

Table R502.5(1)
Girder Spans[a,b] and Header Spans[a,b] for Exterior Bearing Walls
(Maximum Spans for Douglas fir-Larch, hem-fir, southern pine and spruce-pine-fir[b] and required number of jack studs)

b. Spans are based on minimum design properties for No. 2 Grade lumber of Douglas fir-larch, hem-fir, and spruce-pine-fir. No. 1 or better grade lumber shall be used for southern pine.

47. Change the title and footnote “b” of Table R502.5(2) to read:

Table R502.5(2)
Girder Spans[a,b] and Header Spans[a,b] for Interior Bearing Walls

(Maximum Spans for Douglas fir-Larch, hem-fir, southern pine and spruce-pine-fir[b] and required number of jack studs)

b. Spans are based on minimum design properties for No. 2 Grade lumber of Douglas fir-larch, hem-fir, and spruce-pine-fir. No. 1 or better grade lumber shall be used for southern pine.

~~38. Change Section R502.5 and add~~ 48. Add] Table R502.5(3) to read:

[~~R502.5 Allowable girder and header spans. The allowable spans of girders and headers fabricated of dimension lumber shall not exceed the values set forth in Tables R502.5(1) through R502.5(3).~~]

Table R502.5(3) Girder and Header Spans for Porches[a,b] (Maximum span for southern pine)			
Header Supporting	Header Size	Porch Width (ft)	
		8	14
Roof	2-2x4	6’-11”	5’-3”
	2-2x6	9’-11”	7’-6”
	2-2x8	12’-10”	9’-8”
	2-2x10	16’-8”	12’-7”
	2-2x12	19’-6”	14’-9”
Floor	2-2x4	5’-1”	3’-10”
	2-2x6	7’-4”	5’-6”
	2-2x8	9’-5”	7’-1”
	2-2x10	12’-2”	9’-3”
	2-2x12	14’-4”	10’-10”
For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm a. Tabulated values based on 30 psf ground snow load, L/240 deflection and #2 grade lumber. b. The values of this table shall be equivalent to a roof live load of 20 psf.			

~~44.~~ [~~39.~~ 49.] Change Section R506.2.1 to read:

R506.2.1 Fill. Fill material shall be free of vegetation and foreign material and shall be natural nonorganic material that is not susceptible to swelling when exposed to moisture. The fill shall be compacted to assure uniform support of the slab, and except where approved, the fill depth shall not exceed 24 inches (610 mm) for clean sand or gravel and 8 inches (203 mm) for earth.

Exception: Material other than natural material may be used as fill material when accompanied by a certification from an RDP and approved by the building official.

~~45.~~ [~~40.~~ 50.] Change Section R506.2.2 to read:

R506.2.2 Base. A 4-inch-thick (102 mm) base course consisting of clean graded sand, gravel or crushed stone passing a 2-inch (51 mm) sieve shall be placed on the prepared subgrade when the slab is below grade.

Exception: A base course is not required when the concrete slab is installed on well drained or sand-gravel mixture soils classified as Group I according to the United Soil Classification System in accordance with Table R405.1. Material other than natural material may be used as base course material when accompanied by a certification from an RDP and approved by the building official.

[51. Change Section R507.1 to read:

R507.1 Decks. Wood-framed decks shall be in accordance with this section or Section R301 for materials and conditions not prescribed herein. Where supported by attachment to an exterior wall, decks shall be positively anchored to the primary structure and designed for both vertical and lateral loads. Such attachment shall not be accomplished by the use of toenails or nails subject to withdrawal. Where positive connection to the primary building structure cannot be verified during inspection, decks shall be self-supporting. For decks with cantilevered framing members, connections to exterior walls or other framing members, shall be designed and constructed to resist uplift resulting from the full live load specified in Table R301.5 acting on the cantilevered portion of the deck.

52. Add Sections R507.4 through R507.8 to read:

R507.4 Decking. Maximum allowable spacing for wood joists supporting decking shall be in accordance with Table R507.4. Wood decking shall be attached to each supporting member with a minimum of (2)8d nails or (2)#8 wood screws.

Table R507.4
Maximum Joist Spacing (in.)

Material Type and Nominal Size	Maximum Joist Spacing	
	Perpendicular to Joist	Diagonal to Joist[a]
5/4-inch thick wood	16	12
2-inch thick wood	24	16
Wood/plastic composite	per R507.3	per R507.3

For SI: 1 inch = 25.4 mm
a. Maximum angle of 45 degrees from perpendicular for wood deck boards.

R507.5 Deck joists. Maximum allowable spans for wood deck joists, as shown in Figure R507.5, shall be in accordance with Table R507.5. Deck joist shall be permitted to cantilever a maximum of one-fourth of the actual, adjacent joist span.

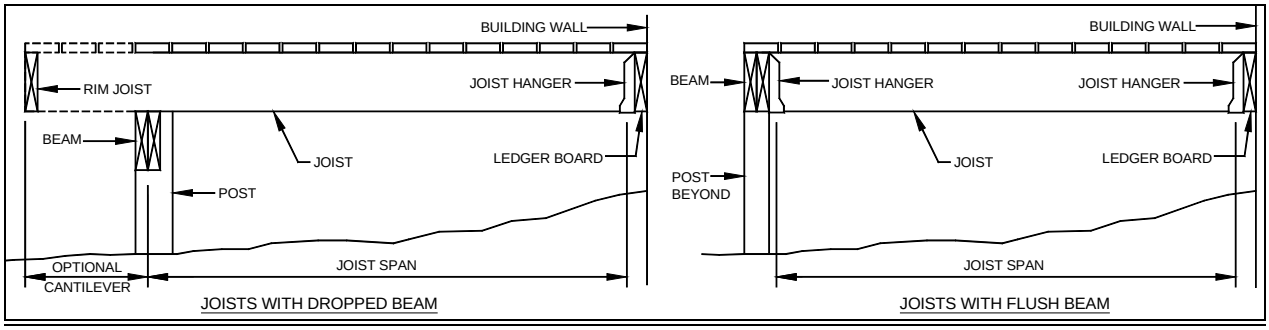


Figure R507.5
Typical Deck Joist Spans

Table R507.5
Deck Joist Spans and Cantilevers for Common Lumber Species (ft.-in.)

Species[a]	Size	Allowable Joist Span[b] spacing of deck joists (in.)			Allowable Cantilever[c,d] spacing of deck joists (in.)		
		12	16	24	12	16	24
Southern pine	2 x 6	9-11	9-0	7-7	1-3	1-4	1-6
	2 x 8	13-1	11-10	9-8	2-1	2-3	2-5
	2 x 10	16-2	14-0	11-5	3-4	3-6	2-10
	2 x 12	18-0	16-6	13-6	4-6	4-2	3-4
Douglas fir-larche, hem-fir[e], spruce-pine-fir[e]	2 x 6	9-6	8-4	6-10	1-2	1-3	1-5
	2 x 8	12-6	11–1	9-1	1-11	2-1	2-3
	2 x 10	15-8	13–7	11-1	3-1	3-5	2-9
	2 x 12	18-0	15–9	12-10	4-6	3-11	3-3
Redwood, western cedars, ponderosa pine[f], red pine[f]	2 x 6	8-10	8-0	6-10	1-0	1-1	1-2
	2 x 8	11-8	10–7	8-8	1-8	1-10	2-0
	2 x 10	14-11	13–0	10-7	2-8	2-10	2-8
	2 x 12	17-5	15-1	12-4	3-10	3-9	3-1

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.
a. No. 2 grade with wet service factor.
b. Ground snow load, live load = 40 psf, dead load = 10 psf, L/Δ = 360.
c. Ground snow load, live load = 40 psf, dead load = 10 psf, L/Δ = 360 at main span, L/Δ = 180 at cantilever with a 220 pound point load applied to end.
d. Maximum allowable cantilever shall not exceed one-fourth of the actual joist span.
e. Includes incising factor.
f. Northern species with no incising factor.

R507.5.1 Lateral restraint at supports. Joist ends and bearing locations shall be provided with lateral restraint to prevent rotation. Where lateral restraint is provided by joist hangers or blocking between joists, their depth shall equal not less than 60 percent of the joist depth. Where lateral restraint is provided by rim joists, they shall be secured to the end of each joist with a minimum of (3)10d (3-inch x 0.128-inch) nails or (3)#10x3 inch (76 mm) long wood screws.

R507.6 Deck Beams. Maximum allowable spans for wood deck beams, as shown in Figure R507.6, shall be in accordance with Table R507.6. Beam plies shall be fastened with two rows of 10d (3-inch x 0.128-inch) nails minimum at 16 inches (406 mm) on center along each edge. Beams shall be permitted to cantilever at each end up to one-fourth of the beam span. Splices of multi-span beams shall be located at interior post locations.

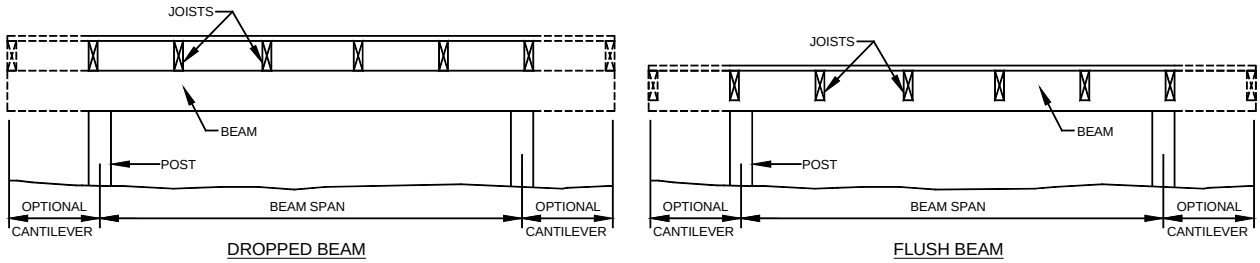


Figure R507.6
Typical Deck Beam Spans

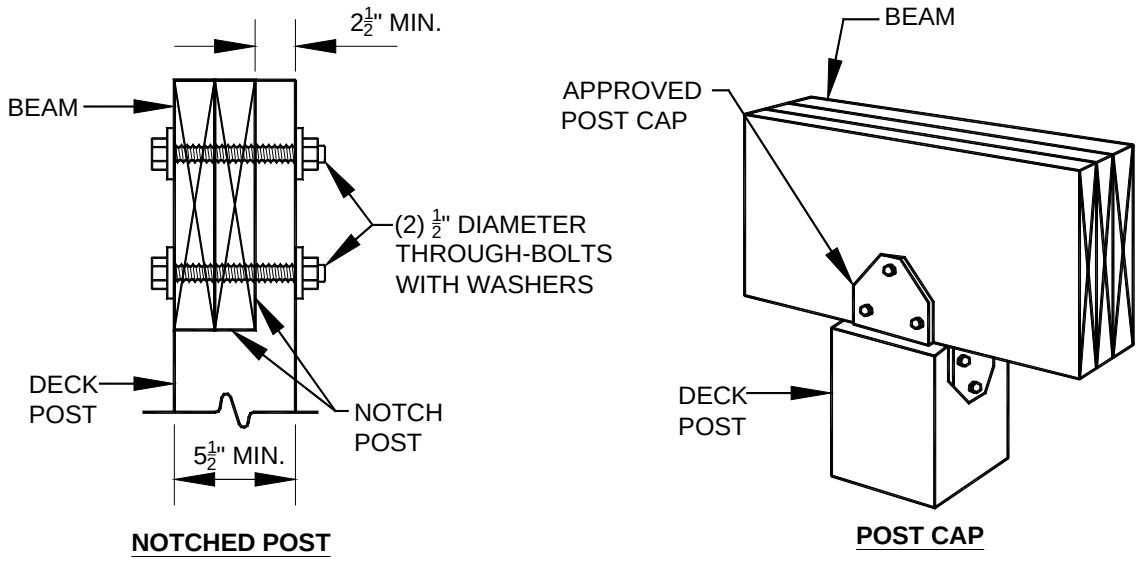
Table R507.6 Deck Beam Span Lengths (ft.-in.)[a,b]								
Species[c]	Size[d]	Deck Joist Span (ft.) Less Than or Equal To:						
		6	8	10	12	14	16	18
Southern pine	2-2x6	6-11	5-11	5-4	4-10	4-6	4-3	4-0
	2-2x8	8-9	7-7	6-9	6-2	5-9	5-4	5-0
	2-2x10	10-4	9-0	8-0	7-4	6-9	6-4	6-0
	2-2x12	12-2	10-7	9-5	8-7	8-0	7-6	7-0
	3-2x6	8-2	7-5	6-8	6-1	5-8	5-3	5-0
	3-2x8	10-10	9-6	8-6	7-9	7-2	6-8	6-4
	3-2x10	13-0	11-3	10-0	9-2	8-6	7-11	7-6
	3-2x12	15-3	13-3	11-10	10-9	10-0	9-4	8-10
Douglas fir-larch[e], hem-fire, spruce-pine-fire, redwood, western cedars, ponderosa pine[f], red pine[f]	3x6 or 2-2x6	5-5	4-8	4-2	3-10	3-6	3-1	2-9
	3x8 or 2-2x8	6-10	5-11	5-4	4-10	4-6	4-1	3-8
	3x10 or 2-2x10	8-4	7-3	6-6	5-11	5-6	5-1	4-8
	3x12 or 2-2x12	9-8	8-5	7-6	6-10	6-4	5-11	5-7
	4x6	6-5	5-6	4-11	4-6	4-2	3-11	3-8
	4x8	8-5	7-3	6-6	5-11	5-6	5-2	4-10
	4x10	9-11	8-7	7-8	7-0	6-6	6-1	5-8
	4x12	11-5	9-11	8-10	8-1	7-6	7-0	6-7
	3-2x6	7-4	6-8	6-0	5-6	5-1	4-9	4-6
	3-2x8	9-8	8-6	7-7	6-11	6-5	6-0	5-8
	3-2x10	12-0	10-5	9-4	8-6	7-10	7-4	6-11
	3-2x12	13-11	12-1	10-9	9-10	9-1	8-6	8-1
For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm. a. Ground snow load, live load = 40 psf, dead load = 10 psf, L/Δ = 360 at main span,								

L/Δ = 180 at cantilever with a 220 pound point load applied at the end. b. Beams supporting deck joists from one side only. c. No 2 grade, wet service factor. d. Beam depth shall be greater than or equal to depth of joists with a flush beam condition. e. Includes incising factor. f. Northern species with no incising factor.

R507.7 Deck joist and deck beam bearing. The ends of each joist and beam shall have not less than 1.5 inches (38 mm) of bearing on wood or metal and not less than 3 inches (76 mm) on concrete or masonry for the entire width of the beam. Joist framing into the side of a ledger board or beam shall be supported by approved joist hangers. Joists bearing on a beam shall be attached to the beam to resist lateral displacement.

R507.7.1 Deck beam to deck post. Deck beams shall be attached to deck posts in accordance with Figure R507.7.1 or by other equivalent means capable to resist lateral displacement. Manufactured post-to-beam connectors shall be sized for the post and beam sizes. All bolts shall have washers under the head and nut.

Exception: Where deck beams bear directly on footings in accordance with Section R507.8.1.



For SI: 1 inch = 25.4 mm

Figure R507.7.1
Deck Beam to Deck Post

R507.8 Deck posts. For single level wood-framed decks with beams sized in accordance with Table R507.6, deck post size shall be in accordance with Table R507.8.

Table R507.8

Deck Post Height[a] (ft.)	
Deck Post Size	Maximum Height[a]
4x4	8
4x6	8
6x6	14
For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm. a. Measured to the underside of the beam.	

R507.8.1 Deck post to deck footing. Posts shall bear on footings in accordance with Section R403 and Figure R507.8.1. Posts shall be restrained to prevent lateral displacement at the footing. Lateral restraint shall be provided by manufactured connectors installed in accordance with the manufacturers' installation instructions or by a minimum post embedment of 12 inches (304.8 mm) in surrounding soils or concrete piers.

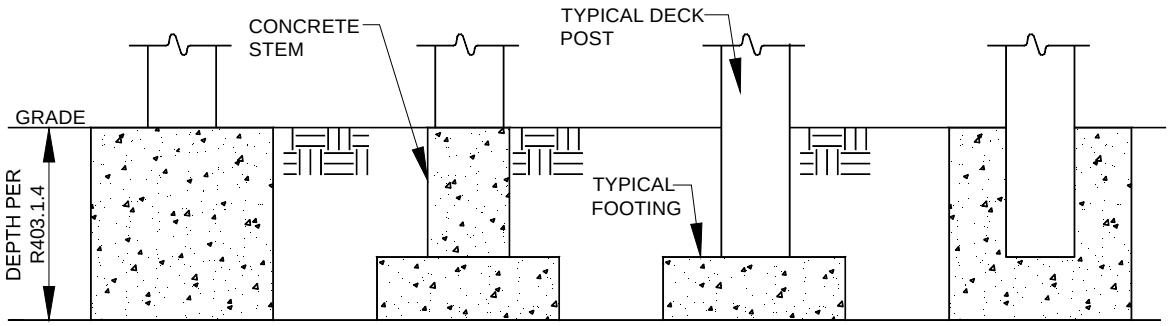


Figure R507.8.1
Typical Deck Posts to Deck Footings]

~~46. Modify Table R602.3(1) to change and add items as shown:~~

~~7~~	~~Built-up studs, face nail~~	~~10d (3"x0.128")~~	~~24" o.c.~~
~~7a~~	~~Abutting studs at intersecting wall corners, face nail~~	~~16d (3½"x0.135")~~	~~12" o.c.~~
~~26a~~	~~Rim joist or blocking to sill plate, toe nail~~	~~8d (2½"x0.113")~~	~~6" o.c.~~

[53. Change Section R602.3.1 to read:

R602.3.1 Stud size, height and spacing. The size, height and spacing of studs shall be in accordance with Table R602.3(5).

Exceptions:

1. Utility grade studs shall not be spaced more than 16 inches (406 mm) on center, shall not support more than a roof and ceiling, and shall not exceed 8 feet (2438 mm) in height for exterior walls and load-bearing walls or 10 feet (3048 mm) for interior nonload-bearing walls.

2. Where snow loads are less than or equal to 25 pounds per square foot (1.198 kPa), and the ultimate design wind speed is less than or equal to 130 mph (58.11 m/s), 2-inch by 6-inch (38 mm by 140 mm) studs supporting a roof load with not more than 6 feet (1829 mm) of tributary length shall have a maximum height of 18 feet (5486 mm) where spaced at 16 inches (406 mm) on center, or 20 feet (6096 mm) where spaced at 12 inches (305 mm) on center. Studs shall be minimum No. 2 grade lumber.

54. Delete Table R602.3.1.]

~~47. Add Section R602.3.5 to read:~~

~~R602.3.5 Braced wall panel uplift load path. Braced wall panels located at exterior walls that support roof rafters or trusses (including stories below top story) shall have the framing members connected in accordance with one of the following:~~

~~1. Fastening in accordance with Table R602.3(1) where:~~

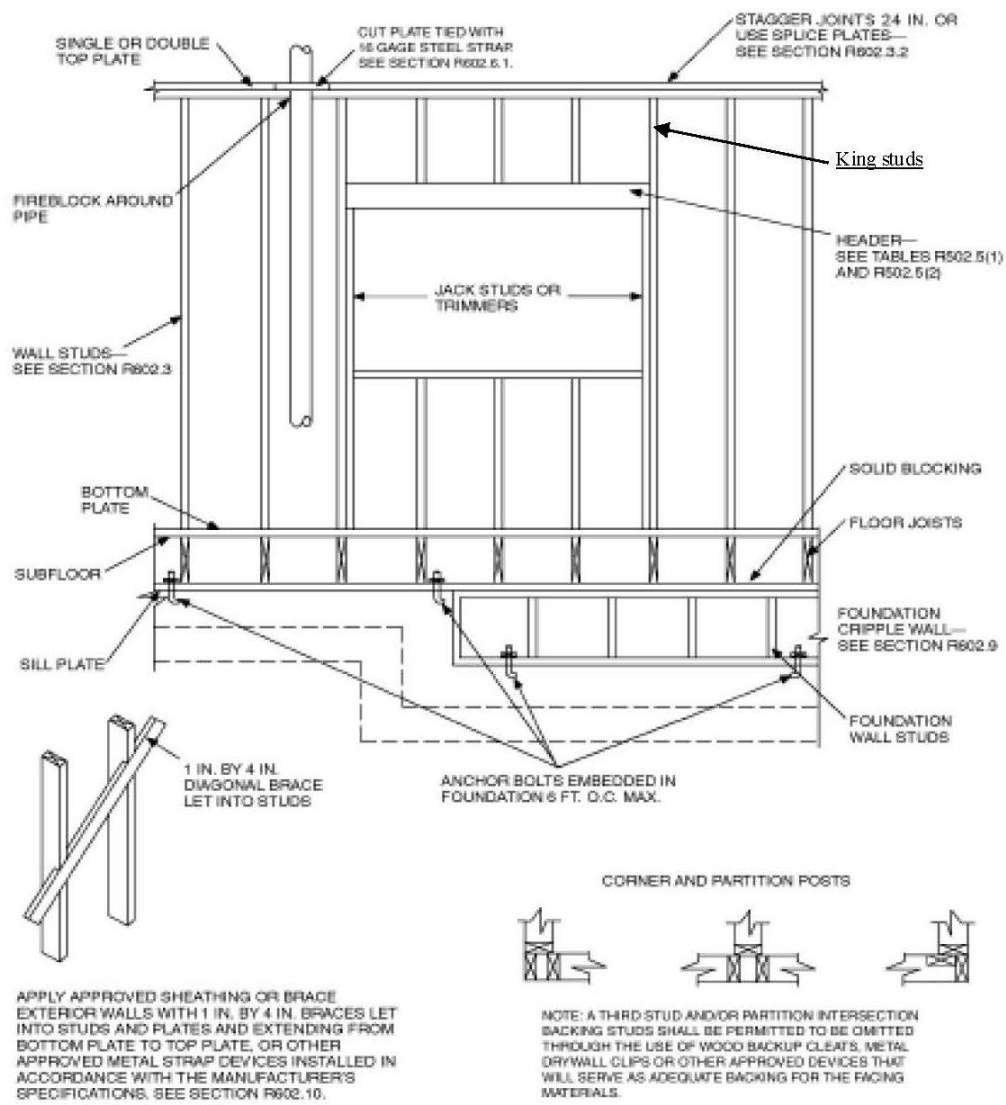
~~1.1. The basic wind speed does not exceed 90 mph (40 m/s), the wind exposure category is B, the roof pitch is 5:12 or greater, and the roof span is 32 feet (9754 mm) or less, or~~

~~1.2. The net uplift value at the top of a wall does not exceed 100 plf (146 N/mm). The net uplift value shall be determined in accordance with Section R802.11 and shall be permitted to be reduced by 60 plf (57 N/mm) for each full wall above.~~

~~2. Where the net uplift value at the top of a wall exceeds 100 plf (146 N/mm), installing approved uplift framing connectors to provide a continuous load path from the top of the wall to the foundation or to a point where the uplift force is 100 plf (146 N/mm) or less. The net uplift value shall be as determined in Item 1.2 above.~~

~~3. Wall sheathing and fasteners designed in accordance with accepted engineering practice to resist combined uplift and shear forces.~~

[~~41.~~ 55.] Change Figure R602.3(2) to read:



For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

FIGURE R602.3(2)
FRAMING DETAILS

[56. Change the column entries under the heading "Wood Species" in Table R602.7.1 to read:

Spruce-Pine-Fir Hem-Fir Douglas-Fir or No. 1 Grade Southern Pine

~~42.~~ 57.] Add Section R602.7.4 to read:

R602.7.4 Supports for headers. Headers shall be supported on each end with one or more jack studs in accordance with Table R505.5(1) or Table R502.5(2). A king stud

shall be adjacent to the jack stud on each end of the header and nailed at each end of the header with 4-12d nails.

~~48. Change Section R602.9 to read:~~

~~R602.9 Cripple walls. Foundation cripple walls shall be framed of studs not smaller than the studding above. When exceeding four feet (1219 mm) in height, such walls shall be framed of studs having the size required for an additional story.~~

~~Cripple walls with a stud height less than 14 inches (356 mm) shall be continuously sheathed on one side with wood structural panels fastened to both the top and bottom plates in accordance with Table R602.3(1), or the cripple walls shall be constructed of solid blocking. Cripple walls shall be supported on continuous foundations.~~

~~49. Replace Section R602.10, including all subsections, with the following~~:

~~R602.10 Wall bracing. Buildings shall be braced in accordance with this section or, when applicable, Section R602.12. Where a building, or portion thereof, does not comply with one or more of the bracing requirements in this section, those portions shall be designed and constructed in accordance with Section R301.1.~~

~~The building official may require the permit applicant to identify and locate on the construction documents braced wall lines and braced wall panels as described herein.~~

~~R602.10.1 Braced wall lines. For the purpose of determining the amount and location of bracing required in each story level of a building, braced wall lines shall be designated as straight lines in the building plan placed in accordance with this section.~~

~~R602.10.1.1 Length of a braced wall line. The length of a braced wall line shall be the distance between its ends. The end of a braced wall line shall be the intersection with a perpendicular braced wall line, an angled braced wall line as permitted in Section R602.10.1.4 or an exterior wall as shown in Figure R602.10.1.1.~~

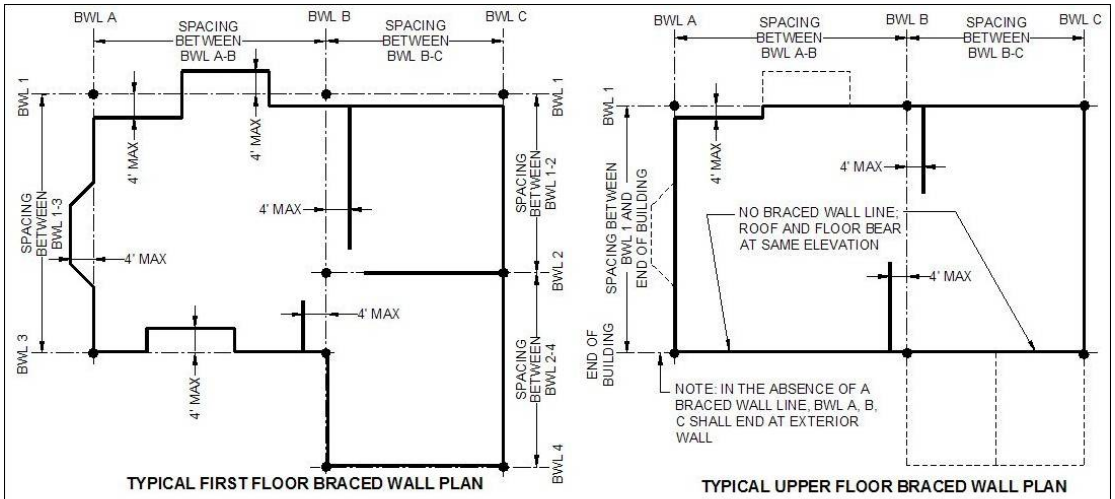


FIGURE R602.10.1.1
BRACED WALL LINES

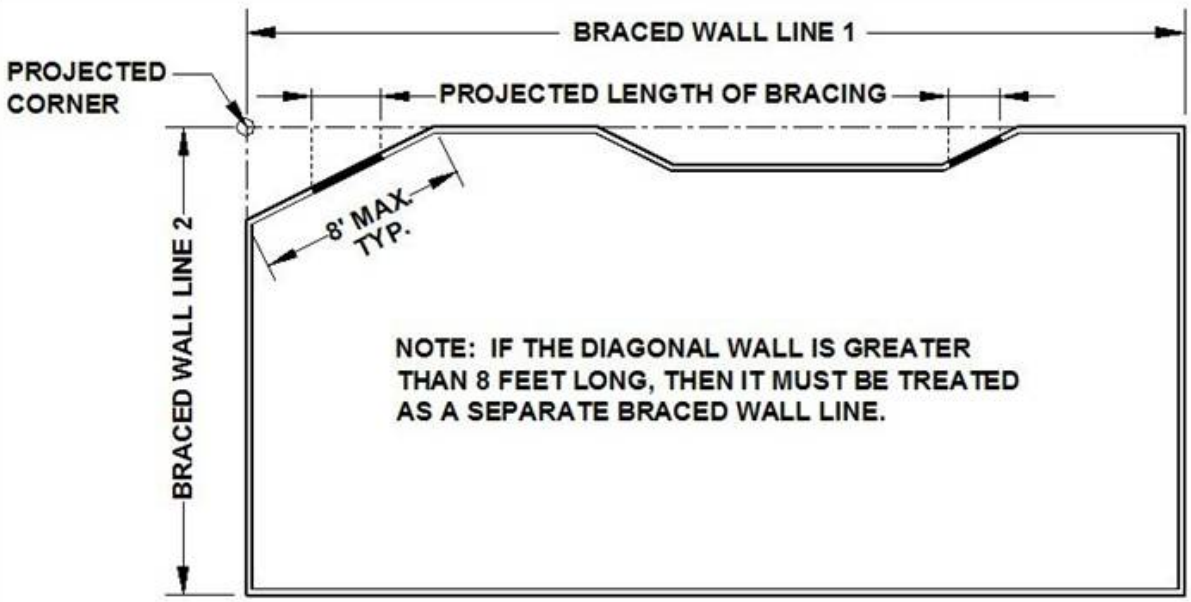
~~R602.10.1.2 Offsets along a braced wall line. All exterior walls parallel to a braced wall line shall be permitted to offset up to four feet (1219 mm) from the designated braced wall line location as shown Figure R602.10.1.1. Interior walls used as bracing shall be permitted to offset up to four feet (1219 mm) from a braced wall line through the interior of the building as shown in Figure R602.10.1.1.~~

~~R602.10.1.3 Spacing of braced wall lines. There shall be a minimum of two braced wall lines in both the longitudinal and transverse direction as shown in Figure R602.10.1.1. Intermediate braced wall lines through the interior of the building shall be permitted. The spacing between parallel braced wall lines shall be in accordance with Table R602.10.1.3.~~

~~Table R602.10.1.3~~ ~~Braced Wall Line Spacing~~				
~~APPLICATION~~	~~CONDITION~~	~~BUILDING TYPE~~	~~BRACED WALL LINE SPACING CRITERIA~~	
			~~Maximum Spacing~~	~~Exception to Maximum Spacing~~
~~Wind bracing~~	~~85 mph to <110 mph~~	~~Detached, townhouse~~	~~60 feet~~	~~None~~
~~Seismic bracing~~	~~SDC A - C~~	~~Detached~~	~~Use wind bracing~~	
	~~SDC A – B~~	~~Townhouse~~	~~Use wind bracing~~	
	~~SDC C~~	~~Townhouse~~	~~35 feet~~	~~Up to 50 feet when length of required bracing per Table R602.10.3(3) is adjusted in accordance with Table R602.10.3(4)~~

~~For SI: 1 foot=304.8 mm~~

~~R602.10.1.4 Angled walls. Any portion of a wall along a braced wall line shall be permitted to angle out of plane for a maximum diagonal length of eight feet (2438 mm). Where the angled wall occurs at a corner, the length of the braced wall line shall be measured from the projected corner as shown in Figure R602.10.1.4. Where the diagonal length is greater than eight feet (2438 mm), it shall be considered a separate braced wall line and shall be braced in accordance with Section R602.10.1.~~



For SI: 1 foot=304.8 mm

FIGURE R602.10.1.4
ANGLED WALLS

~~R602.10.2 Braced wall panels. Braced wall panels shall be full-height sections of wall that shall have no vertical or horizontal offsets. Braced wall panels shall be constructed and placed along a braced wall line in accordance with this section and the bracing methods specified in Section R602.10.4.~~

~~R602.10.2.1 Braced wall panel uplift load path. The bracing lengths in Table R602.10.3(1) apply only when uplift loads are resisted per Section R602.3.5.~~

~~R602.10.2.2 Locations of braced wall panels. A braced wall panel shall begin within 10 feet (3810 mm) from each end of a braced wall line as determined in accordance with Section R602.10.1.1. The distance between adjacent edges of braced wall panels along a braced wall line shall be no greater than 20 feet (6096 mm) as shown in Figure R602.10.2.2.~~

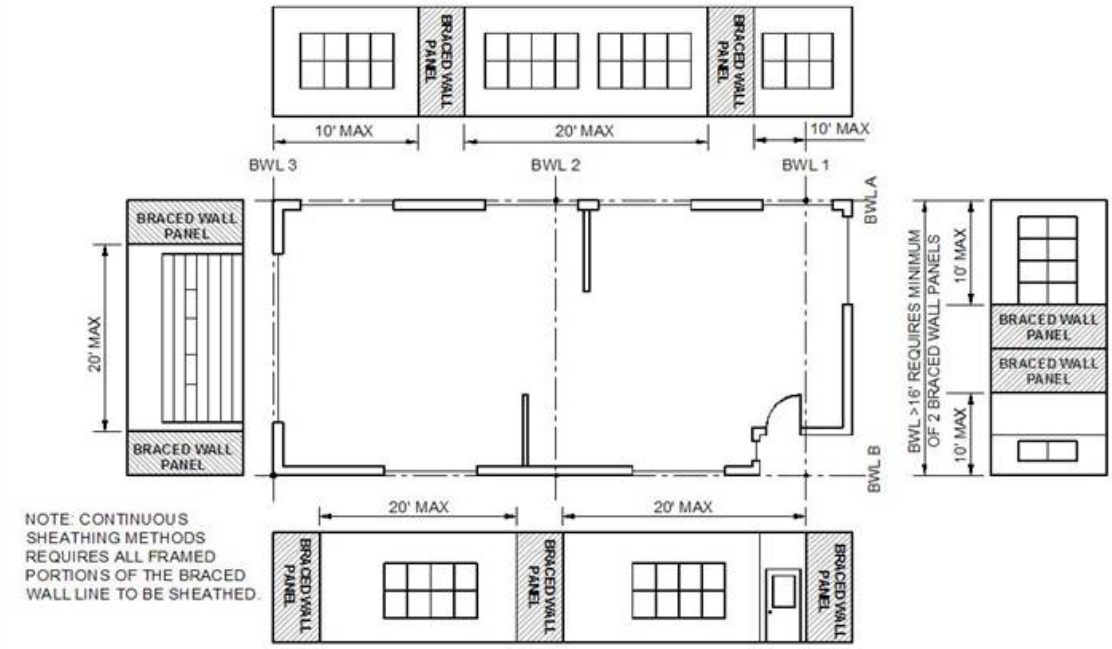


FIGURE R602.10.2.2
LOCATION OF BRACED WALL PANELS

~~R602.10.2.3 Minimum number of braced wall panels. Braced wall lines with a length of 16 feet (4877 mm) or less shall have a minimum of two braced wall panels of any length or one braced wall panel equal to 48 inches (1219 mm) or more. Braced wall lines greater than 16 feet (4877 mm) shall have a minimum of two braced wall panels.~~

~~R602.10.3 Required length of bracing. The required length of bracing along each braced wall line shall be determined as follows.~~

~~1. All buildings in Seismic Design Categories A and B shall use Table R602.10.3(1) and the applicable adjustment factors in Table R602.10.3(2).~~

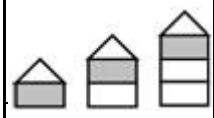
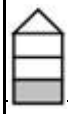
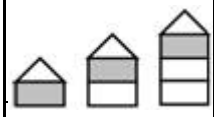
~~2. Detached buildings in Seismic Design Category C shall use Table R602.10.3(1) and the applicable adjustment factors in Table R602.10.3(2).~~

~~3. Townhouses in Seismic Design Category C shall use the greater value determined from Table R602.10.3(1) or R602.10.3(3) and the applicable adjustment factors in Table R602.10.3(2) or R602.10.3(4) respectively.~~

~~Only braced wall panels parallel to the braced wall line within the four foot (1219 mm) offset permitted by Section R602.10.1.2 shall contribute towards the required length of bracing of that braced wall line. If a braced wall panel is located along an angled wall and meets the minimum length requirements of Tables R602.10.5 or R602.10.5.2, it shall be permitted to contribute its projected length towards the minimum required length of bracing for the braced wall line as shown in Figure R602.10.1.4. If a braced wall panel is located along an angled wall at the end of a~~

~~braced wall line, it shall contribute its projected length for only one of the braced wall lines at the projected corner.~~

~~Table R602.10.3(1)~~ ~~Bracing Requirements Based on Wind Speed~~						
~~EXPOSURE CATEGORY B~~ ~~30 FT MEAN ROOF HEIGHT~~ ~~10 FT EAVE TO RIDGE HEIGHT~~ ~~10 FT WALL HEIGHT~~ ~~2 BRACED WALL LINES~~			~~MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE[a]~~			
~~Basic Wind Speed (mph)~~	~~Story Location~~	~~Braced Wall Line Spacing (feet)~~	~~Method LIB[b]~~	~~Method GB~~	~~Methods DWB, WSP, SFB, PBS, PCP, HPS, CS-SFB[c]~~	~~Methods CS-WSP, CS-G, CS-PF~~
~~≤ 85~~		~~10~~	~~3.5~~	~~3.5~~	~~2.0~~	~~1.5~~
		~~20~~	~~6.0~~	~~6.0~~	~~3.5~~	~~3.0~~
		~~30~~	~~8.5~~	~~8.5~~	~~5.0~~	~~4.5~~
		~~40~~	~~11.5~~	~~11.5~~	~~6.5~~	~~5.5~~
		~~50~~	~~14.0~~	~~14.0~~	~~8.0~~	~~7.0~~
		~~60~~	~~16.5~~	~~16.5~~	~~9.5~~	~~8.0~~
		~~10~~	~~6.5~~	~~6.5~~	~~3.5~~	~~3.0~~
		~~20~~	~~11.5~~	~~11.5~~	~~6.5~~	~~5.5~~
		~~30~~	~~16.5~~	~~16.5~~	~~9.5~~	~~8.0~~
		~~40~~	~~21.5~~	~~21.5~~	~~12.5~~	~~10.5~~
		~~50~~	~~26.5~~	~~26.5~~	~~15.0~~	~~13.0~~
		~~60~~	~~31.5~~	~~31.5~~	~~18.0~~	~~15.5~~
		~~10~~	~~NP~~	~~9.0~~	~~5.5~~	~~4.5~~
		~~20~~	~~NP~~	~~17.0~~	~~10.0~~	~~8.5~~
		~~30~~	~~NP~~	~~24.5~~	~~14.0~~	~~12.0~~
		~~40~~	~~NP~~	~~32.0~~	~~18.0~~	~~15.5~~
		~~50~~	~~NP~~	~~39.0~~	~~22.5~~	~~19.0~~
		~~60~~	~~NP~~	~~46.5~~	~~26.5~~	~~22.5~~
~~≤ 90~~		~~10~~	~~3.5~~	~~3.5~~	~~2.0~~	~~2.0~~
		~~20~~	~~7.0~~	~~7.0~~	~~4.0~~	~~3.5~~
		~~30~~	~~9.5~~	~~9.5~~	~~5.5~~	~~5.0~~
		~~40~~	~~12.5~~	~~12.5~~	~~7.5~~	~~6.0~~
		~~50~~	~~15.5~~	~~15.5~~	~~9.0~~	~~7.5~~
		~~60~~	~~18.5~~	~~18.5~~	~~10.5~~	~~9.0~~
		~~10~~	~~7.0~~	~~7.0~~	~~4.0~~	~~3.5~~
		~~20~~	~~13.0~~	~~13.0~~	~~7.5~~	~~6.5~~
		~~30~~	~~18.5~~	~~18.5~~	~~10.5~~	~~9.0~~
		~~40~~	~~24.0~~	~~24.0~~	~~14.0~~	~~12.0~~
		~~50~~	~~29.5~~	~~29.5~~	~~17.0~~	~~14.5~~
		~~60~~	~~35.0~~	~~35.0~~	~~20.0~~	~~17.0~~

~~Table R602.10.3(1)~~ ~~Bracing Requirements Based on Wind Speed~~						
~~EXPOSURE CATEGORY B~~ ~~30 FT MEAN ROOF HEIGHT~~ ~~10 FT EAVE TO RIDGE HEIGHT~~ ~~10 FT WALL HEIGHT~~ ~~2 BRACED WALL LINES~~			~~MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE[a]~~			
~~Basic Wind Speed (mph)~~	~~Story Location~~	~~Braced Wall Line Spacing (feet)~~	~~Method LIB[b]~~	~~Method GB~~	~~Methods DWB, WSP, SFB, PBS, PCP, HPS, CS-SFB[c]~~	~~Methods CS-WSP, CS-G, CS-PF~~
		~~10~~	~~NP~~	~~10.5~~	~~6.0~~	~~5.0~~
		~~20~~	~~NP~~	~~19.0~~	~~11.0~~	~~9.5~~
		~~30~~	~~NP~~	~~27.5~~	~~15.5~~	~~13.5~~
		~~40~~	~~NP~~	~~35.5~~	~~20.5~~	~~17.5~~
		~~50~~	~~NP~~	~~44.0~~	~~25.0~~	~~21.5~~
		~~60~~	~~NP~~	~~52.0~~	~~30.0~~	~~25.5~~
~~≤ 100~~		~~10~~	~~4.5~~	~~4.5~~	~~2.5~~	~~2.5~~
		~~20~~	~~8.5~~	~~8.5~~	~~5.0~~	~~4.0~~
		~~30~~	~~12.0~~	~~12.0~~	~~7.0~~	~~6.0~~
		~~40~~	~~15.5~~	~~15.5~~	~~9.0~~	~~7.5~~
		~~50~~	~~19.0~~	~~19.0~~	~~11.0~~	~~9.5~~
		~~60~~	~~22.5~~	~~22.5~~	~~13.0~~	~~11.0~~
		~~10~~	~~8.5~~	~~8.5~~	~~5.0~~	~~4.5~~
		~~20~~	~~16.0~~	~~16.0~~	~~9.0~~	~~8.0~~
		~~30~~	~~23.0~~	~~23.0~~	~~13.0~~	~~11.0~~
		~~40~~	~~29.5~~	~~29.5~~	~~17.0~~	~~14.5~~
		~~50~~	~~36.5~~	~~36.5~~	~~21.0~~	~~18.0~~
		~~60~~	~~43.5~~	~~43.5~~	~~25.0~~	~~21.0~~
		~~10~~	~~NP~~	~~12.5~~	~~7.5~~	~~6.0~~
		~~20~~	~~NP~~	~~23.5~~	~~13.5~~	~~11.5~~
		~~30~~	~~NP~~	~~34.0~~	~~19.5~~	~~16.5~~
		~~40~~	~~NP~~	~~44.0~~	~~25.0~~	~~21.5~~
		~~50~~	~~NP~~	~~54.0~~	~~31.0~~	~~26.5~~
		~~60~~	~~NP~~	~~64.0~~	~~36.5~~	~~31.0~~
~~< 110~~		~~10~~	~~5.5~~	~~5.5~~	~~3.0~~	~~3.0~~
		~~20~~	~~10.0~~	~~10.0~~	~~6.0~~	~~5.0~~
		~~30~~	~~14.5~~	~~14.5~~	~~8.5~~	~~7.0~~
		~~40~~	~~18.5~~	~~18.5~~	~~11.0~~	~~9.0~~
		~~50~~	~~23.0~~	~~23.0~~	~~13.0~~	~~11.5~~
		~~60~~	~~27.5~~	~~27.5~~	~~15.5~~	~~13.5~~
		~~10~~	~~10.5~~	~~10.5~~	~~6.0~~	~~5.0~~
		~~20~~	~~19.0~~	~~19.0~~	~~11.0~~	~~9.5~~

~~Table R602.10.3(1)~~
~~Bracing Requirements Based on Wind Speed~~

~~EXPOSURE CATEGORY B~~ ~~30 FT MEAN ROOF HEIGHT~~ ~~10 FT EAVE TO RIDGE HEIGHT~~ ~~10 FT WALL HEIGHT~~ ~~2 BRACED WALL LINES~~			~~MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE[a]~~			
~~Basic Wind Speed (mph)~~	~~Story Location~~	~~Braced Wall Line Spacing (feet)~~	~~Method LIB[b]~~	~~Method GB~~	~~Methods DWB, WSP, SFB, PBS, PCP, HPS, CS-SFB[c]~~	~~Methods CS-WSP, CS-G, CS-PF~~
		~~30~~	~~27.5~~	~~27.5~~	~~16.0~~	~~13.5~~
		~~40~~	~~36.0~~	~~36.0~~	~~20.5~~	~~17.5~~
		~~50~~	~~44.0~~	~~44.0~~	~~25.5~~	~~21.5~~
		~~60~~	~~52.5~~	~~52.5~~	~~30.0~~	~~25.5~~
		~~10~~	~~0~~	~~15.5~~	~~9.0~~	~~7.5~~
		~~20~~	~~NP~~	~~28.5~~	~~16.5~~	~~14.0~~
		~~30~~	~~NP~~	~~41.0~~	~~23.5~~	~~20.0~~
		~~40~~	~~NP~~	~~53.0~~	~~30.5~~	~~26.0~~
		~~50~~	~~NP~~	~~65.5~~	~~37.5~~	~~32.0~~
		~~60~~	~~NP~~	~~77.5~~	~~44.5~~	~~37.5~~

~~For SI: 1 inch=25.4 mm, 1 foot=305 mm.~~

~~[a]Linear interpolation shall be permitted.~~

~~[b]Method LIB shall have gypsum board fastened to at least one side with nails or screws per Table R602.3(1) for exterior sheathing or Table R702.3.5 for interior gypsum board. Spacing of fasteners at panel edges shall not exceed eight inches (203 mm).~~

~~[c]Method CS-SFB does not apply where the wind speed is greater than 100 mph.~~

~~Table R602.10.3(2)~~
~~Wind Adjustment Factors to the Required Length of Wall Bracing~~

~~ADJUSTMENT BASED ON~~	~~STORY/ SUPPORTING~~	~~CONDITION~~	~~ADJUSTMENT FACTOR[a,b] (multiply length from Table R602.10.3(1) by this factor)~~	~~APPLICABLE METHODS~~
~~Exposure category~~	~~One story structure~~	~~B~~	~~1.00~~	~~All methods~~
		~~C~~	~~1.20~~	

		~~D~~	~~1.50~~	
	~~Two-story structure~~	~~B~~	~~1.00~~	
		~~C~~	~~1.30~~	
		~~D~~	~~1.60~~	
	~~Three-story structure~~	~~B~~	~~1.00~~	
		~~C~~	~~1.40~~	
		~~D~~	~~1.70~~	
~~Roof eave-to-ridge height~~	~~Roof only~~	~~≤5 ft~~	~~0.70~~	
		~~10 ft~~	~~1.00~~	
		~~15 ft~~	~~1.30~~	
		~~20 ft~~	~~1.60~~	
	~~Roof + 1 floor~~	~~≤5 ft~~	~~0.85~~	
		~~10 ft~~	~~1.00~~	
		~~15 ft~~	~~1.15~~	
		~~20 ft~~	~~1.30~~	
	~~Roof + 2 floors~~	~~≤5 ft~~	~~0.90~~	
		~~10 ft~~	~~1.00~~	
		~~15 ft~~	~~1.10~~	
		~~20 ft~~	~~Not permitted~~	
~~Wall height adjustment~~	~~Any story~~	~~8 ft~~	~~0.90~~	
		~~9 ft~~	~~0.95~~	
		~~10 ft~~	~~1.00~~	
		~~11 ft~~	~~1.05~~	
		~~12 ft~~	~~1.10~~	
~~Number of braced wall lines (per plan direction)~~[c]	~~Any story~~	~~2~~	~~1.00~~	
		~~3~~	~~1.30~~	
		~~4~~	~~1.45~~	
		~~≥5~~	~~1.60~~	
~~Additional 800 lb hold-down device~~	~~Top story only~~	~~Fastened to the end studs of each braced wall panel and to the foundation or framing below~~	~~0.80~~	~~DWB, WSP, SFB, PBS, PCP, HPS~~
~~Interior gypsum board finish (or equivalent)~~	~~Any story~~	~~Omitted from inside face of braced wall panels~~	~~1.40~~	~~DWB, WSP, SFB,PBS, PCP, HPS, CS-WSP, CS-G, CS-SFB~~
~~Gypsum board fastening~~	~~Any story~~	~~4 in. o.c. at panel edges, including top and bottom plates, and all horizontal joints blocked~~	~~0.7~~	~~GB~~

~~For SI: 1 foot=305 mm, 1 lb=4.48 N.~~

[a]~~Linear interpolation shall be permitted.~~

[b]~~The total adjustment factor is the product of all applicable adjustment factors.~~

[c]~~The adjustment factor is permitted to be 1.0 when determining bracing amounts of intermediate braced wall lines provided the bracing amounts on adjacent braced wall lines are based on a spacing and number that neglects the intermediate braced wall line.~~

~~Table R602.10.3(3)~~
~~Bracing Requirements Based on Seismic Design Category~~

~~SOIL CLASS D[b]~~ ~~WALL HEIGHT = 10 FT~~ ~~10 PSF FLOOR DEAD LOAD~~ ~~15 PSF ROOF/CEILING DEAD LOAD~~ ~~BRACED WALL LINE SPACING ≤ 25 FT~~			~~MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE[a]~~				
~~Seismic Design Category~~	~~Story Location~~	~~Braced Wall Line Length (ft)~~	~~Method LIB[c]~~	~~Method GB~~	~~Methods DWB, SFB, PBS, PCP, HPS, CS-SFB~~	~~Method WSP~~	~~Methods CS-WSP, CS-G~~
~~C (townhouses only)~~		~~10~~	~~2.5~~	~~2.5~~	~~2.5~~	~~1.6~~	~~1.4~~
		~~20~~	~~5.0~~	~~5.0~~	~~5.0~~	~~3.2~~	~~2.7~~
		~~30~~	~~7.5~~	~~7.5~~	~~7.5~~	~~4.8~~	~~4.1~~
		~~40~~	~~10.0~~	~~10.0~~	~~10.0~~	~~6.4~~	~~5.4~~
		~~50~~	~~12.5~~	~~12.5~~	~~12.5~~	~~8.0~~	~~6.8~~
		~~10~~	~~NP~~	~~4.5~~	~~4.5~~	~~3.0~~	~~2.6~~
		~~20~~	~~NP~~	~~9.0~~	~~9.0~~	~~6.0~~	~~5.1~~
		~~30~~	~~NP~~	~~13.5~~	~~13.5~~	~~9.0~~	~~7.7~~
		~~40~~	~~NP~~	~~18.0~~	~~18.0~~	~~12.0~~	~~10.2~~
		~~50~~	~~NP~~	~~22.5~~	~~22.5~~	~~15.0~~	~~12.8~~
		~~10~~	~~NP~~	~~6.0~~	~~6.0~~	~~4.5~~	~~3.8~~
		~~20~~	~~NP~~	~~12.0~~	~~12.0~~	~~9.0~~	~~7.7~~
		~~30~~	~~NP~~	~~18.0~~	~~18.0~~	~~13.5~~	~~11.5~~
		~~40~~	~~NP~~	~~24.0~~	~~24.0~~	~~18.0~~	~~15.3~~
		~~50~~	~~NP~~	~~30.0~~	~~30.0~~	~~22.5~~	~~19.1~~

~~For SI: 1 foot=305 mm~~

[a]~~Linear interpolation shall be permitted.~~

[b]~~Wall bracing lengths are based on a soil site class "D." Interpolation of bracing length between the S_{ds} values associated with the Seismic Design Categories shall be permitted when a site-specific S_{ds} value is determined in accordance with Section 1613.5 of the International Building~~

~~Table R602.10.3(3)~~ ~~Bracing Requirements Based on Seismic Design Category~~							
~~SOIL CLASS D[b]~~ ~~WALL HEIGHT = 10 FT~~ ~~10 PSF FLOOR DEAD LOAD~~ ~~15 PSF ROOF/CEILING DEAD LOAD~~ ~~BRACED WALL LINE SPACING ≤ 25 FT~~			~~MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE[a]~~				
~~Seismic Design Category~~	~~Story Location~~	~~Braced Wall Line Length (ft)~~	~~Method LIB[e]~~	~~Method GB~~	~~Methods DWB, SFB, PBS, PCP, HPS, CS-SFB~~	~~Method WSP~~	~~Methods CS-WSP, CS-G~~
~~Code.~~ ~~[e]Method LIB shall have gypsum board fastened to at least one side with nails or screws per Table R602.3(1) for exterior sheathing or Table R702.3.5 for interior gypsum board. Spacing of fasteners at panel edges shall not exceed eight inches (203 mm).~~							

~~Table R602.10.3(4)~~ ~~Seismic Adjustment Factors to the Required Length of Wall Bracing~~				
~~ADJUSTMENT BASED ON:~~	~~STORY/SUPPORTING~~	~~CONDITION~~	~~ADJUSTMENT FACTOR[a,b] (multiply length from Table R602.10.3(3) by this factor)~~	~~APPLICABLE METHODS~~
~~Story height (Section 301.3)~~	~~Any story~~	~~≤10 ft~~	~~1.0~~	~~All methods~~
		~~>10 ft ≤ 12 ft~~	~~1.2~~	
~~Braced wall line spacing~~	~~Any story~~	~~≤35 ft~~	~~1.0~~	
		~~>35 ft ≤ 50 ft~~	~~1.43~~	
~~Wall dead load~~	~~Any story~~	~~> 8 psf < 15 psf~~	~~1.0~~	
		~~<8 psf~~	~~0.85~~	
~~Roof/ceiling dead load for wall supporting~~	~~Any story~~	~~≤15 psf~~	~~1.0~~	
	~~Roof plus one or two stories~~	~~>15 psf ≤ 25 psf~~	~~1.1~~	
	~~Roof only~~	~~>15 psf ≤ 25 psf~~	~~1.2~~	
~~Walls with stone or masonry veneer[e]~~		~~1.0~~		
		~~1.5~~		

		1.5		
Interior gypsum board finish (or equivalent)	Any story	Omitted from inside face of braced wall panels	1.5	DWB, WSP, SFB, PBS, PCP, HPS, CS-WSP, CS-G, CS-SFB

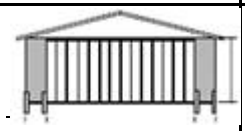
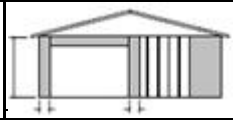
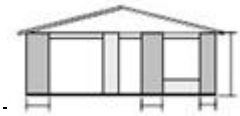
For SI: 1 psf=47.8 N/m^2.
[a]Linear interpolation shall be permitted.
[b]The total length of bracing required for a given wall line is the product of all applicable adjustment factors.
[c]The length-to-width ratio for the floor/roof diaphragm shall not exceed 3:1. The top plate lap splice nailing shall be a minimum of 12-16d nails on each side of the splice.

R602.10.4 Bracing methods for braced wall panels. Braced wall panels shall be constructed in accordance with this section and the methods listed in Table R602.10.4.

Table R602.10.4
Bracing Methods

METHODS, MATERIAL		MINIMUM THICKNESS	FIGURE	CONNECTION CRITERIA[a]	
				Fasteners	Spacing
Intermittent Bracing Methods	LIB Let-in-bracing	1x4 wood or approved metal straps at 45° to 60° angles for maximum 16" stud spacing		Wood: 2-8d common nails or 3-8d (2 ½" long x 0.113" dia.) nails	Wood: per stud and top and bottom plates
				Metal: per manufacturer	Metal: per manufacturer
	DWB Diagonal wood boards	¾" (1" nominal) for maximum 24" stud spacing		2-8d (2½" long x 0.113" dia.) nails or 2 - 1¾" long staples	Per stud
	WSP Wood structural panel (See Section R604)	$^3/_8$"		Exterior sheathing per Table R602.3(3)	6" edges 12" field
				Interior sheathing per Table	Varies by fastener

				~~R602.3(1) or R602.3(2)~~	
	~~SFB Structural fiberboard sheathing~~	~~$^{1}/_{2}$" or $^{25}/_{32}$" for maximum 16" stud spacing~~		~~1½" long x 0.12" dia. (for ½ " thick sheathing)~~ ~~$1^{3}/_{4}$" long x 0.12" dia. (for $^{25}/_{32}$" thick sheathing)~~ ~~galvanized roofing nails or 8d common (2½" long x 0.131" dia.) nails~~	3" edges 6" field
	~~GB Gypsum board~~	~~$^{1}/_{2}$"~~		~~Nails or screws per Table R602.3(1) for exterior locations~~ ~~Nails or screws per Table R702.3.5 for interior locations~~	For all braced wall panel locations: 7" edges (including top and bottom plates) 7" field
	~~PBS Particleboard sheathing (See Section R605)~~	~~$^{3}/_{8}$" or $^{1}/_{2}$" For maximum16" stud spacing~~		~~For 3/8", 6d common (2" long x 0.113" dia.) nails~~ ~~For ½", 8d common (2½" long x 0.131" dia.) nails~~	3" edges 6" field
	~~PCP Portland cement plaster~~	~~See Section R703.6 for maximum 16" stud spacing~~		~~1½" long, 11 gage, $^{7}/_{16}$" dia. head nails or~~	6" o.c. on all framing members

				~~7/8" long, 16 gage staples~~	
	~~HPS Hardboard panel siding~~	~~7/16" for maximum 16" stud spacing~~		~~0.092" dia., 0.225" dia. head nails with length to accommodate 1½" penetration into studs~~	~~4" edges 8" field~~
	~~ABW Alternate braced wall~~	~~3/8"~~		~~See Section R602.10.6.1~~	~~See Section R602.10.6.1~~
	~~PFH Portal frame with hold-downs~~	~~3/8~~		~~See Section R602.10.6.2~~	~~See Section R602.10.6.2~~
	~~PFG Portal frame at garage~~	~~7/16"~~		~~See Section R602.10.6.3~~	~~See Section R602.10.6.3~~
Continuous Sheathing Methods	~~CS-WSP Continuously sheathed wood structural panel~~	~~3/8"~~		~~Exterior sheathing per Table R602.3(3)~~	~~6" edges 12" field~~
				~~Interior sheathing per Table R602.3(1) or R602.3(2)~~	~~Varies by fastener~~
	~~CS-G[b,c] Continuously sheathed wood structural panel adjacent to garage openings~~	~~3/8"~~		~~See Method CS-WSP~~	~~See Method CS-WSP~~
	~~CS-PF Continuously sheathed portal frame~~	~~7/16"~~		~~See Section R602.10.6.4~~	~~See Section R602.10.6.4~~

	~~CS-SFB[d] Continuously sheathed structural fiberboard~~	~~1/2" or 25/32" for maximum 16" stud spacing~~		~~1½" long x 0.12" dia. (for ½ " thick sheathing) 1 3/4" long x 0.12" dia. (for 25/32" thick sheathing) galvanized roofing nails or 8d common (2½" long x 0.131 dia.) nails~~	~~3" edges 6" field~~

~~For SI: 1 inch = 25.4 mm, 1 foot = 305 mm.~~

~~[a]Adhesive attachment of wall sheathing, including Method GB, shall not be permitted in townhouses in Seismic Design Category C.~~

~~[b]Applies to panels next to garage door opening when supporting gable end wall or roof load only. May only be used on one wall of the garage.~~

~~[c]Garage openings adjacent to a Method CS-G panel shall be provided with a header in accordance with Table R502.5(1). A full height clear opening shall not be permitted adjacent to a Method CS-G panel.~~

~~[d]Method CS-SFB does not apply in areas where the wind speed exceeds 100 mph.~~

~~R602.10.4.1 Mixing methods. Mixing of bracing methods shall be permitted as follows:~~

~~1. Mixing intermittent bracing and continuous sheathing methods from story to story shall be permitted.~~

~~2. Mixing intermittent bracing methods from braced wall line to braced wall line within a story shall be permitted. In regions where the basic wind speed is less than or equal to 100 mph, mixing of intermittent bracing and continuous sheathing methods from braced wall line to braced wall line within a story shall be permitted.~~

~~3. Mixing intermittent bracing methods along a braced wall line shall be permitted in Seismic Design Categories A and B, and detached dwellings in Seismic Design Category C provided the length of required bracing in accordance with Table R602.10.3(1) or R602.10.3(3) is the highest value of all intermittent bracing methods used.~~

~~4. Mixing of continuous sheathing methods CS-WSP, CS-G and CS-PF along a braced wall line shall be permitted.~~

~~5. In Seismic Design Categories A and B, and for detached one-family and two-family dwellings in Seismic Design Category C, mixing of intermittent bracing methods along the interior portion of a braced wall line with continuous sheathing methods CS-WSP, CS-G and CS-PF along the exterior portion of the same braced~~

~~wall line shall be permitted. The length of required bracing shall be the highest value of all intermittent bracing methods used in accordance with Table R602.10.3(1) or R602.10.3(3) as adjusted by Tables R602.10.3(2) and R602.10.3(4), respectively. The requirements of Section R602.10.7 shall apply to each end of the continuously sheathed portion of the braced wall line.~~

~~R602.10.4.2 Continuous sheathing methods. Continuous sheathing methods require structural panel sheathing to be used on all sheathable surfaces on one side of a braced wall line including areas above and below openings and gable end walls and shall meet the requirements of Section R602.10.7.~~

~~R602.10.4.3 Braced wall panel interior finish material. Braced wall panels shall have gypsum wall board installed on the side of the wall opposite the bracing material. Gypsum wall board shall be not less than 1/2 inch (12.7 mm) in thickness and be fastened with nails or screws in accordance with Table R602.3(1) for exterior sheathing or Table R702.3.5 for interior gypsum wall board. Spacing of fasteners at panel edges for gypsum wall board opposite Method LIB bracing shall not exceed eight inches (203 mm). Interior finish material shall not be glued in townhouses in Seismic Category C.~~

~~Exceptions:~~

~~1. Interior finish material is not required opposite wall panels that are braced in accordance with Method GB, ABW, PFH, PFG and CS-PF, unless otherwise required by Section R302.6.~~

~~2. An approved interior finish material with an in-plane shear resistance equivalent to gypsum board shall be permitted to be substituted, unless otherwise required by Section R302.6.~~

~~3. Except for Method LIB, gypsum wall board is permitted to be omitted provided the required length of bracing in Tables R602.10.3(1) and R602.10.3(3) is multiplied by the appropriate adjustment factor in Tables R602.10.3(2) and R602.10.3(4) respectively, unless otherwise required by Section R302.6.~~

~~R602.10.5 Minimum length of a braced wall panel. The minimum length of a braced wall panel shall comply with Table R602.10.5. For Methods CS-WSP and CS-SFB, the minimum panel length shall be based on the vertical dimension of the adjacent opening in accordance with Table R602.10.5 and Figure R602.10.5. When a panel has openings on either side of differing heights, the larger vertical dimension shall be used to determine the minimum braced wall panel length.~~

~~R602.10.5.1 Contributing length. For purposes of complying with the required length of bracing in Tables R602.10.3(1) and R602.10.3(3), the contributing length of each braced wall panel to the total length of bracing shall be as specified in Table R602.10.5.~~

~~Table R602.10.5~~

~~Minimum Length of Braced Wall Panels~~							
~~METHOD (See Table R602.10.4)~~		~~MINIMUM LENGTH[a] (in)~~					~~CONTRIBUTING LENGTH (in)~~
		~~Wall Height~~					
		~~8 ft~~	~~9 ft~~	~~10 ft~~	~~11 ft~~	~~12 ft~~	
~~DWG, WSP, SFB, PBS, PCP, HPS~~		~~48~~	~~48~~	~~48~~	~~53~~	~~58~~	~~Actual[b]~~
~~GB~~		~~48~~	~~48~~	~~48~~	~~53~~	~~58~~	~~Double sided = Actual Single sided = 0.5 x Actual~~
~~LIB~~		~~55~~	~~62~~	~~69~~	~~NP~~	~~NP~~	~~Actual[b]~~
~~ABW~~		~~28~~	~~32~~	~~34~~	~~38~~	~~42~~	~~48~~
~~PFH~~	~~Supporting roof only~~	~~16~~	~~16~~	~~16~~	~~18[e]~~	~~20[e]~~	~~48~~
	~~Supporting one story and roof~~	~~24~~	~~24~~	~~24~~	~~27[e]~~	~~29[e]~~	~~48~~
~~PFG~~		~~24~~	~~27~~	~~30~~	~~33[e]~~	~~36[e]~~	~~1.5 x Actual[b]~~
~~CS-G~~		~~24~~	~~27~~	~~30~~	~~33~~	~~36~~	~~Actual[b]~~
~~CS-PF~~		~~16~~	~~18~~	~~20~~	~~22[e]~~	~~24[e]~~	~~Actual[b]~~
~~CS-WSP, CS-SFB~~	~~Adjacent opening vertical dimension (in)~~	-	-	-	-	-	-
	~~≤ 64~~	~~24~~	~~27~~	~~30~~	~~33~~	~~36~~	~~Actual[b]~~
	~~68~~	~~26~~	~~27~~	~~30~~	~~33~~	~~36~~	
	~~72~~	~~27~~	~~27~~	~~30~~	~~33~~	~~36~~	
	~~76~~	~~30~~	~~29~~	~~30~~	~~33~~	~~36~~	
	~~80~~	~~32~~	~~30~~	~~30~~	~~33~~	~~36~~	
	~~84~~	~~35~~	~~32~~	~~32~~	~~33~~	~~36~~	
	~~88~~	~~38~~	~~35~~	~~33~~	~~33~~	~~36~~	
	~~92~~	~~43~~	~~37~~	~~35~~	~~35~~	~~36~~	
	~~96~~	~~48~~	~~41~~	~~38~~	~~36~~	~~36~~	
	~~100~~	-	~~44~~	~~40~~	~~38~~	~~38~~	
	~~104~~	-	~~49~~	~~43~~	~~40~~	~~39~~	
	~~108~~	-	~~54~~	~~46~~	~~43~~	~~41~~	
	~~112~~	-	-	~~50~~	~~45~~	~~43~~	
	~~116~~	-	-	~~55~~	~~48~~	~~45~~	
	~~120~~	-	-	~~60~~	~~52~~	~~48~~	
	~~124~~	-	-	-	~~56~~	~~51~~	
	~~128~~	-	-	-	~~61~~	~~54~~	
	~~132~~	-	-	-	~~66~~	~~58~~	
	~~136~~	-	-	-	-	~~62~~	
	~~140~~	-	-	-	-	~~66~~	

	~~144~~	~~-~~	~~-~~	~~-~~	~~-~~	~~72~~

~~For SI: 1 inch=25.4 mm~~
~~NP=Not permitted~~
~~[a]Linear interpolation shall be permitted.~~
~~[b]Use the actual length provided it is greater than or equal to the minimum length.~~
~~[c]Maximum header height for is 10'; however, wall height may be increased to 12' with a pony wall per Table R602.10.6.4.~~

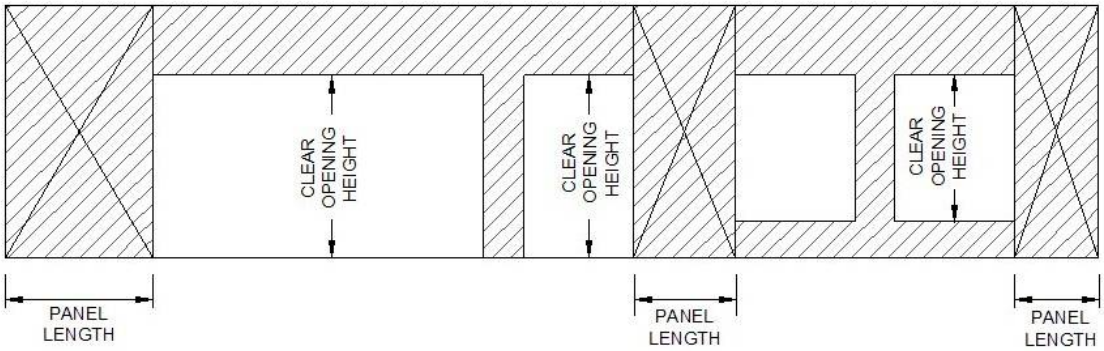


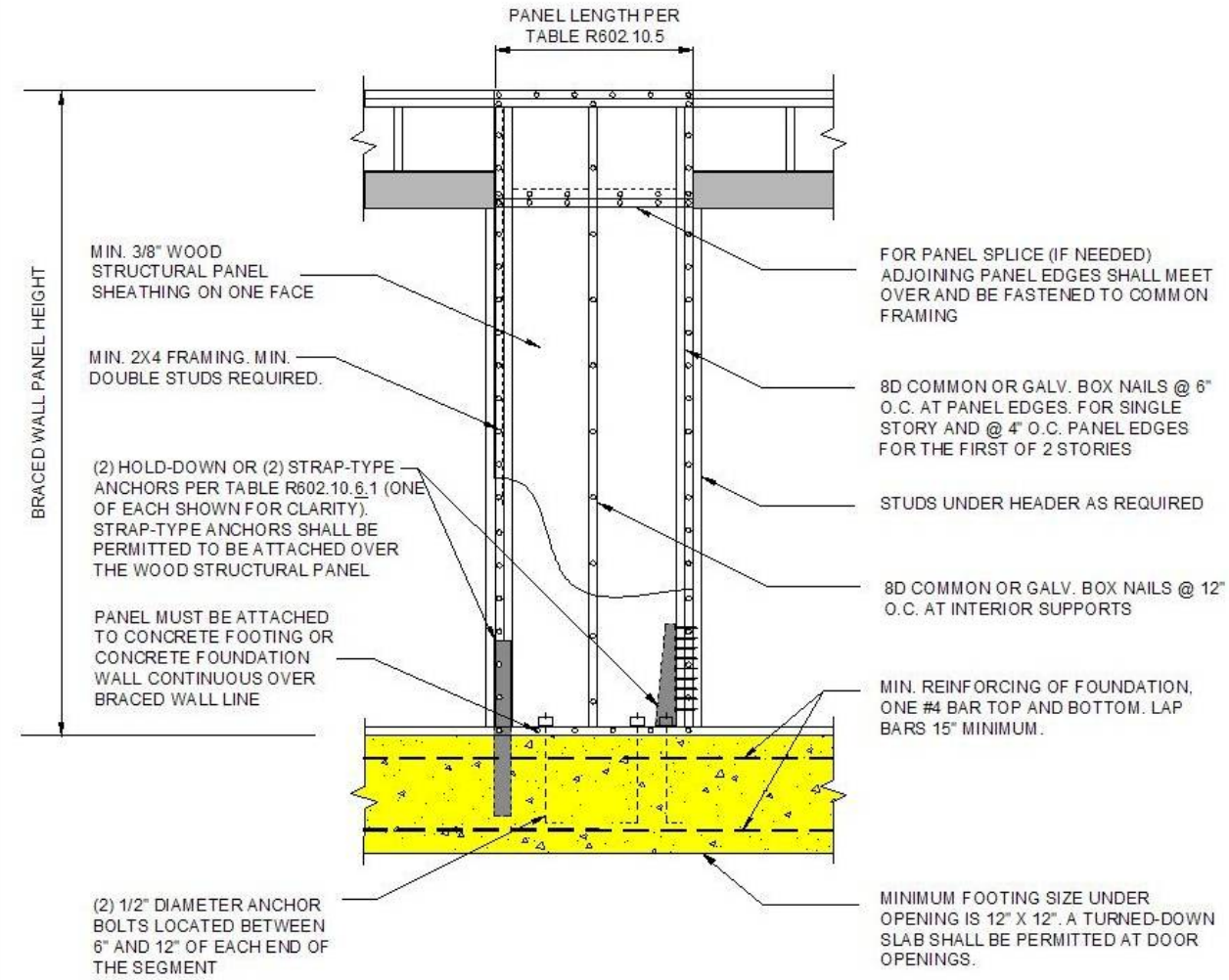
FIGURE R602.10.5
BRACED WALL PANELS WITH CONTINUOUS SHEATHING

~~R602.10.5.2 Partial credit. For Methods DWB, WSP, SFB, PBS, PCP and HPS panels between 36 inches and 48 inches in length shall be considered a braced wall panel and shall be permitted to partially contribute towards the required length of bracing in Table R602.10.3(1) and R602.10.3(3), and the contributing length shall be determined from Table R602.10.5.2.~~

~~Table R602.10.5.2~~ ~~Partial Credit for Braced Wall Panels Less than 48 Inches in Actual Length~~		
~~Actual Length of Braced Wall Panel (in)~~	~~Contributing Length of Braced Wall Panel (in)[a]~~	
	~~8 ft Wall Height~~	~~9 ft Wall Height~~
~~48~~	~~48~~	~~48~~
~~42~~	~~36~~	~~36~~
~~36~~	~~27~~	~~N/A~~
~~For SI: 1 inch=25.4mm~~ ~~[a]Linear interpolation shall be permitted.~~		

~~R602.10.6 Construction of Methods ABW, PFH, PFG and CS-PF. Methods ABW, PFH, PFG and CS-PF shall be constructed as specified in Sections R602.10.6.1 through R602.10.6.4.~~

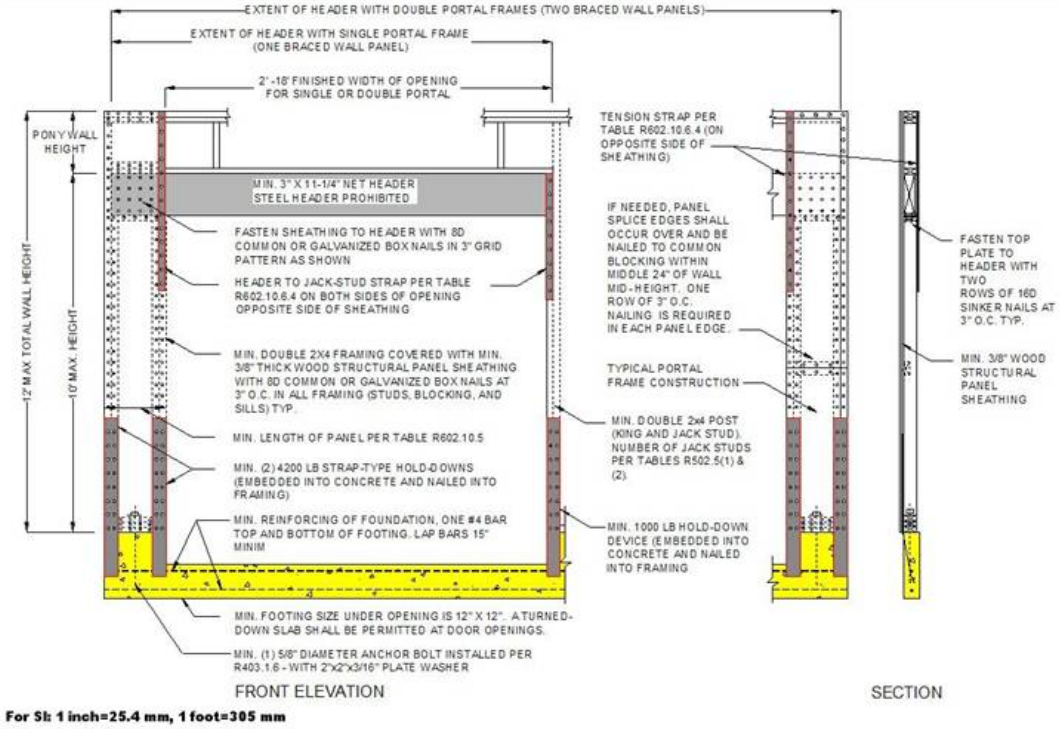
~~R602.10.6.1 Method ABW: Alternate braced wall panels. Method ABW braced wall panels shall be constructed in accordance with Figure R602.10.6.1.~~



For SI: 1 inch=25.4 mm, 1 foot=305 mm

FIGURE R602.10.6.1
METHOD ABW: ALTERNATE BRACED WALL PANEL

~~R602.10.6.2 Method PFH: Portal frame with hold-downs. Method PFH braced wall panels shall be constructed in accordance with Figure R602.10.6.2.~~



For SI: 1 inch=25.4 mm, 1 foot=305 mm

FIGURE R602.10.6.2
METHOD PFH: PORTAL FRAME WITH HOLD-DOWNS

~~R602.10.6.3 Method PFG: Portal frame at garage door openings. Where supporting a roof or one story and a roof, a Method PFG braced wall panel constructed in accordance with Figure R602.10.6.3 shall be permitted on either side of garage door openings.~~

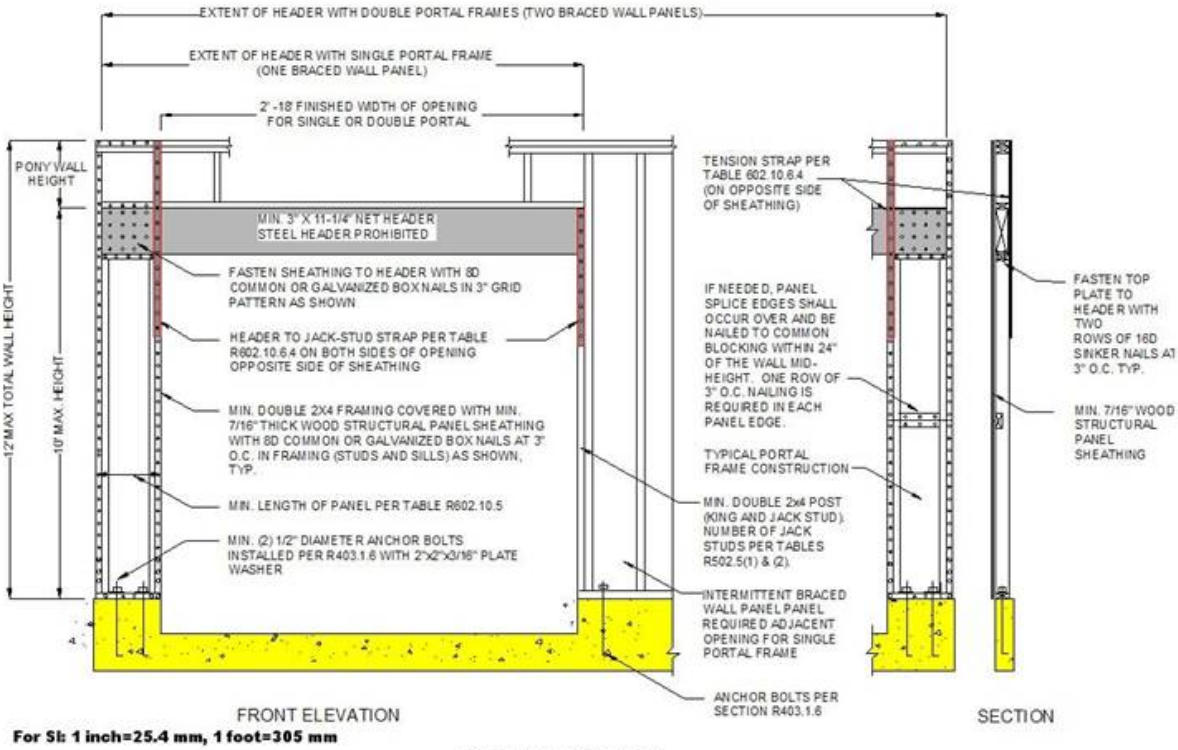


FIGURE R602.10.6.3
METHOD PFG: PORTAL FRAME AT GARAGE DOOR OPENINGS IN SEISMIC DESIGN CATEGORIES A, B AND C

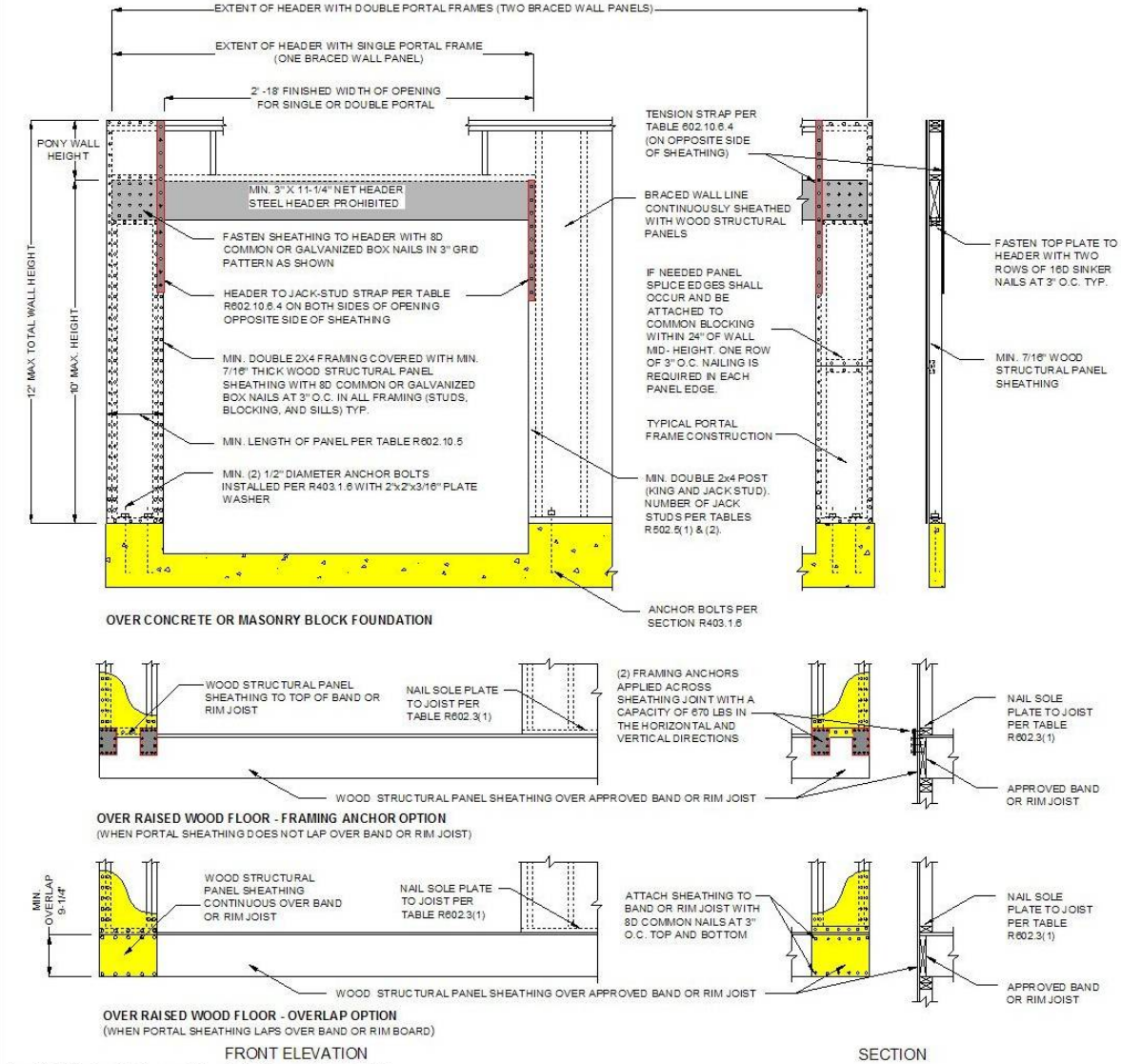
~~R602.10.6.4 Method CS-PF: Continuously sheathed portal frame. Continuously sheathed portal frame braced wall panels shall be constructed in accordance with Figure R602.10.6.4 and Table R602.10.6.4. The number of continuously sheathed portal frame panels in a single braced wall line shall not exceed four.~~

~~Table R602.10.6.4~~
~~Tension Strap Capacity Required for Resisting Wind Pressures Perpendicular to Method PFH, PFG and CS-PF Braced Wall Panels~~

~~MINIMUM WALL STUD FRAMING NOMINAL SIZE AND GRADE~~	~~MAXIMUM PONY WALL HEIGHT (ft)~~	~~MAXIMUM TOTAL WALL HEIGHT (ft)~~	~~MAXIMUM OPENING WIDTH (ft)~~	~~TENSION STRAP CAPACITY REQUIRED (lb)[a]~~					
				~~Basic Wind Speed (mph)~~					
				~~85~~	~~90~~	~~100~~	~~85~~	~~90~~	~~100~~
				~~Exposure B~~			~~Exposure C~~		
~~2x4 No. 2 Grade~~	~~0~~	~~10~~	~~18~~	~~1000~~	~~1000~~	~~1000~~	~~1000~~	~~1000~~	~~1000~~
	~~1~~	~~10~~	~~9~~	~~1000~~	~~1000~~	~~1000~~	~~1000~~	~~1000~~	~~1275~~
			~~16~~	~~1000~~	~~1000~~	~~1750~~	~~1800~~	~~2325~~	~~3500~~
			~~18~~	~~1000~~	~~1200~~	~~2100~~	~~2175~~	~~2725~~	~~DR~~
	~~2~~	~~10~~	~~9~~	~~100~~	~~100~~	~~102~~	~~107~~	~~155~~	~~2500~~

				~~0~~	~~0~~	~~5~~	~~5~~	~~0~~	
			~~16~~	~~1525~~	~~2025~~	~~3125~~	~~3200~~	~~3900~~	~~DR~~
			~~18~~	~~1875~~	~~2400~~	~~3575~~	~~3700~~	~~DR~~	~~DR~~
	~~2~~	~~12~~	~~9~~	~~1000~~	~~1200~~	~~2075~~	~~2125~~	~~2750~~	~~4000~~
			~~16~~	~~2600~~	~~3200~~	~~DR~~	~~DR~~	~~DR~~	~~DR~~
			~~18~~	~~3175~~	~~3850~~	~~DR~~	~~DR~~	~~DR~~	~~DR~~
	~~4~~	~~12~~	~~9~~	~~1775~~	~~2350~~	~~3500~~	~~3550~~	~~DR~~	~~DR~~
			~~16~~	~~4175~~	~~DR~~	~~DR~~	~~DR~~	~~DR~~	~~DR~~
~~2x6 Stud Grade~~	~~2~~	~~12~~	~~9~~	~~1000~~	~~1000~~	~~1325~~	~~1375~~	~~1750~~	~~2550~~
			~~16~~	~~1650~~	~~2050~~	~~2925~~	~~3000~~	~~3550~~	~~DR~~
			~~18~~	~~2025~~	~~2450~~	~~3425~~	~~3500~~	~~4100~~	~~DR~~
	~~4~~	~~12~~	~~9~~	~~1125~~	~~1500~~	~~2225~~	~~2275~~	~~2775~~	~~3800~~
			~~16~~	~~2650~~	~~3150~~	~~DR~~	~~DR~~	~~DR~~	~~DR~~
			~~18~~	~~3125~~	~~3675~~	~~DR~~	~~DR~~	~~DR~~	~~DR~~

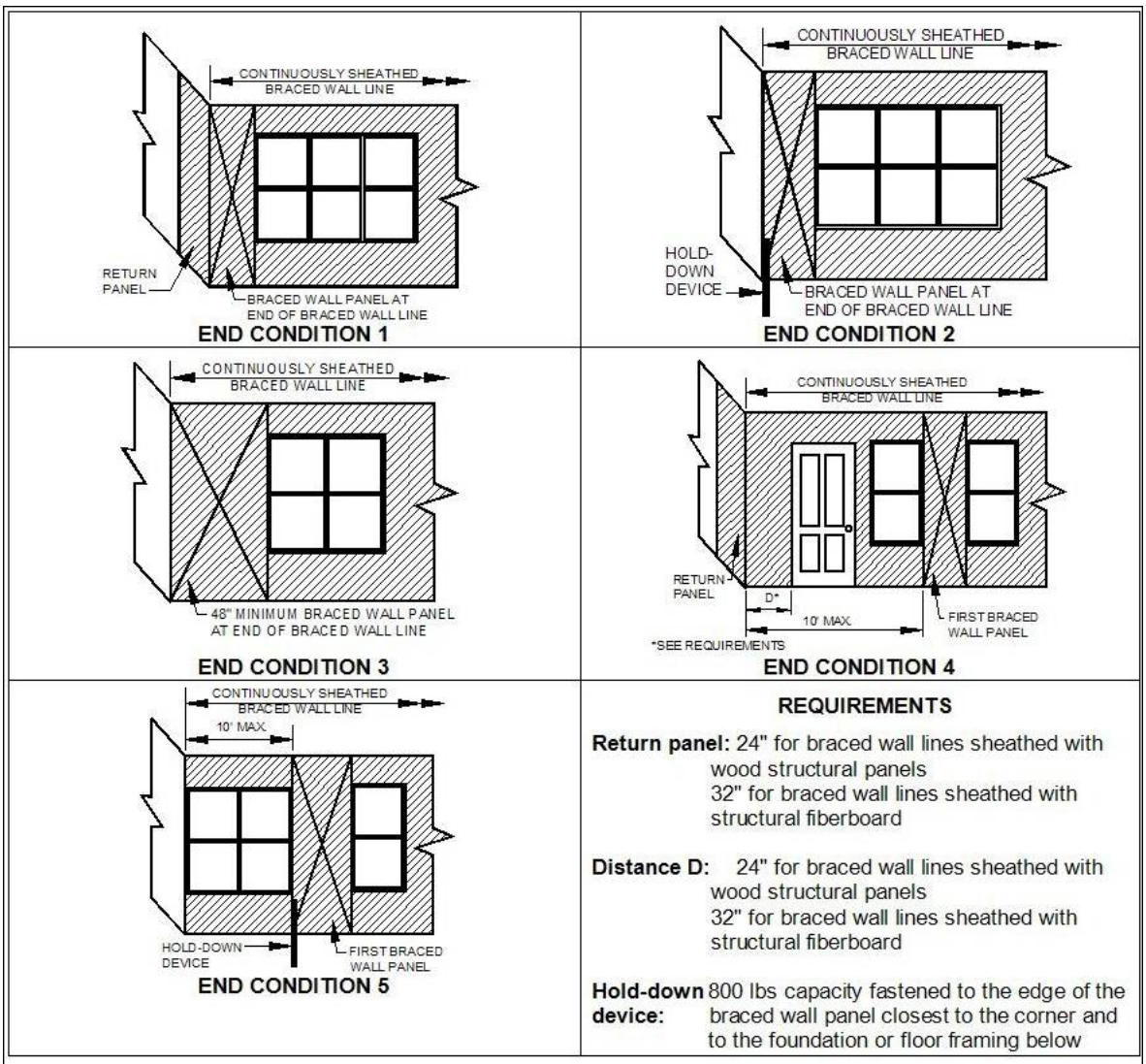
~~For SI: 1 inch=25.4 mm, 1 foot=305 mm, 1 lb=4.45 N~~
~~DR = design required~~
~~[a]Strap shall be installed in accordance with manufacturer's recommendations.~~



For SI: 1 inch=25.4 mm, 1 foot=305 mm, 1lb=4.45N

FIGURE R602.10.6.4
METHOD CS-PF: CONTINUOUSLY SHEATHED PORTAL FRAME PANEL CONSTRUCTION

~~R602.10.7 Ends of braced wall lines with continuous sheathing. Each end of a braced wall line with continuous sheathing shall be in accordance with one of the end conditions shown in Figure R602.10.7.~~



For SI: 1 inch=25.4 mm, 1 foot=305 mm, 1lb=4.45N

FIGURE R602.10.7
END CONDITIONS FOR BRACED WALL LINES
WITH CONTINUOUS SHEATHING

~~R602.10.8 Braced wall panel connections. Braced wall panels shall be connected to floor framing or foundations as follows:~~

~~1. Where joists are perpendicular to a braced wall panel above or below, a rim joist, band joist or blocking shall be provided along the entire length of the braced wall panel in accordance with Figure R602.10.8(1). Fastening of top and bottom wall plates to framing, rim joist, band joist and/or blocking shall be in accordance with Table R602.3(1).~~

~~2. Where joists are parallel to a braced wall panel above or below, a rim joist, end joist or other parallel framing member shall be provided directly above and below the braced wall panel in accordance with Figure R602.10.8(2). Where a parallel framing member cannot be located directly above and below the panel, full-depth blocking at 16 inch (406 mm) spacing shall be provided between the parallel framing members to~~

~~each side of the braced wall panel in accordance with Figure R602.10.8(2). Fastening of blocking and wall plates shall be in accordance with Table R602.3(1) and Figure R602.10.8(2).~~

~~3. Connections of braced wall panels to concrete or masonry shall be in accordance with Section R403.1.6.~~

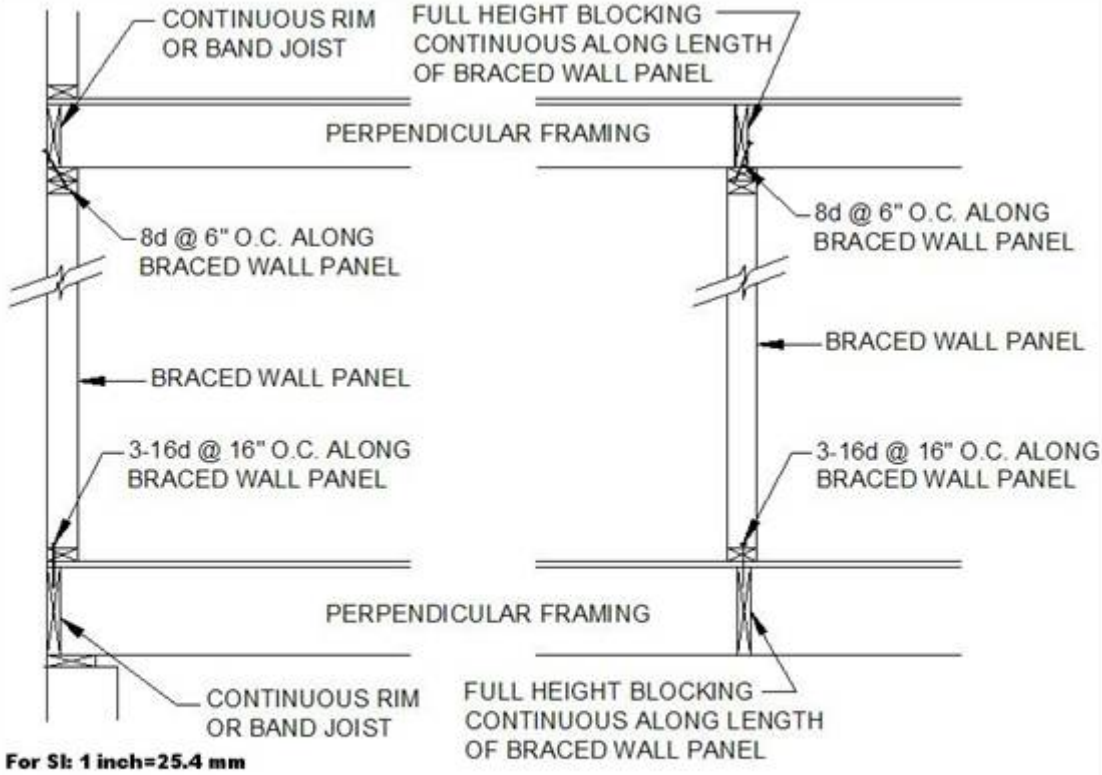


FIGURE R602.10.8(1)
BRACED WALL PANEL CONNECTION WHEN PERPENDICULAR TO FLOOR/CEILING FRAMING

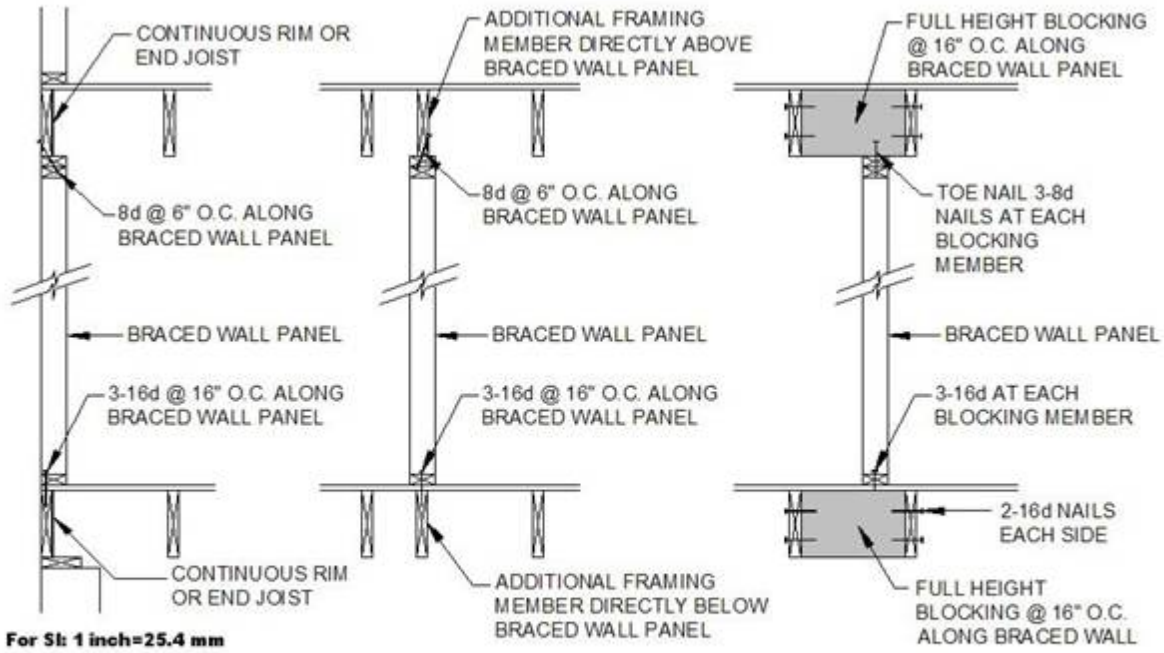


FIGURE R602.10.8(2)
BRACED WALL PANEL CONNECTION WHEN PARALLEL TO FLOOR/CEILING FRAMING

~~R602.10.8.1 Connections to roof framing. Top plates of exterior braced wall panels shall be attached to rafters or roof trusses above in accordance with Table R602.3(1) and this section. Where required by this section, blocking between rafters or roof trusses shall be attached to top plates of braced wall panels and to rafters and roof trusses in accordance with Table R602.3(1). A continuous band, rim, or header joist or roof truss parallel to the braced wall panels shall be permitted to replace the blocking required by this section. Blocking shall not be required over openings in continuously sheathed braced wall lines. In addition to the requirements of this section, lateral support shall be provided for rafters and ceiling joists in accordance with Section R802.8 and for trusses in accordance with Section R802.10.3. Roof ventilation shall be provided in accordance with R806.1.~~

~~1. For wind speeds less than 100 mph (45 m/s):~~

~~1.1. Where the distance from the top of the braced wall panel to the top of the rafters or roof trusses above is 9.25 inches (235 mm) or less, blocking between rafters or roof trusses shall not be required.~~

~~1.2. Where the distance from the top of the braced wall panel to the top of the rafters or roof trusses above is between 9.25 inches (235 mm) and 15.25 inches (387 mm) blocking between rafters or roof trusses shall be provided above the braced wall panel in accordance with Figure R602.10.8.1(1).~~

~~2. For wind speeds of 100 mph (45 m/s) or greater, where the distance from the top of the braced wall panel to the top of the rafters or roof trusses is 15.25 inches (387 mm)~~

~~or less, blocking between rafters or roof trusses shall be provided above the braced wall panel in accordance with Figure R602.10.8.1(1).~~

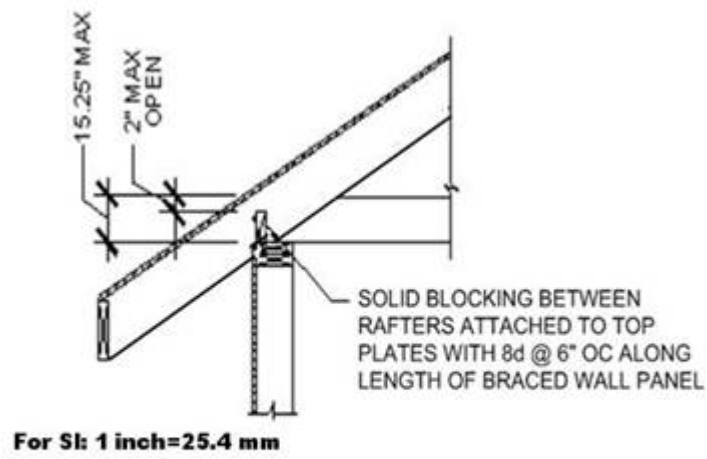
~~3. Where the distance from the top of the braced wall panel to the top of the rafters or roof trusses exceeds 15.25 inches (387 mm), the top plate of the braced wall panel shall be connected to perpendicular rafters or roof trusses above in accordance with one or more of the following methods:~~

~~3.1. Soffit blocking panels constructed per Figure R602.10.8.1(2).~~

~~3.2. Vertical blocking panels constructed per Figure R602.10.8.1(3).~~

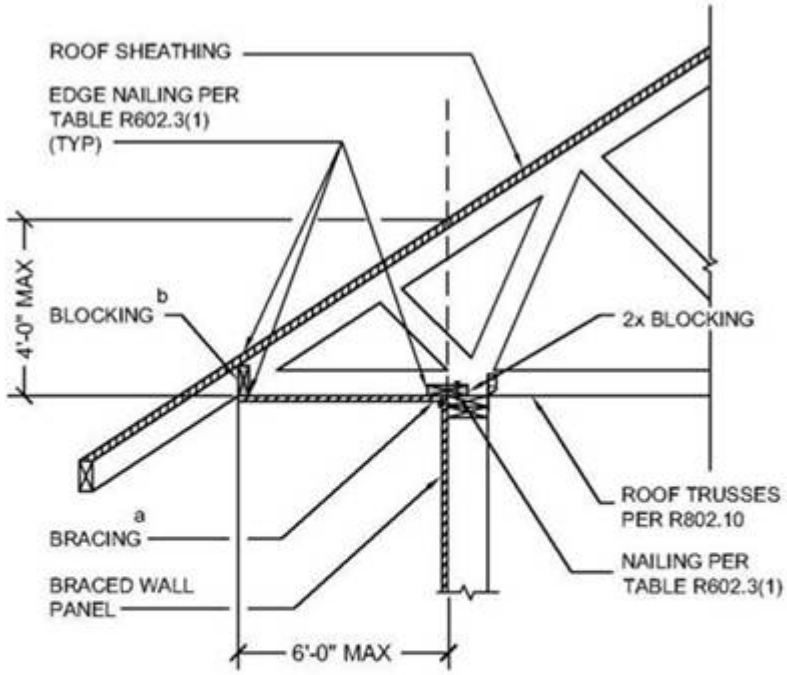
~~3.3. Full-height engineered blocking panels designed per the AF&PA WFCM.~~

~~3.4. Blocking, blocking panels, or other methods of lateral load transfer designed in accordance with accepted engineering practice.~~



For SI: 1 inch=25.4 mm

FIGURE R602.10.8.1(1)
BRACED WALL PANEL CONNECTION TO PERPENDICULAR ROOF FRAMING



For SI: 1 inch = 25.4 mm

a. Methods of bracing shall be as described in Section R602.10.4

b. Provide ventilation (not shown) per Section R806.

FIGURE R602.10.8.1(2)
BRACED WALL PANEL CONNECTION OPTION TO PERPENDICULAR ROOF FRAMING - SOFFIT BLOCKING PANELS

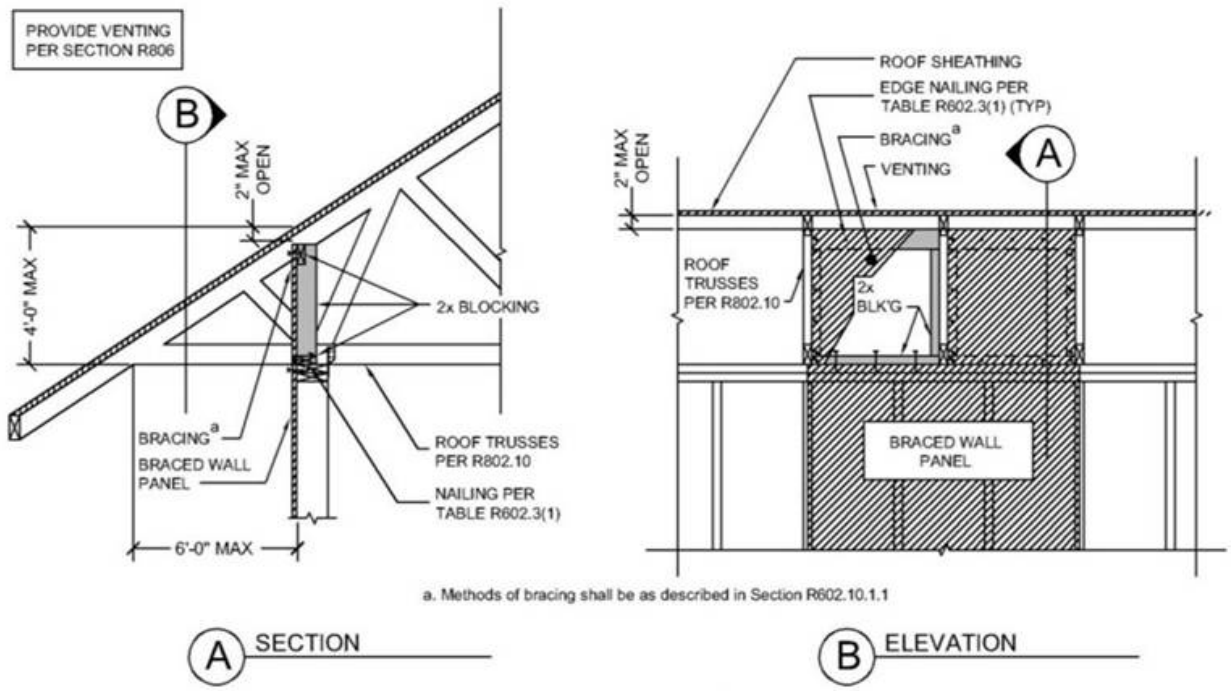


FIGURE R602.10.8.1(3)
BRACED WALL PANEL CONNECTION OPTION TO PERPENDICULAR ROOF FRAMING - VERTICAL BLOCKING PANELS

~~R602.10.9 Braced wall panel support. Braced wall panel support shall be provided as follows:~~

~~1. Cantilevered floor joists complying with Section R502.3.3 shall be permitted to support braced wall panels.~~

~~2. Elevated post or pier foundations supporting braced wall panels shall be designed in accordance with accepted engineering practice.~~

~~3. Masonry stem walls less than 48 inches (1220 mm) in length that support braced wall panels shall be reinforced in accordance with Figure R602.10.9. Masonry stem walls with a length greater than or equal to 48 inches (1220 mm) supporting braced wall panels shall be constructed in accordance with Section R403.1 Methods ABW and PFH shall not be permitted to attach to masonry stem walls.~~

~~4. Concrete stem walls less than 48 inches (1220 mm) in length, greater than 12 inches (305 mm) tall and less than six inches (152 mm) thick shall have reinforcement sized and located in accordance with Figure R602.10.9.~~

~~Exception: As an alternative to the Optional Stem Wall Reinforcement in Fig. R602.10.9, an approved post-installed adhesive anchoring system shall be permitted. A minimum of two anchors shall be installed as indicated in Figure R602.10.9. Anchors shall be located not more than four inches (102 mm) from each end of the stem wall. Anchors shall be installed into the concrete footing as follows:~~

~~1. 5/8 inch (16 mm) threaded rod – 3/4 inch (19 mm) diameter hole with a minimum embedment of six inches (152 mm).~~

~~2. No. 4 reinforcing bar – 5/8 inch (16 mm) diameter hole with a minimum embedment of 4-1/2 inches (114 mm).~~

~~A minimum footing thickness of eight inches (203 mm) is required and the minimum distance from each anchor to the edge of the footing shall be 3-3/4 (95 mm).~~

~~The anchoring adhesive and anchors shall be installed in accordance with the manufactures instructions and have a minimum tensile capacity of 5,000 lbs (22 kN).~~

~~The reinforcement of the masonry stem wall and attachment of the braced wall panel to the stem wall shall be as shown in Figure R602.10.9.~~

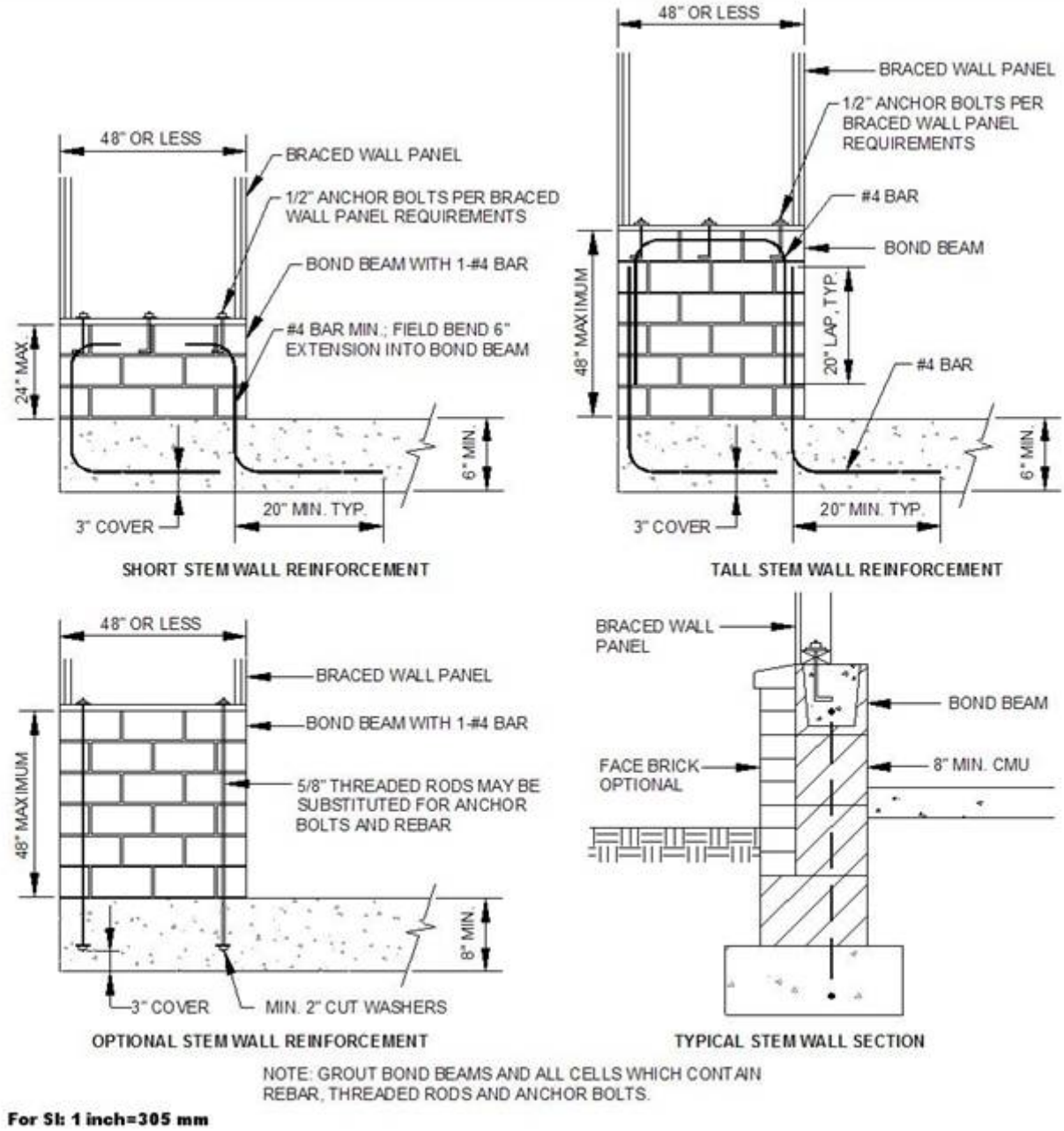


FIGURE R602.10.9
MASONRY STEM WALLS SUPPORTING BRACED WALL PANELS

~~R602.10.10 Panel joints. All vertical joints of panel sheathing shall occur over and be fastened to common studs. Horizontal joints in braced wall panels shall occur over and be fastened to common blocking of a minimum 1-1/2 inch (38 mm) thickness.~~

~~Exceptions:~~

~~1. Vertical joints of panel sheathing shall be permitted to occur over double studs where adjoining panel edges are attached to separate studs with the required panel~~

~~edge fastening schedule and the adjacent studs are attached together with two rows of 10d box nails (3 inches long x 0.128 inch diameter) at 10 inches (254 mm) o.c.~~

~~2. Blocking at horizontal joints shall not be required in wall segments that are not counted as braced wall panels.~~

~~3. Where the length of bracing provided is at least twice the required length of bracing from Tables R602.10.3(1) and R602.10.3(3) blocking at horizontal joints shall not be required in braced wall panels constructed using Methods WSP, SFB, GB, PBS or HPS.~~

~~4. When Method GB panels are installed horizontally, blocking of horizontal joints is not required.~~

~~R602.10.11 Cripple wall bracing. Cripple walls shall be constructed in accordance with Section R602.9 and braced in accordance with this section. Cripple walls shall be braced with the length and method of bracing used for the wall above in accordance with Tables R602.10.3(1) and R602.10.3(3), except that the length of cripple wall bracing shall be multiplied by a factor of 1.15.~~

~~R602.10.11.1 Cripple wall bracing for townhouses in Seismic Design Category C. In addition to the requirements in Section R602.10.11, the distance between adjacent edges of braced wall panels shall be 14 feet (4267 mm) maximum.~~

~~Where braced wall lines at interior walls are not supported on a continuous foundation below, the adjacent parallel cripple walls, where provided, shall be braced with Method WSP or CS-WSP per Section R602.10.4. The length of bracing required per Table R602.10.3(3) for the cripple walls shall be multiplied by 1.5. Where the cripple walls do not have sufficient length to provide the required bracing, the spacing of panel edge fasteners shall be reduced to four inches (102 mm) on center and the required bracing length adjusted by 0.7. If the required length can still not be provided, the cripple wall shall be designed in accordance with accepted engineering practice.~~

~~R602.10.11.2 Redesignation of cripple walls. Where all cripple wall segments along a braced wall line do not exceed 48 inches (1220 mm) in height, the cripple wall shall be permitted to be redesignated as a first story wall for purposes of determining wall bracing requirements. Where any cripple wall segment in a braced wall line exceeds 48 inches (1220 mm) in height, the entire cripple wall shall be counted as an additional story. If the cripple walls are redesignated, the stories above the redesignated story shall be counted as the second and third stories respectively.~~

~~50. Change Section R602.11.1 to read:~~

~~602.11.1 Wall anchorage for townhouses in Seismic Design Category C. Plate washers, a minimum of 0.229 inch by 3 inches by 3 inches (5.8 mm by 76 mm by 76 mm) in size, shall be provided between the foundation sill plate and the nut except where approved anchor straps are used. The hole in the plate washer is permitted to be diagonally slotted with a width of up to 3/16 inch (5 mm) larger than the bolt~~

~~diameter and a slot length not to exceed 1-3/4 inches (44 mm), provided a standard cut washer is placed between the plate washer and the nut.~~

~~51. Delete Section R602.11.2.~~

[58. Change Section R602.10 to read:

R602.10 Wall bracing. Buildings shall be braced in accordance with this section or Section R602.12. Where a building, or portion thereof, does not comply with one or more of the bracing requirements in this section, those portions shall be designed and constructed in accordance with Section R301.1.

The building official shall be permitted to require the permit applicant to identify braced wall lines and braced wall panels on the construction documents as described herein and provide associated analysis. The building official shall be permitted to waive the analysis of the upper floors where the cumulative length of wall openings of each upper floor wall is less than or equal to the length of the openings of the wall directly below.

59. Change the following row and footnotes in Table R602.10.3(1) to read:

Basic Wind Speed (mph)	Story Location	Braced Wall Line Spacing[c] (feet)	Method LIB[b]	Method GB	Methods DWB, WSP, SFB, PBS, PCP, HPS, BV-WSP, ABW, PFH, PFG, CS-SFB[d]	Methods CS-WSP, CS-G, CS-PF
For SI: 1 inch = 25.4 mm, 1 foot = 305 mm) a. Linear interpolation shall be permitted. b. Method LIB shall have gypsum board fastened to at least one side with nails or screws per Table R602.3(1) for exterior sheathing or Table R702.3.5 for interior gypsum board. Spacing of fasteners at panel edges shall not exceed 8 inches (203 mm). c. Where a braced wall line has parallel braced wall lines on one or both sides of differing dimensions, the average dimension shall be permitted to be used for braced wall line spacing. d. Method CS-SFB does not apply where the wind speed is greater than 100 mph.						

60. Change Section R602.10.4.1 to read:

R602.10.4.1 Mixing methods. Mixing of bracing methods shall be permitted as follows:

1. Mixing bracing methods from braced wall line to braced wall line shall be permitted.

2. Mixing intermittent bracing methods along a braced wall line shall be permitted in Seismic Design Categories A and B, and detached dwellings in Seismic Design Category C provided the length of bracing in accordance with Table R602.10.3(1) or R602.10.3(3) is the highest value of all bracing methods used.

3. Mixing of methods CS-WSP, CS-G, CS-PF, ABW, PFH, and PFG along a braced wall line shall be permitted.

4. In Seismic Design Categories A and B, and detached dwellings in Seismic Design Category C, mixing of intermittent bracing methods along the interior portion of a braced wall line with continuous sheathing methods along the exterior portion of the same braced wall line shall be permitted. The length of required bracing shall be the highest value of all bracing methods used in accordance with Table R602.10.3(1) or R602.10.3(3). The requirements of Section R602.10.7 shall apply to each end of the continuously sheathed portions of the braced wall line.

61. Change the "CS-PF" row of Table R602.10.5 to read:

CS-PF	16	18	20	22[e]	24[e]	1.5 x Actual[b]

62. Change Items 3.3 and 3.4 of Section R602.10.8.2 to read:

3.3. Blocking panels provided by the roof truss manufacturer and designed in accordance with Section R802.10.

3.4 Blocking, blocking panels, or other methods of lateral load transfer designed in accordance with the AMC WFCM or accepted engineering practice.

63. Change Item 3 of Section R602.10.10 to read:

3. Where the bracing length provided is at least twice the minimum length required by Table R602.10.3(1) and Table R602.10.3(3) blocking at horizontal joints shall not be required in braced wall panels constructed using Methods WSP, SFB, GB, PBS, HPS, CS-WSP or CS-SFB.

64. Change Section R602.10.11 to read:

R602.10.11 Cripple wall bracing. Cripple walls shall be constructed in accordance with Section R602.9 and braced in accordance with this section. Cripple walls shall be braced with the length and method of bracing used for the wall above in accordance with Tables R602.10.3(1) and R602.10.3(3), and the applicable adjustment factors in Tables R602.10.3(2) and R602.10.3(4), respectively, except the length of the cripple wall bracing shall be multiplied by a factor of 1.15. Cripple wall bracing shall comply with Section R602.10.4.3.]

~~52.~~ [~~43.~~ 65.] Replace Section R602.12, including all subsections, with the following:

~~R602.12 Simplified wall bracing. Buildings meeting all of the conditions listed below shall be permitted to be braced in accordance with this section as an alternate to the requirements of Section R602.10. The entire building shall be braced in accordance with this section; the use of other bracing provisions of R602.10, except as specified herein, shall not be permitted.~~

~~1. There shall be no more than two stories above the top of a concrete or masonry foundation or basement wall. Permanent wood foundations shall not be permitted.~~

~~2. Floors shall not cantilever more than 24 inches (607 mm) beyond the foundation or bearing wall below.~~

~~3. Wall height shall not be greater than 10 feet (2743 mm).~~

~~4. The building shall have a roof eave-to-ridge height of 15 feet (4572 mm) or less.~~

~~5. All exterior walls shall have gypsum board with a minimum thickness of 1/2 inch (12.7 mm) installed on the interior side fastened in accordance with Table R702.3.5.~~

~~6. The structure shall be located where the basic wind speed is less than or equal to 90 mph (40 m/s) and the Exposure Category is A or B.~~

~~7. The structure shall be located in Seismic Design Category of A, B or C for detached one-family and two-family dwellings or Seismic Design Category A or B for townhouses.~~

~~8. Cripple walls shall not be permitted in two-story buildings.~~

~~R602.12.1 Circumscribed rectangle. Required bracing shall be determined by circumscribing a rectangle around the entire building on each floor as shown in Figure R602.12.1. The rectangle shall surround all enclosed offsets and projections such as sunrooms and attached garages. Open structures such as carports and decks shall be permitted to be excluded. The rectangle shall have no side greater than 60 feet (18 288 mm), and the ratio between the long side and short side shall be a maximum of 3:1.~~

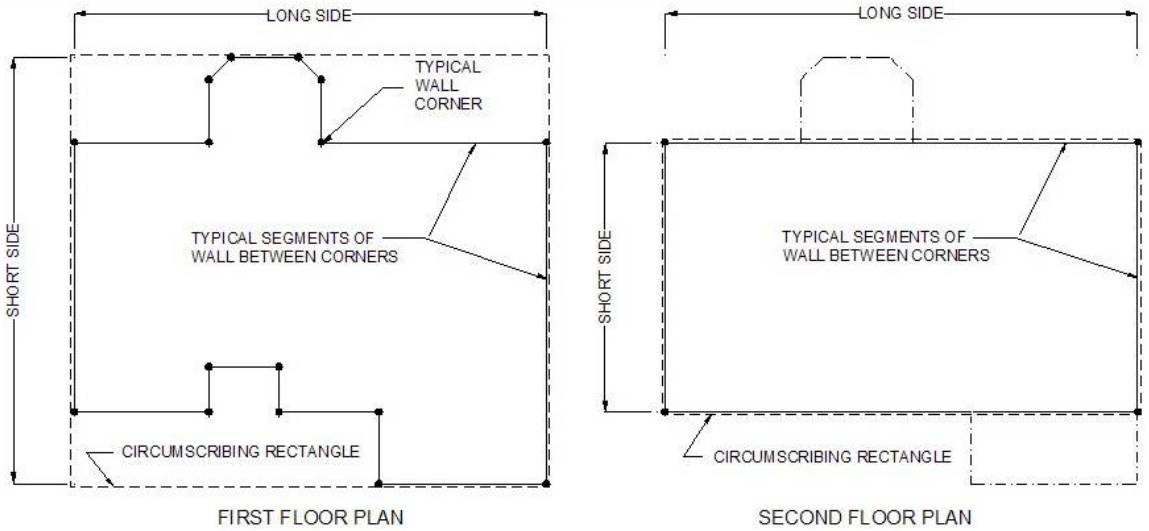


FIGURE R602.10.12.1
RECTANGLE CIRCUMSCRIBING AN ENCLOSED BUILDING

~~R602.12.2 Sheathing materials. The following sheathing materials installed on the exterior side of exterior walls shall be used to construct a bracing unit as defined in Section R602.12.3. Mixing materials is prohibited.~~

~~1. Wood structural panels with a minimum thickness of 3/8 inch (9.5 mm) fastened in accordance with Table R602.3(3).~~

~~2. Structural fiberboard sheathing with a minimum thickness of 1/2 inch (12.7 mm) fastened in accordance with Table R602.3(1).~~

~~R602.12.3 Bracing unit. A bracing unit shall be a full-height sheathed segment of the exterior wall with no openings or vertical or horizontal offsets and a minimum length as specified below. Interior walls shall not contribute toward the amount of required bracing. Mixing of Items 1 and 2 below is prohibited on the same story.~~

~~1. Where all framed portions of all exterior walls are sheathed in accordance with Section R602.12.2, including wall areas between bracing units, above and below openings and on gable end walls, the minimum length of a bracing unit shall be three feet (914 mm).~~

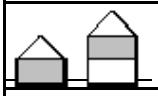
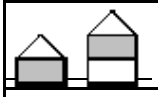
~~2. Where the exterior walls are braced with sheathing panels in accordance with Section R602.12.2 and areas between bracing units are covered with other materials, the minimum length of a bracing unit shall be four feet (1219 mm).~~

~~R602.12.3.1 Multiple bracing units. Segments of wall compliant with Section R602.12.3 and longer than the minimum bracing unit length shall be considered as multiple bracing units. The number of bracing units shall be determined by dividing the wall segment length by the minimum bracing unit length. Full-height sheathed~~

~~segments of wall narrower than the minimum bracing unit length shall not contribute toward a bracing unit except as specified in Section R602.12.6.~~

~~R602.12.4 Number of bracing units. Each side of the circumscribed rectangle, as shown in Figure R602.12.1, shall have, at a minimum, the number of bracing units per Table R602.12.4 placed on the parallel exterior walls facing the side of the rectangle. Bracing units shall then be placed using the distribution requirements specified in Section R602.12.5.~~

~~Table R602.12.4~~
~~Minimum Number of Bracing Units on Each Side of the Circumscribed Rectangle~~

~~Story Level~~	~~Eave-to ridge height (feet)~~	~~Minimum number of bracing units on each long side[a,b]~~						~~Minimum number of bracing units on each short side[a,b]~~					
		~~Length of short side (ft)[c]~~						~~Length of long side (ft)[c]~~					
		~~10~~	~~20~~	~~30~~	~~40~~	~~50~~	~~60~~	~~10~~	~~20~~	~~30~~	~~40~~	~~50~~	~~60~~
	~~10~~	~~1~~	~~2~~	~~2~~	~~2~~	~~3~~	~~3~~	~~1~~	~~2~~	~~2~~	~~2~~	~~3~~	~~3~~
		~~2~~	~~3~~	~~3~~	~~4~~	~~5~~	~~6~~	~~2~~	~~3~~	~~3~~	~~4~~	~~5~~	~~6~~
	~~15~~	~~1~~	~~2~~	~~3~~	~~3~~	~~4~~	~~4~~	~~1~~	~~2~~	~~3~~	~~3~~	~~4~~	~~4~~
		~~2~~	~~3~~	~~4~~	~~5~~	~~6~~	~~7~~	~~2~~	~~3~~	~~4~~	~~5~~	~~6~~	~~7~~

~~For SI: 1 ft=304.8 mm~~
~~[a]Interpolation shall not be permitted.~~
~~[b]Cripple walls or wood-framed basement walls in a walk-out condition of a one-story structure shall be designed as the first floor of a two-story house.~~
~~[c]Actual lengths of the sides of the circumscribed rectangle shall be rounded to the next highest unit of 10 when using this table.~~

~~R602.12.5 Distribution of bracing units. The placement of bracing units on exterior walls shall meet all of the following requirements as shown in Figure R602.12.5.~~

~~1. A bracing unit shall begin no more than 12 feet (3658 mm) from any wall corner.~~

~~2. The distance between adjacent edges of bracing units shall be no greater than 20 feet (6096 mm).~~

~~3. Segments of wall greater than eight feet (2438 mm) in length shall have a minimum of one bracing unit.~~

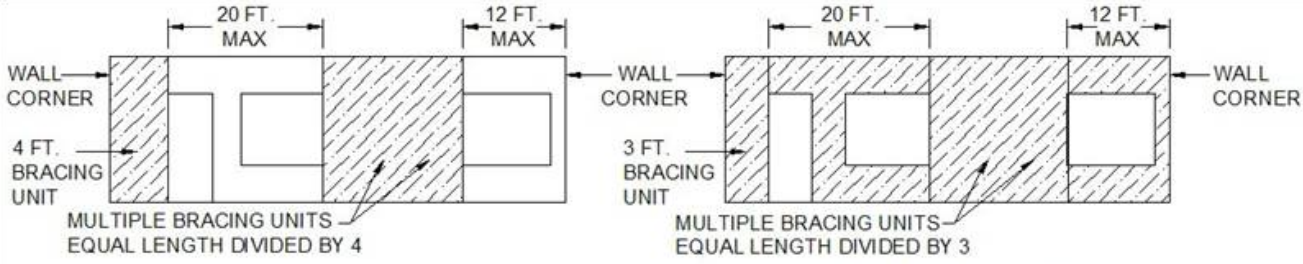


FIGURE R602.10.12.5
BRACING UNIT DISTRIBUTION

~~R602.12.6 Narrow panels. The bracing methods referenced in Section R602.10 and specified in Sections R602.12.6.1 through R602.12.6.3 shall be permitted when using simplified wall bracing.~~

~~R602.12.6.1 Method CS-G. Braced wall panels constructed as Method CS-G in accordance with Tables R602.10.4.1 and R602.10.5 shall be permitted for one-story garages when all framed portions of all exterior walls are sheathed with wood structural panels. Each CS-G panel shall be equivalent to 0.5 bracing units.~~

~~R602.12.6.2 Method CS-PF. Braced wall panels constructed as Method CS-PF in accordance with Section R602.10.6.4 shall be permitted when all framed portions of all exterior walls are sheathed with wood structural panels. Each CS-PF panel shall equal 0.5 bracing units. A maximum of four CS-PF panels shall be permitted on all the segments of walls parallel to each side of the circumscribed rectangle.~~

~~R602.12.6.3 Methods PFH and PFG. Braced wall panels constructed as Method PFH, in accordance with Section R602.10.6.2, and PFG, in accordance with Section R602.10.6.3, shall be permitted when bracing units are constructed using wood structural panels. Each PFH panel shall equal one bracing unit, and each PFG shall equal 0.75 bracing units.~~

~~R602.12.7 Lateral support. For bracing units located along the eaves, the vertical distance from the outside edge of the top wall plate to the roof sheathing above shall not exceed 9.25 inches (235 mm) at the location of a bracing unit unless lateral support is provided in accordance with Section R602.10.8.1.~~

~~R602.12.8 Stem walls. Masonry stem walls with a height and length of 48 inches (1219 mm) or less supporting a bracing unit or a Method CS-G, CS-PF or PFG braced wall panel shall be constructed in accordance with Figure R602.10.9. Concrete stem walls greater than 12 inches (305 mm) tall and less than six inches (152 mm) thick shall have reinforcement sized and located in accordance with Figure R602.10.9.~~

R602.12 Practical wall bracing. All buildings in Seismic Design Categories A and B and detached buildings in Seismic Design Category C shall be permitted to be braced in accordance with this section as an alternative to the requirements of Section

R602.10. Where a building, or portion thereof, does not comply with one or more of the bracing requirements in this section, those portions shall be designed and constructed in accordance with Section R301.1. The use of other bracing provisions of Section R602.10, except as specified herein, shall not be permitted.

The building official shall be permitted to require the permit applicant to identify bracing on the construction documents and provide associated analysis. The building official shall be permitted to waive the analysis of the upper floors where the cumulative length of wall openings of each upper floor wall is less than or equal to the length of the openings of the wall directly below.

R602.12.1 Sheathing materials. The following materials shall be permitted for use as sheathing for wall bracing. Exterior walls shall be sheathed on all sheathable surfaces including infill areas between bracing locations, above and below wall openings, and on gable end walls.

1. Wood structural panels with a minimum thickness of 7/16 inch (9.5 mm) fastened in accordance with Table R602.3(3).

2. Structural fiberboard sheathing with a minimum thickness of 1/2 inch (12.7 mm) fastened in accordance with Table R602.3(1).

3. Gypsum board with a minimum thickness of 1/2 inch (12.7 mm) fastened in accordance with Table R702.3.5 on interior walls only.

R602.12.2 Braced wall panels. Braced wall panels shall be full-height wall sections sheathed with the materials listed in Section R602.12.1 and complying with the following:

1. Exterior braced wall panels shall have a minimum length based on the height of the adjacent opening as specified in Table R602.12.2. Panels with openings on both sides of differing heights shall be governed by the taller opening when determining panel length.

2. Interior braced wall panels shall have a minimum length of 48 inches (1220 mm) when sheathing material is applied to one side. Doubled-sided applications shall be permitted to be considered two braced wall panels.

3. Braced wall panels shall be permitted to be constructed of Methods ABW, PFH, PFG and CS-PF in accordance with Section R602.10.4.

4. Exterior braced wall panels, other than the methods listed in Item 3 above shall have a finish material installed on the interior. The finish material shall consist of 1/2 inch (12.7 mm) gypsum board or equivalent and shall be permitted to be omitted where the required length of bracing, as determined in Section R602.12.4, is multiplied by 1.40, unless otherwise required by Section R302.6.

5. Vertical sheathing joints shall occur over and be fastened to common studs.

6. Horizontal sheathing joints shall be edge nailed to 1-1/2 inch (38 mm) minimum thick common blocking.

Table R602.12.2 Braced Wall Panel Lengths[a]					
Adjacent opening or clear opening height (inches)	Minimum Panel Length (inches)				
	Wall Height (feet)				
	8	9	10	11	12
Garage door opening[b]	24	27	30	33	36
≤ 64	24	27	30	33	36
≤ 72	27	27	30	33	36
≤ 80	30	30	30	33	36
> 80	36	36	36	40	40
For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm a. Interpolation shall be permitted for openings greater than 64 inches (1626 mm) and less than 80 inches (2032 mm); extrapolation shall be prohibited. b. Braced wall panels of a one-story garage located on each side of the garage door opening and supporting a gable end wall or roof load only.					

R602.12.3 Circumscribed rectangle. Required length of bracing shall be determined by circumscribing one or more rectangles around the entire building or portions thereof as shown in Figure R602.12.3. Rectangles shall surround all enclosed offsets and projections such as sunrooms and attached garages. Chimneys, partial height projections, and open structures, such as carports and decks, shall be excluded from the rectangle. Each rectangle shall have no side greater than 80 feet (24 384 mm) with a maximum 3:1 ratio between the long and short side. Rectangles shall be permitted to be skewed to accommodate angled projections as shown in Figure R602.12.4.3.

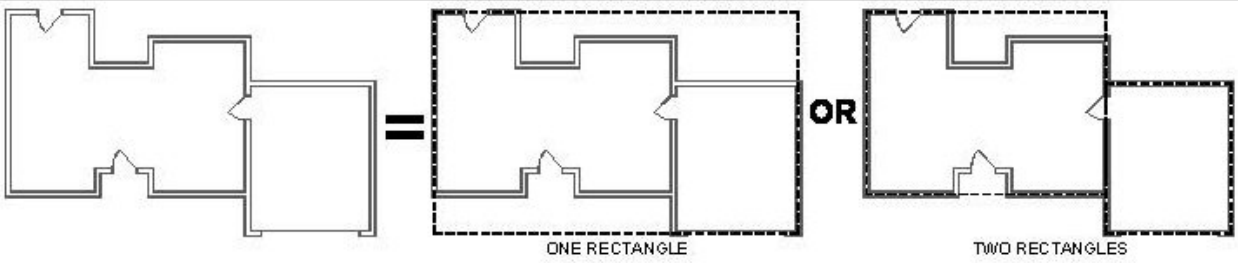


FIGURE R602.12.3
CIRCUMSCRIBED RECTANGLES

R602.12.3.1 Townhouses. Rectangles shall be circumscribed around individual townhouses.

R602.12.4 Required length of bracing. The required length of bracing for each side of a circumscribed rectangle shall be determined using Table R602.12.4. Where multiple rectangles share a common side or sides, the required length of bracing shall equal the sum of the required lengths from all shared rectangle sides.

Table R602.12.4

Required Length of Bracing Along Each Side of a Circumscribed Rectangle[a,b,c] [~~1 d~~]

Wind Speed	Eave-to-Ridge Height (feet)	Number of Floor Levels Above[e,f]	Required Length of Bracing on Front/Rear Side (feet)								Required Length of Bracing on Left/Right Side (feet)							
			Length of Left/Right Side (feet)								Length of Front/Rear Side (feet)							
			10	20	30	40	50	60	70	80	10	20	30	40	50	60	70	80
90	10	0	2.0	3.5	5.0	6.0	7.5	9.0	10.5	12.0	2.0	3.5	5.0	6.0	7.5	9.0	10.5	12.0
		1 [d]	3.5	6.5	9.0	12.0	14.5	17.0	19.8	22.6	3.5	6.5	9.0	12.0	14.5	17.0	19.8	22.6
		2 [d]	5.0	9.5	13.5	17.5	21.5	25.0	29.2	33.4	5.0	9.5	13.5	17.5	21.5	25.0	29.2	33.4
	15	0	2.6	4.6	6.5	7.8	9.8	11.7	13.7	15.7	2.6	4.6	6.5	7.8	9.8	11.7	13.7	15.7
		1 [d]	4.0	7.5	10.4	13.8	16.7	19.6	22.9	26.2	4.0	7.5	10.4	13.8	16.7	19.6	22.9	26.2
		2 [d]	5.5	10.5	14.9	19.3	23.7	27.5	32.1	36.7	5.5	10.5	14.9	19.3	23.7	27.5	32.1	36.7
	20	0	2.9	5.2	7.3	8.8	11.1	13.2	15.4	17.6	2.9	5.2	7.3	8.8	11.1	13.2	15.4	17.6
		1 [d]	4.5	8.5	11.8	15.6	18.9	22.1	25.8	29.5	4.5	8.5	11.8	15.6	18.9	22.1	25.8	29.5
		2 [d]	6.2	11.9	16.8	21.8	27.3	31.1	36.3	41.5	6.2	11.9	16.8	21.8	27.3	31.1	36.3	41.5
100	10	0	2.5	4.0	6.0	7.5	9.5	11.0	12.8	14.6	2.5	4.0	6.0	7.5	9.5	11.0	12.8	14.6
		1 [d]	4.5	8.0	11.0	14.5	18.0	21.0	24.5	28.0	4.5	8.0	11.0	14.5	18.0	21.0	24.5	28.0
		2 [d]	6.0	11.5	16.5	21.5	26.5	31.0	36.2	41.4	6.0	11.5	16.5	21.5	26.5	31.0	36.2	41.4
	15	0	3.4	5.2	7.8	9.8	12.4	14.3	16.7	19.1	3.4	5.2	7.8	9.8	12.4	14.3	16.7	19.1
		1 [d]	5.2	9.2	12.7	16.7	20.7	24.2	28.2	32.2	5.2	9.2	12.7	16.7	20.7	24.2	28.2	32.2
		2 [d]	6.6	12.7	18.2	23.7	29.2	34.1	39.8	45.5	6.6	12.7	18.2	23.7	29.2	34.1	39.8	45.5
	20	0	3.8	5.9	8.8	11.1	14.0	16.2	18.9	21.6	3.8	5.9	8.8	11.1	14.0	16.2	18.9	21.6
		1 [d]	5.9	10.4	14.4	18.9	23.4	27.3	31.8	36.3	5.9	10.4	14.4	18.9	23.4	27.3	31.8	36.3
		2 [d]	7.5	14.4	20.6	26.8	33.0	38.5	44.9	51.3	7.5	14.4	20.6	26.8	33.0	38.5	44.9	51.3

For SI: 1 ft = 304.8 mm

a. Interpolation shall be permitted; extrapolation shall be prohibited.

b. For Exposure Category C, multiply the required length of bracing by a factor of 1.20 for a one-story building, 1.30 for a two-story building and 1.40 for a three-story building.

c. For wall height adjustments multiply the required length of bracing by the following factors: 0.90 for 8 feet (2438 mm), 0.95 for 9 feet (2743 mm), 1.0 for 10 feet (3048 mm), 1.05 for 11 feet (3353 mm), and 1.10 for 12 feet (3658 mm).

d. Where braced wall panels [supporting stories above] have been sheathed in wood structural panels with edge fasteners spaced at 4 inches (102 mm) on center, multiply the required length of bracing by 0.83.

e. A floor level, habitable or otherwise, contained wholly within the roof rafters or trusses shall not be considered a floor level for purposes of determining the required length of bracing.

f. A rectangle side with differing number of floor levels above shall use the greatest number when determining the required length of bracing.

R602.12.4.1 Braced wall panel assignment to rectangle sides. Braced wall panels shall be assigned to the applicable rectangle side and contribute to its required length of bracing. Panels shall be assigned as specified below and as shown in Figure R602.12.4.1.

1. Exterior braced wall panels shall be assigned to the parallel rectangle side on which they are located or in which they face.

2. Interior braced wall panels shall be assigned to the parallel rectangle side on which they are located or in which they face up to 4 feet (1220 mm) away. Interior braced wall panels more than 4 feet (1220 mm) away from a parallel rectangle side shall not contribute.

3. The projections of angled braced wall panels shall be assigned to the adjacent rectangle sides.

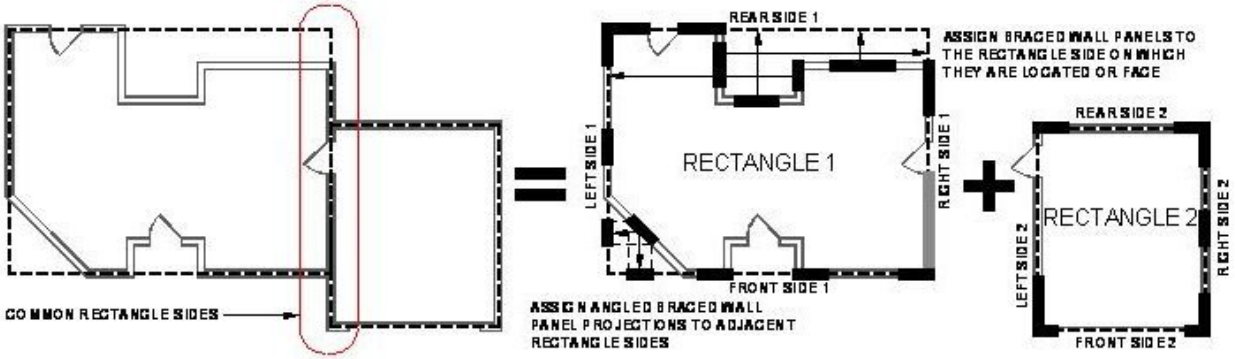


FIGURE R602.12.4.1
BRACED WALL PANEL ASSIGNMENT TO RECTANGLE SIDES

R602.12.4.2 Contributing length. The cumulative contributing length of braced wall panels assigned to a rectangle side shall be greater than or equal to the required length of bracing as determined in Section R602.12.4. The contributing length of a braced wall panel shall be as specified below. When applying contributing length to angled braced wall panels, apply the requirements below to each projection.

1. Exterior braced wall panels shall contribute their actual length.

2. Interior braced wall panels shall contribute one-half of their actual length.

3. The contributing length of Methods ABW, PFH, PFG and CS-PF shall be in accordance with Table R602.10.5.

R602.12.4.3 Common sides with skewed rectangles. Braced wall panels located on a common wall where skewed rectangles intersect, as shown in Figure R602.12.4.3, shall be permitted to be assigned to the parallel rectangle side, and their projections shall be permitted to be assigned to the adjacent skewed rectangle sides.

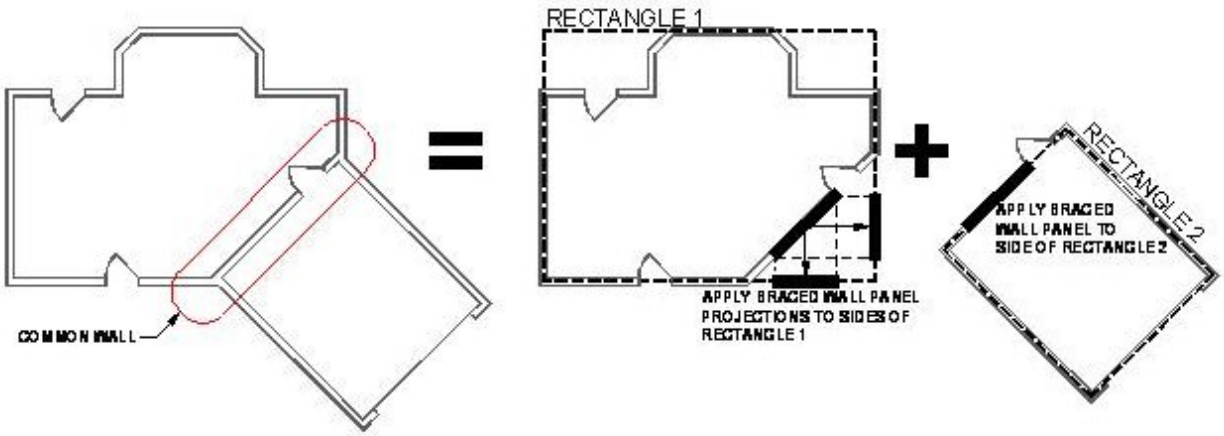


FIGURE R602.12.4.3
COMMON SIDES WITH SKEWED RECTANGLES

R602.12.5 Cripple walls and framed walls of walk-out basements. For rectangle sides with cripple walls having a maximum height of 48 inches (1220 mm), the required length of bracing shall be as determined in Section R602.12.4. For rectangle sides with cripple walls having a height greater than 48 inches (1220 mm) at any location or framed walls of a walk-out basement, the required length of bracing shall be determined using Table R602.12.4. Braced wall panels within cripple walls and walls of walk-out basements shall comply with Item 4 of Section R602.12.2.

R602.12.6 Distribution of braced wall panels. Braced wall panels shall be distributed in accordance with the following requirements as shown in Figure R602.12.6.

1. The edge of a braced wall panel shall be no more than 12 feet (3658 mm) from any building corner or rectangle corner.

2. The distance between adjacent edges of braced wall panels shall be no more than 20 feet (6096 mm).

3. Segments of exterior walls greater than 8 feet (2438 mm) in length shall have a minimum of one braced wall panel.

4. Segments of exterior wall 8 feet (2438 mm) or less in length shall be permitted to have no braced wall panels.

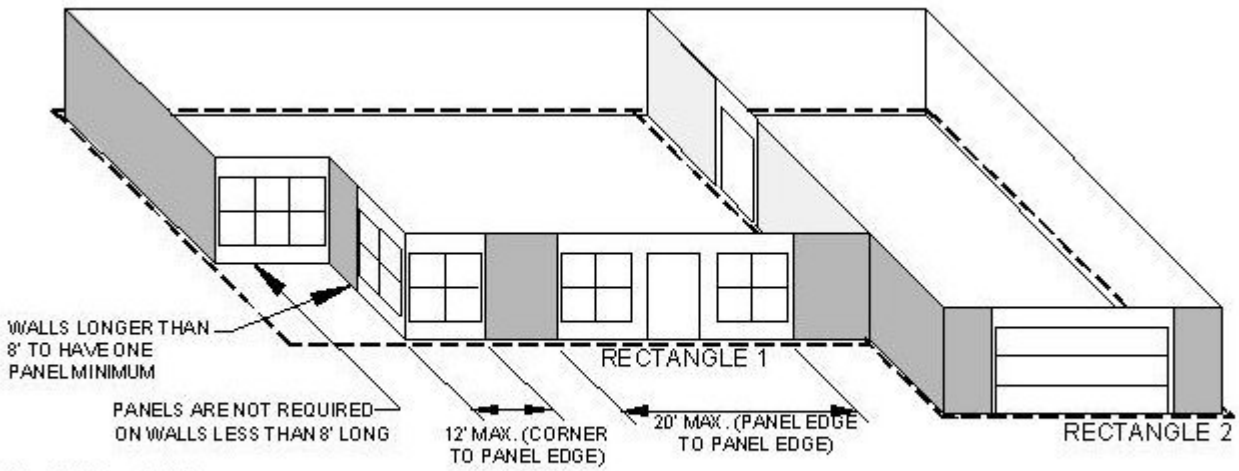


FIGURE R602.12.6
PANEL DISTRIBUTION

R602.12.6.1 Panels adjacent to balloon framed walls. Braced wall panels shall be placed on each side of each story adjacent to balloon framed walls designed in accordance with Section R602.3 with a maximum height of two stories.

R602.12.7 Braced wall panel connection. Braced wall panels shall be connected to other structural elements in accordance with Section R602.10.8.

R602.12.8 Braced wall panel support. Braced wall panels shall be supported in accordance with Section R602.10.9.

~~53. Change Section R612.2 to read:~~

~~R612.2 Window sills. In dwelling units, where the opening of an operable window is located more than 72 inches (1829 mm) above the finished grade or surface below, the lowest part of the clear opening of the window shall be a minimum of 18 inches (457 mm) above the finished floor of the room in which the window is located. Operable sections of windows shall not permit openings that allow passage of a 4-inch-diameter (102 mm) sphere where such openings are located within 18 inches (457 mm) of the finished floor.~~

~~Exceptions:~~

~~1. Windows whose openings will not allow a 4-inch-diameter (102 mm) sphere to pass through the opening when the opening is in its largest opened position.~~

~~2. Openings that are provided with window fall prevention devices that comply with Section R612.3.~~

~~3. Openings that are provided with fall protection devices that comply with ASTM F 2090.~~

~~4. Windows that are provided with opening limiting devices that comply with Section R612.4.~~

~~54. Change Section R703.7 to read:~~

~~R703.7 Stone and masonry veneer, general. Stone and masonry veneer shall be installed in accordance with this chapter, Table R703.4 and Figure R703.7. These veneers installed over a backing of wood or cold-formed steel shall be limited to the first story above grade and shall not exceed five inches (127 mm) in thickness. See Tables R602.10.3(3) and R602.10.3(4) for wall bracing requirements for masonry veneer for wood framed construction and Section R603.9.5 for wall bracing requirements for masonry veneer for cold-formed steel construction.~~

~~Exceptions:~~

~~1. For all buildings in Seismic Design Categories A, B and C, exterior stone or masonry veneer, as specified in Table R703.7(1), with a backing of wood or steel framing shall be permitted to the height specified in Table R703.7(1) above a noncombustible foundation.~~

~~2. For detached one-family or two-family dwellings in Seismic Design Categories D_0, D_1 and D_2, exterior stone or masonry veneer, as specified in Table R703.7(2), with a backing of wood framing shall be permitted to the height specified in Table R703.7(2) above a noncombustible foundation.~~

~~55. Delete the reference to footnote "f" and the footnote itself in Figure R802.11.~~

[66. Change the indicated rows of Table R802.4(1) to read:

Ceiling Joist Spacing	Species and Grade	Dead Load = 5 psf			
		2x4	2x6	2x8	2x10
		Maximum ceiling joist spans			
		(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)
12	Southern Pine SS	12-11	20-3	Note a	Note a
	Southern Pine #1	12-5	19-6	25-8	Note a
	Southern Pine #2	11-10	18-8	24-7	Note a
	Southern Pine #3	10-1	14-11	18-9	22-9
16	Southern Pine SS	11-9	18-5	24-3	Note a
	Southern Pine #1	11-3	17-8	23-4	Note a
	Southern Pine #2	10-9	16-11	21-7	25-7
	Southern Pine #3	8-9	12-11	16-3	19-9
19.2	Southern Pine SS	11-0	17-4	22-10	Note a
	Southern Pine #1	10-7	16-8	22-0	Note a
	Southern Pine #2	10-2	15-7	19-8	23-5
	Southern Pine #3	8-0	11-9	14-10	18-0
24	Southern Pine SS	10-3	16-1	21-2	Note a
	Southern Pine #1	9-10	15-6	20-5	24-0
	Southern Pine #2	9-3	13-11	17-7	20-11

	Southern Pine #3	7-2	10-6	13-3	16-1

67. Change the indicated rows of Table R802.4(2) to read:

Ceiling Joist Spacing	Species and Grade	Dead Load = 10 psf			
		2x4	2x6	2x8	2x10
		Maximum ceiling joist spans			
		(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)
12	Southern Pine SS	10-3	16-1	21-2	Note a
	Southern Pine #1	9-10	15-6	20-5	24-0
	Southern Pine #2	9-3	13-11	17-7	20-11
	Southern Pine #3	7-2	10-6	13-3	16-1
16	Southern Pine SS	9-4	14-7	19-3	24-7
	Southern Pine #1	8-11	14-0	17-9	20-9
	Southern Pine #2	8-0	12-0	15-3	18-1
	Southern Pine #3	6-2	9-2	11-6	14-0
19.2	Southern Pine SS	8-9	13-9	18-2	23-1
	Southern Pine #1	8-5	12-9	16-2	18-11
	Southern Pine #2	7-4	11-0	13-11	16-6
	Southern Pine #3	5-8	8-4	10-6	12-9
24	Southern Pine SS	8-1	12-9	16-10	21-6
	Southern Pine #1	7-8	11-5	14-6	16-11
	Southern Pine #2	6-7	9-10	12-6	14-9
	Southern Pine #3	5-1	7-5	9-5	11-5

68. Change the indicated rows of Table R802.5.1(1) to read:

Rafter Spacing (inches)	Species and Grade	Dead Load = 10 psf					Dead Load = 20 psf				
		2x4	2x6	2x8	2x10	2x12	2x4	2x6	2x8	2x10	2x12
		Maximum rafter spans[a]									
		(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)
12	Southern Pine SS	11-3	17-8	23-4	Note b	Note b	11-3	17-8	23-4	Note b	Note b
	Southern Pine #1	10-10	17-0	22-5	Note b	Note b	10-6	15-8	19-10	23-2	Note b
	Southern Pine #2	10-4	15-7	19-8	23-5	Note b	9-0	13-6	17-1	20-3	23-10
	Southern Pine #3	8-0	11-9	14-10	18-0	21-4	6-11	10-2	12-10	15-7	18-6
16	Southern Pine SS	10-3	16-1	21-2	Note b	Note b	10-3	16-1	21-2	25-7	Note b
	Southern Pine #1	9-10	15-6	19-10	23-2	Note b	9-1	13-7	17-2	20-1	23-10
	Southern Pine #2	9-0	13-6	17-1	20-3	23-10	7-9	11-8	14-9	17-6	20-8
	Southern Pine #3	6-11	10-2	12-10	15-7	18-6	6-0	8-10	11-2	13-6	16-0
19.2	Southern Pine SS	9-8	15-2	19-11	25-5	Note b	9-8	15-2	19-7	23-4	Note b
	Southern Pine #1	9-3	14-3	18-1	21-2	25-2	8-4	12-4	15-8	18-4	21-9
	Southern Pine #2	8-2	12-3	15-7	18-6	21-9	7-1	10-8	13-6	16-0	18-10
	Southern Pine #3	6-4	9-4	11-9	14-3	16-10	5-6	8-1	10-2	12-4	14-7
24	Southern Pine SS	8-11	14-1	18-6	23-8	Note b	8-11	13-10	17-6	20-10	24-8
	Southern Pine #1	8-7	12-9	16-2	18-11	22-6	7-5	11-1	14-0	16-5	19-6
	Southern Pine #2	7-4	11-0	13-11	16-6	19-6	6-4	9-6	12-1	14-4	16-10
	Southern Pine #3	5-8	8-4	10-6	12-9	15-1	4-11	7-3	9-1	11-0	13-1

69. Change the indicated rows of Table R802.5.1(2) to read:

Rafter	Species and	Dead Load = 10 psf	Dead Load = 20 psf

Spacing (inches)	Grade	2x4	2x6	2x8	2x10	2x12	2x4	2x6	2x8	2x10	2x12
		Maximum rafter spans[a]									
		(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)
12	Southern Pine SS	10-3	16-1	21-2	Note b	Note b	10-3	16-1	21-2	Note b	Note b
	Southern Pine #1	9-10	15-6	20-5	Note b	Note b	9-10	15-6	19-10	23-2	Note b
	Southern Pine #2	9-5	14-9	19-6	23-5	Note b	9-0	13-6	17-1	20-3	23-10
	Southern Pine #3	8-0	11-9	14-10	18-0	21-4	6-11	10-2	12-10	15-7	18-6
16	Southern Pine SS	9-4	14-7	19-3	24-7	Note b	9-4	14-7	19-3	24-7	Note b
	Southern Pine #1	8-11	14-1	18-6	23-2	Note b	8-11	13-7	17-2	20-1	23-10
	Southern Pine #2	8-7	13-5	17-1	20-3	23-10	7-9	11-8	14-9	17-6	20-8
	Southern Pine #3	6-11	10-2	12-10	15-7	18-6	6-0	8-10	11-2	13-6	16-0
19.2	Southern Pine SS	8-9	13-9	18-2	23-1	Note b	8-9	13-9	18-2	23-1	Note b
	Southern Pine #1	8-5	13-3	17-5	21-2	25-2	8-4	12-4	15-8	18-4	21-9
	Southern Pine #2	8-1	12-3	15-7	16-6	21-9	7-1	10-8	13-6	16-0	18-10
	Southern Pine #3	6-4	9-4	11-9	14-3	16-10	5-6	8-1	10-2	12-4	14-7
24	Southern Pine SS	8-1	12-9	16-10	21-6	Note b	8-1	12-9	16-10	20-10	24-8
	Southern Pine #1	7-10	12-3	16-2	18-11	22-6	7-6	11-1	14-0	16-5	19-6
	Southern Pine #2	7-4	11-0	13-11	16-6	19-6	6-4	9-6	12-1	14-4	16-10
	Southern Pine #3	5-8	8-4	10-6	12-9	15-1	4-11	7-3	9-1	11-0	13-1

70. Change the indicated rows of Table R802.5.1(3) to read:

Rafter Spacing (inches)	Species and Grade	Dead Load = 10 psf					Dead Load = 20 psf				
		2x4	2x6	2x8	2x10	2x12	2x4	2x6	2x8	2x10	2x12
		Maximum rafter spans[a]									
		(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)
12	Southern Pine SS	9-10	15-6	20-5	Note b	Note b	9-10	15-6	20-5	25-4	Note b
	Southern Pine #1	9-6	14-10	19-0	22-3	Note b	9-0	13-5	17-0	19-11	23-7
	Southern Pine #2	8-7	12-11	16-4	19-5	22-10	7-8	11-7	14-8	17-4	20-5
	Southern Pine #3	6-7	9-9	12-4	15-0	17-9	5-11	8-9	11-0	13-5	15-10
16	Southern Pine SS	8-11	14-1	18-6	23-8	Note b	8-11	14-1	18-5	21-11	25-11
	Southern Pine #1	8-7	13-0	16-6	19-3	22-10	7-10	11-7	14-9	17-3	20-5
	Southern Pine #2	7-6	11-2	14-2	16-10	19-10	6-8	10-0	12-8	15-1	17-9
	Southern Pine #3	5-9	8-6	10-8	13-0	15-4	5-2	7-7	9-7	11-7	13-9
19.2	Southern Pine SS	8-5	13-3	17-5	22-3	Note b	8-5	13-3	16-10	20-0	23-7
	Southern Pine #1	8-0	11-10	15-1	17-7	20-11	7-1	10-7	13-5	15-9	18-8
	Southern Pine #2	6-10	10-2	12-11	15-4	18-1	6-1	9-2	11-7	13-9	16-2
	Southern Pine #3	5-3	7-9	9-9	11-10	14-0	4-8	6-11	8-9	10-7	12-6
24	Southern Pine SS	7-10	12-3	16-2	20-0	23-7	7-10	11-10	15-0	17-11	21-2
	Southern Pine #1	7-1	10-7	13-5	15-9	18-8	6-4	9-6	12-0	14-1	16-8
	Southern Pine #2	6-1	9-2	11-7	13-9	16-2	5-5	8-2	10-4	12-3	14-6
	Southern Pine #3	4-8	6-11	8-9	10-7	12-6	4-2	6-2	7-10	9-6	11-2

71. Change the indicated rows of Table R802.5.1(4) to read:

Rafter Spacing (inches)	Species and Grade	Dead Load = 10 psf					Dead Load = 20 psf				
		2x4	2x6	2x8	2x10	2x12	2x4	2x6	2x8	2x10	2x12
		Maximum rafter spans[a]									
		(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)
12	Southern Pine SS	8-4	13-1	17-2	21-11	Note b	8-4	13-1	17-2	21-5	25-3
	Southern Pine #1	8-0	12-3	15-6	18-2	21-7	7-7	11-4	14-5	16-10	20-0
	Southern Pine #2	7-0	10-6	13-4	15-10	18-8	6-6	9-9	12-4	14-8	17-3
	Southern Pine #3	5-5	8-0	10-1	12-3	14-6	5-0	7-5	9-4	11-4	13-5
16	Southern Pine SS	7-6	11-10	15-7	19-11	23-7	7-6	11-10	15-7	18-6	21-10
	Southern Pine #1	7-1	10-7	13-5	15-9	18-8	6-7	9-10	12-5	14-7	17-3
	Southern Pine #2	6-1	9-2	11-7	13-9	16-2	5-8	8-5	10-9	12-9	15-0

	Southern Pine #3	4-8	6-11	8-9	10-7	12-6	4-4	6-5	8-1	9-10	11-7
19.2	Southern Pine SS	7-1	11-2	14-8	18-3	21-7	7-1	11-2	14-2	16-11	20-0
	Southern Pine #1	6-6	9-8	12-3	14-4	17-1	6-0	9-0	11-4	13-4	15-9
	Southern Pine #2	5-7	8-4	10-7	12-6	14-9	5-2	7-9	9-9	11-7	13-8
	Southern Pine #3	4-3	6-4	8-0	9-8	11-5	4-0	5-10	7-4	8-11	10-7
24	Southern Pine SS	6-7	10-4	13-8	16-4	19-3	6-7	10-0	12-8	15-2	17-10
	Southern Pine #1	5-10	8-8	11-0	12-10	15-3	5-5	8-0	10-2	11-11	14-1
	Southern Pine #2	5-0	7-5	9-5	11-3	13-2	4-7	6-11	8-9	10-5	12-3
	Southern Pine #3	3-10	5-8	7-1	8-8	10-3	3-6	5-3	6-7	8-0	9-6

72. Change the indicated rows of Table R802.5.1(5) to read:

Rafter Spacing (inches)	Species and Grade	Dead Load = 10 psf					Dead Load = 20 psf				
		2x4	2x6	2x8	2x10	2x12	2x4	2x6	2x8	2x10	2x12
		Maximum rafter spans[a]									
		(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)
12	Southern Pine SS	8-11	14-1	18-6	23-8	Note b	8-11	14-1	18-6	23-8	Note b
	Southern Pine #1	8-7	13-6	17-10	22-3	Note b	8-7	13-5	17-0	19-11	23-7
	Southern Pine #2	8-3	12-11	16-4	19-5	22-10	7-8	11-7	14-8	17-4	20-5
	Southern Pine #3	6-7	9-9	12-4	15-0	17-9	5-11	8-9	11-0	13-5	15-10
16	Southern Pine SS	8-1	12-9	16-10	21-6	Note b	8-1	12-9	16-10	21-6	25-11
	Southern Pine #1	7-10	12-3	16-2	19-3	22-10	7-10	11-7	14-9	17-3	20-5
	Southern Pine #2	7-6	11-2	14-2	16-10	19-10	6-8	10-0	12-8	15-1	17-9
	Southern Pine #3	5-9	8-6	10-8	13-0	15-4	5-2	7-7	9-7	11-7	13-9
19.2	Southern Pine SS	7-8	12-0	15-10	20-2	24-7	7-8	12-0	15-10	20-0	23-7
	Southern Pine #1	7-4	11-7	15-1	17-7	20-11	7-1	10-7	13-5	15-9	18-8
	Southern Pine #2	6-10	10-2	12-11	15-4	18-1	6-1	9-2	11-7	13-9	16-2
	Southern Pine #3	5-3	7-9	9-9	11-10	14-0	4-8	6-11	8-9	10-7	12-6
24	Southern Pine SS	7-1	11-2	14-8	18-9	22-10	7-1	11-2	14-8	17-11	21-2
	Southern Pine #1	6-10	10-7	13-5	15-9	18-8	6-4	9-6	12-0	14-1	16-8
	Southern Pine #2	6-1	9-2	11-7	13-9	16-2	5-5	8-2	10-4	12-3	14-6
	Southern Pine #3	4-8	6-11	8-9	10-7	12-6	4-2	6-2	7-10	9-6	11-2

73. Change the indicated rows of Table R802.5.1(6) to read:

Rafter Spacing (inches)	Species and Grade	Dead Load = 10 psf					Dead Load = 20 psf				
		2x4	2x6	2x8	2x10	2x12	2x4	2x6	2x8	2x10	2x12
		Maximum rafter spans[a]									
		(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)
12	Southern Pine SS	7-6	11-0	15-7	19-11	24-3	7-6	11-10	15-7	19-11	24-3
	Southern Pine #1	7-3	11-5	15-0	18-2	21-7	7-3	11-4	14-5	16-10	20-0
	Southern Pine #2	6-11	10-6	13-4	15-10	18-8	6-6	9-9	12-4	14-8	17-3
	Southern Pine #3	5-5	8-0	10-1	12-3	14-6	5-0	7-5	9-4	11-4	13-5
16	Southern Pine SS	6-10	10-9	14-2	18-1	22-0	6-10	10-9	14-2	18-1	21-10
	Southern Pine #1	6-7	10-4	13-5	15-9	18-8	6-7	9-10	12-5	14-7	17-3
	Southern Pine #2	6-1	9-2	11-7	13-9	16-2	5-8	8-5	10-9	12-9	15-0
	Southern Pine #3	4-8	6-11	8-9	10-7	12-6	4-4	6-5	8-1	9-10	11-7
19.2	Southern Pine SS	6-5	10-2	13-4	17-0	20-9	6-5	10-2	13-4	16-11	20-0
	Southern Pine #1	6-2	9-8	12-3	14-4	17-1	6-0	9-0	11-4	13-4	15-9
	Southern Pine #2	5-7	8-4	10-7	12-6	14-9	5-2	7-9	9-9	11-7	13-8
	Southern Pine #3	4-3	6-4	8-0	9-8	11-5	4-0	5-10	7-4	8-11	10-7
24	Southern Pine SS	6-0	9-5	12-5	15-10	19-3	6-0	9-5	12-5	15-2	17-10
	Southern Pine #1	5-9	8-8	11-0	12-10	15-3	5-5	8-0	10-2	11-11	14-1
	Southern Pine #2	5-0	7-5	9-5	11-3	13-2	4-7	6-11	8-9	10-5	12-3
	Southern Pine #3	3-10	5-8	7-1	8-8	10-3	3-6	5-3	6-7	8-0	9-6

74. Change the indicated rows of Table R802.5.1(7) to read:

Rafter Spacing (inches)	Species and Grade	Dead Load = 10 psf					Dead Load = 20 psf				
		2x4	2x6	2x8	2x10	2x12	2x4	2x6	2x8	2x10	2x12
		Maximum rafter spans[a]									
		(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)
12	Southern Pine SS	7-5	11-8	15-4	19-7	23-7	7-5	11-8	15-4	18-10	22-3
	Southern Pine #1	7-1	10-7	13-5	15-9	18-8	6-9	10-0	12-8	14-10	17-7
	Southern Pine #2	6-1	9-2	11-7	13-9	16-2	5-9	8-7	10-11	12-11	15-3
	Southern Pine #3	4-8	6-11	8-9	10-7	12-6	4-5	6-6	8-3	10-0	11-10
16	Southern Pine SS	6-9	10-7	14-0	17-4	20-5	6-9	10-7	13-9	16-4	19-3
	Southern Pine #1	6-2	9-2	11-8	13-8	16-2	5-10	8-8	11-0	12-10	15-3
	Southern Pine #2	5-3	7-11	10-0	11-11	14-0	5-0	7-5	9-5	11-3	13-2
	Southern Pine #3	4-1	6-0	7-7	9-2	10-10	3-10	5-8	7-1	8-8	10-3
19.2	Southern Pine SS	6-4	10-0	13-2	15-10	18-8	6-4	9-10	12-6	14-11	17-7
	Southern Pine #1	5-8	8-5	10-8	12-5	14-9	5-4	7-11	10-0	11-9	13-11
	Southern Pine #2	4-10	7-3	9-2	10-10	12-9	4-6	6-10	8-8	10-3	12-1
	Southern Pine #3	3-8	5-6	6-11	8-4	9-11	3-6	5-2	6-6	7-11	9-4
24	Southern Pine SS	5-11	9-3	11-11	14-2	16-8	5-11	8-10	11-2	13-4	15-9
	Southern Pine #1	5-0	7-6	9-6	11-1	13-2	4-9	7-1	9-0	10-6	12-5
	Southern Pine #2	4-4	6-5	8-2	9-9	11-5	4-1	6-1	7-9	9-2	10-9
	Southern Pine #3	3-4	4-11	6-2	7-6	8-10	3-1	4-7	5-10	7-1	8-4

75. Change the indicated rows of Table R802.5.1(8) to read:

Rafter Spacing (inches)	Species and Grade	Dead Load = 10 psf					Dead Load = 20 psf				
		2x4	2x6	2x8	2x10	2x12	2x4	2x6	2x8	2x10	2x12
		Maximum rafter spans[a]									
		(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)
12	Southern Pine SS	6-9	10-7	14-0	17-10	21-8	6-9	10-7	14-0	17-10	21-8
	Southern Pine #1	6-6	10-2	13-5	15-9	18-8	6-6	10-0	12-8	14-10	17-7
	Southern Pine #2	6-1	9-2	11-7	13-9	16-2	5-9	8-7	10-11	12-11	15-3
	Southern Pine #3	4-8	6-11	8-9	10-7	12-6	4-5	6-6	8-3	10-0	11-10
16	Southern Pine SS	6-1	9-7	12-8	16-2	19-8	6-1	9-7	12-8	16-2	19-3
	Southern Pine #1	5-11	9-2	11-8	13-8	16-2	5-10	8-8	11-0	12-10	15-3
	Southern Pine #2	5-3	7-11	10-0	11-11	14-0	5-0	7-5	9-5	11-3	13-2
	Southern Pine #3	4-1	6-0	7-7	9-2	10-10	3-10	5-8	7-1	8-8	10-3
19.2	Southern Pine SS	5-9	9-1	11-11	15-3	18-6	5-9	9-1	11-11	14-11	17-7
	Southern Pine #1	5-6	8-5	10-8	12-5	14-9	5-4	7-11	10-0	11-9	13-11
	Southern Pine #2	4-10	7-3	9-2	10-10	12-9	4-6	6-10	8-8	10-3	12-1
	Southern Pine #3	3-8	5-6	6-11	8-4	9-11	3-6	5-2	6-6	7-11	9-4
24	Southern Pine SS	5-4	8-5	11-1	14-2	16-8	5-4	8-5	11-1	13-4	15-9
	Southern Pine #1	5-0	7-6	9-6	11-1	13-2	4-9	7-1	9-0	10-6	12-5
	Southern Pine #2	4-4	6-5	8-2	9-9	11-5	4-1	6-1	7-9	9-2	10-9
	Southern Pine #3	3-4	4-11	6-2	7-6	8-10	3-1	4-7	5-10	7-1	8-4

~~44.~~ 76.] Change Section R807.1 to read:

R807.1 Attic access. Buildings with combustible ceiling or roof construction shall have an attic access opening to attic areas 30 square feet (2.8 m^2) or larger having a vertical height of not less than 30 inches (762 mm). The vertical height shall be measured from the top of the ceiling framing members to the underside of the roof framing members.

The rough-framed opening shall not be less than 22 inches by 30 inches (559 mm by 762 mm) and shall be located in a hallway or other readily accessible location. When located in a wall, the opening shall be a minimum of 22 inches wide by 30 inches high (559 mm wide by 762 mm high). When the access is located in a ceiling, minimum unobstructed headroom in the attic space shall be 30 inches (762 mm) at some point above the access measured vertically from the bottom of ceiling framing members. See Section M1305.1.3 for access requirements where mechanical equipment is located in attics.

[~~45.~~ 77.] Delete Section R905.2.8.5.

[~~46.~~ 78.] Change Section R1001.8 to read:

R1001.8 Smoke chamber. Smoke chamber walls shall be constructed of solid masonry units, hollow masonry units grouted solid, stone or concrete. The total minimum thickness of front, back and side walls shall be 8 inches (203 mm) of solid masonry. When the inside surface of the smoke chamber is formed by corbelled masonry, the inside surface shall be parged smooth. When a lining of firebrick at least 2 inches (51 mm) thick, or a lining of vitrified clay at least 5/8 inch (16 mm) thick, is provided, the total minimum thickness of front, back and side walls shall be 6 inches (152 mm) of solid masonry, including the lining. Firebrick shall conform to ASTM C 1261 and shall be laid with medium duty refractory mortar conforming to ASTM C 199. Vitrified clay linings shall conform to ASTM C 315.

~~56.~~ [~~47.~~ 79.] Delete Section ~~N1101.9~~ N1101.16 (R401.16).

[~~48.~~ 80.] Change the ceiling R-value and wood frame wall R-value categories for climate zone “4 except Marine” in Table N1102.1.1 (R402.1.1) to read:

Ceiling R-Value	Wood Frame Wall R-Value
38	15 or 13 + 1[h]

[~~49.~~ 81.] Change the ceiling U-factor and frame wall U-factor categories for climate zone “4 except Marine” in Table N1102.1.3 (R402.1.3) to read:

Ceiling U-Factor	Frame Wall U-Factor
0.030	0.079

[~~50.~~ 82.] Change Sections N1102.2.1 (R402.2.1) and N1102.2.4 (R402.2.4) to read:

N1102.2.1 (R402.2.1) Ceilings with attic spaces. When Section N1102.1.1 would require R-38 in the ceiling, installing R-30 over 100% of the ceiling area shall be deemed to satisfy the requirement for R-38 wherever the full height of uncompressed R-30 insulation extends over the wall top plate at the eaves. Similarly, when Section N1102.1.1 would require R-49 in the ceiling, installing R-38 over 100% of the ceiling area shall be deemed to satisfy the requirement for R-49 wherever the full height of uncompressed R-38 insulation extends over the wall top plate at the eaves. This

reduction shall not apply to the U-factor alternative approach in Section N1102.1.3 and the total UA alternative in Section N1102.1.4.

N1102.2.4 (R402.2.4) Access hatches and doors. Access doors from conditioned spaces to unconditioned spaces (e.g., attics and crawl spaces) shall be weatherstripped and insulated in accordance with the following values:

1. Hinged vertical doors shall have a minimum overall R-5 insulation value;

2. Hatches and scuttle hole covers shall be insulated to a level equivalent to the insulation on the surrounding surfaces; and

3. Pull down stairs shall have a minimum of 75% of the panel area having R-5 rigid insulation.

Access shall be provided to all equipment that prevents damaging or compressing the insulation. A wood framed or equivalent baffle or retainer is required to be provided when loose fill insulation is installed, the purpose of which is to prevent the loose fill insulation from spilling into the living space when the attic access is opened, and to provide a permanent means of maintaining the installed R-value of the loose fill insulation.

[~~51.~~ 83.] Delete Section N1102.3.6 (R402.3.6) and change Sections N1102.4 (R402.4) and N1102.4.1.1 (R402.4.1.1) to read:

N1102.4 (R402.4) Air leakage. The building thermal envelope shall be constructed to limit air leakage in accordance with the requirements of Sections N1102.4.1 through N1102.4.4.

N1102.4.1.1 (R402.4.1.1) Installation (Mandatory). The components of the building thermal envelope as listed in Table N1102.4.1.1 shall be installed in accordance with the manufacturer's instructions and the criteria listed in Table N1102.4.1.1, as applicable to the method of construction. Where required by the code official, an approved third party shall inspect all components and verify compliance.

[~~52.~~ 84.] Change the title of the "Criteria" category of Table N1102.4.1.1 (R402.4.1.1); change the "Walls," "Shower/tub on exterior wall" and "Fireplace" categories of Table N1102.4.1.1 (R402.4.1.1), and add footnotes "b" and "c" to Table N1102.4.1.1 (R402.4.1.1) to read:

Component	Criteria[a,b]
Walls	Cavities within corners and headers shall be insulated by completely filling the cavity with a material having a minimal thermal resistance of R-3 per inch. The junction of the foundation and sill plate shall be sealed. The junction of the top plate and top of exterior

	walls shall be sealed. Exterior thermal envelope insulation for framed walls shall be installed in substantial contact and continuous alignment with the air barrier. Knee walls shall be sealed.
Shower/tub on exterior wall[c]	Exterior walls adjacent to showers and tubs shall be insulated, and an air barrier shall be installed on the interior side of the exterior wall, adjacent to the shower or tub.
Fireplace	An air barrier shall be installed on fireplace walls. Fireplaces shall have gasketed doors or tight-fitting flue dampers.
b. Structural integrity of headers shall be in accordance with the applicable building code. c. Air barriers used behind showers and tubs on exterior walls shall be of a permeable material that does not cause the entrapment of moisture in the stud cavity.	

[~~53.~~ 85.] Change Section N1102.4.1.2 (R402.4.1.2) and add Sections N1102.4.1.2.1 (R402.4.1.2.1), N1102.4.1.2.2 (R402.4.1.2.2), and N1102.4.1.3 (R402.4.1.3) to read:

N1102.4.1.2 (R402.4.1.2) Air sealing. Building envelope air tightness shall be demonstrated to comply with either Section N1102.4.1.2.1 or N1102.4.1.2.2.

N1102.4.1.2.1 (R402.4.1.2.1) Testing option. The building or dwelling unit shall be tested for air leakage. Testing shall be conducted with a blower door at a pressure of 0.2 inches [~~water gauge (w.g.)~~ w.g. ~~(50 Pascals (Pa)~~ (50 Pa)]). Where required by the building official, testing shall be conducted by an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the building official. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope.

During testing:

1. Exterior windows and doors and fireplace and stove doors shall be closed, but not sealed beyond the intended weatherstripping or other infiltration control measures;

2. Dampers, including exhaust, intake, makeup air, backdraft, and flue dampers shall be closed, but not sealed beyond intended infiltration control measures;

3. Interior doors, if installed at the time of the test, shall be open;

4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed;

5. Heating and cooling systems, if installed at the time of the test, shall be turned off; and

6. Supply and return registers, if installed at the time of the test, shall be fully open.

N1102.4.1.2.2 (R402.4.1.2.2) Visual inspection option. Building envelope tightness shall be considered acceptable when the items listed in Table N1102.4.1.1, applicable to the method of construction, are field verified. Where required by the building official, an approved party, independent from the installer, shall inspect the air barrier.

N1102.4.1.3 (R402.4.1.3) Leakage rate (Prescriptive). The building or dwelling unit shall have an air leakage rate not exceeding 5 changes per hour as verified in accordance with Section N1102.4.1.2.

[~~54.~~ 86.] Change Section N1103.1.1 (R403.1.1) to read:

N1103.1.1 (R403.1.1) Programmable thermostat. The thermostat controlling the primary heating or cooling system of the dwelling unit shall be capable of controlling the heating and cooling system on a daily schedule to maintain different temperature set points at different times of the day. This thermostat shall include the capability to set back or temporarily operate the system to maintain zone temperatures down to 55°F (13°C) or up to 85°F (29°C). The thermostat shall initially be programmed with a heating temperature set point no higher than 70°F (21°C) and a cooling temperature set point no lower than 78°F (26°C).

~~57.~~ [~~55.~~ 87.] Change Section N1103.2.2 (R403.2.2) to read:

N1103.2.2 (R403.2.2) Sealing (Mandatory). ~~All ducts~~ Ducts, air handlers, and filter boxes ~~and building cavities used as ducts~~ shall be sealed. Joints and seams shall comply with Section M1601.4.1 of ~~the International Residential Code~~ this code. Verification of compliance with this section shall be in accordance with either Section N1103.2.2.1 or Section N1103.2.2.2.

Exceptions:

1. Air-impermeable spray foam products shall be permitted to be applied without additional joint seals.

2. Where a duct connection is made that is partially inaccessible, three screws or rivets shall be equally spaced on the exposed portion of the joint so as to prevent a hinge effect.

3. Continuously welded and locking-type longitudinal joints and seams in ducts operating at static pressures less than 2 inches of water column (500 Pa) pressure classification shall not require additional closure systems.

~~58. Add~~ [~~56.~~ 88.] Change Section N1103.2.2.1 (R403.2.2.1) to read:

N1103.2.2.1 (R403.2.2.1) Testing option. Duct tightness shall be verified by either of the following:

1. Post-construction test: ~~Leakage to outdoors~~ Total leakage shall be less than or equal to ~~eight~~ 6 cfm ~~(3.78 L/s)~~ (169.9 L/min) per 100 ~~ft²~~ square feet (9.29 m^2) of conditioned floor area ~~or a total leakage less than or equal to 12 cfm (5.66 L/s) per 100 ft² (9.29m²) of conditioned floor area~~ when tested at a pressure differential of 0.1 inch w.g. (25 Pa) across the entire system, including the manufacturer's air handler ~~end closure~~ enclosure. All register boots shall be taped or otherwise sealed during the test.

2. Rough-in test: Total leakage shall be less than or equal to ~~six~~ 5 cfm ~~(2.83 L/s)~~ (141.5 L/min) per 100 ~~ft²~~ square feet (9.29 m^2) of conditioned floor area when tested at a pressure differential of 0.1 inch w.g. (25 Pa) across the ~~roughed in~~ system, including the manufacturer's air handler enclosure. All register boots shall be taped or otherwise sealed during the test. If the air handler is not installed at the time of the test, total leakage shall be less than or equal to 4 5 cfm ~~(1.89 L/s)~~ (141.5 L/min) per 100 ~~ft²~~ square feet (9.29 m^2) of conditioned floor area.

Exception: ~~Duct tightness~~ The total leakage test is not required ~~if the~~ for ducts and air ~~handler and all ducts are~~ handlers located entirely within ~~conditioned space~~ the building thermal envelope.

When this option is chosen, testing shall be performed by approved qualified individuals, testing agencies or contractors. Testing and results shall be as prescribed in Section N1103.2.2 and approved recognized industry standards.

~~59.~~ [~~57.~~ 89.] Add Section N1103.2.2.2 (R403.2.2.2) to read:

N1103.2.2.2 (R403.2.2.2) Visual inspection option. In addition to the inspection of ducts otherwise required by this code, when the air handler and all ducts are not within conditioned space and this option is chosen to verify duct tightness, duct tightness shall be considered acceptable when the requirements of Section N1103.2.2 are field verified.

[~~58.~~ 90.] Add Section N1103.2.2.3 (R403.2.2.3) to read:

N1103.2.2.3 (R403.2.2.1) Sealed air handler. Air handlers shall have a manufacturer's designation for an air leakage of no more than 2% of the design air flow rate when tested in accordance with ASHRAE 193.

[~~59.~~ 91.] Change Section N1103.4.2 (R403.4.2) to read:

N1103.4.2 (R403.4.2) Hot water pipe insulation (Prescriptive). Insulation for hot water pipe with a minimum thermal resistance (R-value) of R-3 shall be applied to the following:

1. Piping larger than 3/4 inch nominal diameter.

2. Piping serving more than one dwelling unit.

3. Piping located outside the conditioned space.

4. Piping from the water heater to a distribution manifold.

5. Piping located under a floor slab.

6. Buried piping.

7. Supply and return piping in recirculation systems other than demand recirculation systems.

[~~60.~~ 92.] Delete Table N1103.4.2 (R403.4.2).

[~~61.~~ 93.] Change Section N1104.1 (R404.1) to read:

N1104.1 (R404.1) Lighting equipment (Mandatory). A minimum of 50% of the lamps in permanently installed luminaires shall be high-efficacy lamps or a minimum of 50% of the permanently installed luminaires shall contain only high efficacy lamps.

Exception: Low-voltage lighting shall not be required to utilize high-efficiency lamps.

[~~62.~~ 94.] Change the "Glazing" and "Air exchange rate" categories of Table N1105.5.2(1) (Table R405.5.2(1)) and add footnote "b-1" to read:

Building Component	Standard Reference Design	Proposed Design
Glazing[a]	Total area[b] is 15% of the conditioned floor area.	As proposed
Glazing[a]	Orientation: equally distributed to four cardinal compass orientations (North, East, South & West).	As proposed
Glazing[a]	U-factor: from Table [~~R402.1.3~~ N1102.1.3 (R402.1.3)].	As proposed
Glazing[a]	SHGC: From Table [~~R402.1.1~~ N1102.1.1 (R402.1.1)] except that for climates with no requirement (NR) SHGC = 0.40 shall be used.	As proposed
Glazing[a]	Interior shade fraction: [~~Summer (all hours when cooling is required) = 0.70. Winter (all hours when heating is required) = 0.85[b-1].~~ 0.92-(0.21 x SHGC for the standard reference design)]	[Same as standard referenced design[b-1] 0.92-(0.21 x SHGC as proposed)]
Glazing[a]	External shading: none.	As proposed
Air exchange rate	Air leakage rate of 5 air changes per hour at a pressure of 0.2 inches w.g (50 Pa). The mechanical ventilation rate shall be in addition to the air leakage	For residences that are not tested, the same air leakage rate as the

	rate and the same as in the proposed design, but no greater than 0.01 × CFA + 7.5 × (N_{br} + 1) where: CFA = conditioned floor area N_{br} = number of bedrooms Energy recovery shall not be assumed for mechanical ventilation.	standard reference design. For tested residences, the measured air exchange rate[c]. The mechanical ventilation rate[d] shall be in addition to the air leakage rate and shall be as proposed.
[~~b-1. For fenestrations facing within 15 degrees (0.26 rad) of true south that are directly coupled to thermal storage mass, the winter interior shade fraction shall be permitted to be increased to .095 in the proposed design.~~]		

~~60. Change Section M1502.4.4.1 to read:~~

~~M1502.4.4.1 Specified length. The maximum length of the exhaust duct shall be 35 feet (10 668 mm) from the connection to the transition duct from the dryer to the outlet terminal. Where fittings are used the maximum length of the exhaust duct shall be reduced in accordance with Table M1502.4.4.1.~~

[95. Add Section M1501.2 to read:

M1501.2 Transfer air. Air transferred from occupiable spaces other than kitchens, baths and toilet rooms shall not be prohibited from serving as makeup air for exhaust systems. Transfer openings between spaces shall be of the same cross-sectional area as the free area of the makeup air openings. Where louvers and grilles are installed, the required size of openings shall be based on the net free area of each opening. Where the design and free area of louvers and grilles are not known, it shall be assumed that wood louvers will have 25-percent free area and metal louvers and grilles will have 75-percent free area.

96. Change Section M1503.4 and add Section M1503.4.1 to read:

M1503.4 Makeup air required. Exhaust hood systems capable of exhausting more than 400 cubic feet per minute (0.19 m^3/s) shall be provided with makeup air at a rate approximately equal to the exhaust air rate in excess of 400 cubic feet per minute (0.19 m^3/s). Such makeup air systems shall be equipped with a means of closure and shall be automatically controlled to start and operate simultaneously with the exhaust system.

Exception: Intentional openings for makeup air are not required for kitchen exhaust systems capable of exhausting not greater than 600 cubic feet per minute (0.28 m^3/s) provided that one of the following conditions is met:

1. Where the floor area within the air barrier of a dwelling unit is at least 1500 square feet (139.35 m^2), and where natural draft or mechanical draft space-or water-heating appliances are not located within the air barrier.

2. Where the floor area within the air barrier of a dwelling unit is at least 3000 square feet (278.71 m^2), and where natural draft space-or water-heating appliances are not located within the air barrier.

M1503.4.1 Location. Kitchen exhaust makeup air shall be provided in the same room as the exhaust system or in a room or duct system communicating through one or more permanent openings with the room in which such exhaust system is located. Permanent openings shall be at least of the same net cross-sectional area as the required area of the makeup air openings.]

~~61.~~ [~~63.~~ 97.] Add Section M1801.1.1 to read:

M1801.1.1 Equipment changes. Upon the replacement or new installation of any fuel-burning appliances or equipment in existing buildings, an inspection or inspections shall be conducted to ensure that the connected vent or chimney systems comply with the following:

1. Vent or chimney systems are sized in accordance with this code.

2. Vent or chimney systems are clean, free of any obstruction or blockages, defects or deterioration and are in operable condition.

Where not inspected by the local building department, persons performing such changes or installations shall certify to the building official that the requirements of Items 1 and 2 of this section are met.

~~62.~~ [~~64.~~ 98.] Add Section G2425.1.1 to read:

G2425.1.1 Equipment changes. Upon the replacement or new installation of any fuel-burning appliances or equipment in existing buildings, an inspection or inspections shall be conducted to ensure that the connected vent or chimney systems comply with the following:

1. Vent or chimney systems are sized in accordance with this code.

2. Vent or chimney systems are clean, free of any obstruction or blockages, defects, or deterioration and are in operable condition.

Where not inspected by the local building department, persons performing such changes or installations shall certify to the building official that the requirements of Items 1 and 2 of this section are met.

~~63.~~ [~~65.~~ 99.] Change Section P2601.2 to read:

P2601.2 Connections. Plumbing fixtures, drains and appliances used to receive or discharge liquid wastes or sewage shall be directly connected to the sanitary drainage system of the building or premises, in accordance with the requirements of this code. This section shall not be construed to prevent indirect waste systems.

Exception: Bathtubs, showers, lavatories, clothes washers and laundry trays ~~are~~ shall not be required to discharge to the sanitary drainage system where ~~those~~ such fixtures discharge to an approved nonpotable gray water ~~or rain water recycling~~ system in accordance with the applicable provisions of Sections P2909, P2910 and P2911.

~~64.~~ [~~66.~~ 100.] Change Section P2602.1 to read:

P2602.1 General. The water and drainage system of any building or premises where plumbing fixtures are installed shall be connected to a public or private water supply and a public or private sewer system. As provided for in Section [~~103.11~~ 103.10] of Part I of the Virginia Uniform Statewide Building Code (13VAC5-63) for functional design, water supply sources and sewage disposal systems are regulated and approved by the Virginia Department of Health and the Virginia Department of Environmental Quality.

Note: See also the Memorandums of Agreement in the "Related Laws Package," which is available from the Virginia Department of Housing and Community Development.

[~~67.~~ 101.] Add Section P2901.1 to read:

P2901.1 Nonpotable fixtures and outlets. Nonpotable water shall be permitted to serve nonpotable type fixtures and outlets in accordance with the applicable provisions of Sections P2909, P2910, and P2911.

~~65.~~ [~~68.~~ 102.] Change Section P2903.5 to read:

P2903.5 Water hammer. The flow velocity of the water distribution system shall be controlled to reduce the possibility of water hammer. A water-hammer arrestor shall be installed where quick-closing valves are utilized, unless otherwise approved. Water hammer arrestors shall be installed in accordance with manufacturer's specifications. Water hammer arrestors shall conform to ASSE 1010.

~~66.~~ [~~69.~~ 103.] Add Section P3002.2.1 to read:

P3002.2.1 Tracer wire. Nonmetallic sanitary sewer piping that discharges to public systems shall be locatable. An insulated copper tracer wire, 18 AWG minimum in size and suitable for direct burial or an equivalent product, shall be utilized. The wire shall be installed in the same trench as the sewer within 12 inches (305 mm) of the pipe and shall be installed from within five feet of the building wall to the point where the building sewer intersects with the public system. At a minimum, one end of the wire shall terminate above grade in an accessible location that is resistant to physical damage, such as with a cleanout or at the building wall.

[~~70.~~ 104.] Add an exception to Section P3301.1 to read:

Exception: Rainwater nonpotable water systems shall be permitted in accordance with the applicable provisions of Sections P2909 and 2911.

[~~71.~~ 105.] Add Section P2909 Nonpotable Water Systems.

[~~72.~~ 106.] Add Sections P2909.1 through P2909.18, including subsections, to read:

P2909.1 Scope. The provisions of this section shall govern the materials, design, construction and installation of nonpotable water systems subject to this code.

P2909.1.1 Design of nonpotable water systems. All portions of nonpotable water systems subject to this code shall be constructed using the same standards and requirements for the potable water systems or drainage systems as provided for in this code unless otherwise specified in this section or Section P2910 or P2911, as applicable.

P2909.2 Makeup water. Makeup water shall be provided for all nonpotable water supply systems. The makeup water system shall be designed and installed to provide supply of water in the amounts and at the pressures specified in this code. The makeup water supply shall be potable and be protected against backflow in accordance with the applicable requirements of Section P2902.

P2909.2.1 Makeup water sources. Nonpotable water shall be permitted to serve as makeup water for gray water and rainwater systems.

P2909.2.2 Makeup water supply valve. A full-open valve shall be provided on the makeup water supply line.

P2909.2.3 Control valve alarm. Makeup water systems shall be fitted with a warning mechanism that alerts the user to a failure of the inlet control valve to close correctly. The alarm shall activate before the water within the storage tank begins to discharge into the overflow system.

P2909.3 Sizing. Nonpotable water distribution systems shall be designed and sized for peak demand in accordance with approved engineering practice methods that comply with the applicable provisions of this chapter.

P2909.4 Signage required. All nonpotable water outlets, other than water closets and urinals, such as hose connections, open ended pipes, and faucets shall be identified at the point of use for each outlet with signage that reads as follows: “Nonpotable water is utilized for (application name). Caution: nonpotable water. DO NOT DRINK.” The words shall be legibly and indelibly printed on a tag or sign constructed of corrosion-resistant waterproof material or shall be indelibly printed on the fixture. The letters of the words shall be not less than 0.5 inches (12.7 mm) in height and in colors in contrast to the background on which they are applied. The pictograph shown in Figure P2909.4 shall appear on the signage required by this section.

Figure P2909.4
Pictograph DO NOT DRINK

P2909.5 Potable water supply system connections. Where a potable water supply system is connected to a nonpotable water system, the potable water supply shall be protected against backflow in accordance with the applicable provisions of Section P2902.

P2909.6 Nonpotable water system connections. Where a nonpotable water system is connected and supplies water to another nonpotable water system, the nonpotable water system that supplies water shall be protected against backflow in accordance with the applicable provisions of Section P2902.

P2909.7 Approved components and materials. Piping, plumbing components, and materials used in the nonpotable water drainage and distribution systems shall be approved for the intended application and compatible with the water and any disinfection or treatment systems used.

P2909.8 Insect and vermin control. Nonpotable water systems shall be protected to prevent the entrance of insects and vermin into storage and piping systems. Screen materials shall be compatible with system material and shall not promote corrosion of system components.

P2909.9 Freeze protection. Nonpotable water systems shall be protected from freezing in accordance with the applicable provisions of Chapter 26.

P2909.10 Nonpotable water storage tanks. Nonpotable water storage tanks shall be approved for the intended application and comply with Sections P2909.10.1 through P2909.10.12.

P2909.10.1 Sizing. The holding capacity of storage tanks shall be sized for the intended use.

P2909.10.2 Inlets. Storage tank inlets shall be designed to introduce water into the tank and avoid agitating the contents of the storage tank. The water supply to storage tanks shall be controlled by fill valves or other automatic supply valves designed to stop the flow of incoming water before the tank contents reach the overflow pipes.

P2909.10.3 Outlets. Outlets shall be located at least 4 inches (102 mm) above the bottom of the storage tank, and shall not skim water from the surface.

P2909.10.4 Materials and location. Storage tanks shall be constructed of material compatible with treatment systems used to treat water. Above grade storage vessels shall be constructed using opaque, UV-resistant materials such as tinted plastic, lined metal, concrete, or wood or painted to prevent algae growth. Above grade storage tanks shall be protected from direct sunlight unless their design specifically incorporates the use of the sunlight heat transfer. Wooden storage tanks shall be provided with a flexible liner. Storage tanks and their manholes shall not be located directly under soil or waste piping or sources of contamination.

P2909.10.5 Foundation and supports. Storage tanks shall be supported on a firm base capable of withstanding the storage tank's weight when filled to capacity. Storage tanks shall be supported in accordance with the applicable provisions of the IBC.

P2909.10.5.1 Ballast. Where the soil can become saturated, an underground storage tank shall be ballasted, or otherwise secured, to prevent the effects of buoyancy. The combined weight of the tank and hold down ballast shall meet or exceed the buoyancy force of the tank. Where the installation requires a foundation, the foundation shall be flat and shall be designed to support the storage tank weight when full, consistent with the bearing capability of adjacent soil.

P2909.10.5.2 Structural support. Where installed below grade, storage tank installations shall be designed to withstand earth and surface structural loads without damage.

P2909.10.6 Overflow. The storage tank shall be equipped with an overflow pipe having a diameter not less than that shown in Table P2909.10.6. The overflow outlet shall discharge at a point not less than 6 inches (152 mm) above the roof or roof drain, floor or floor drain, or over an open water-supplied fixture. The overflow outlet shall terminate through a check valve. Overflow pipes shall not be directed on walkways. The overflow drain shall not be equipped with a shutoff valve. A minimum of one cleanout shall be provided on each overflow pipe in accordance with the applicable provisions of Section P3005.2.

Table P2909.10.6
Size of Drain Pipes for Water Tanks

Tank Capacity (gallons)	Drain Pipe (inches)
Up to 750	1
751-1500	1 1/2
1501-3000	2
3001-5000	2 1/2
5001-7500	3
Over 7500	4

P2909.10.7 Access. A minimum of one access opening shall be provided to allow inspection and cleaning of the tank interior. Access openings shall have an approved locking device or other approved method of securing access. Below grade storage

tanks, located outside of the building, shall be provided with either a manhole not less than 24 inches (610 mm) square or a manhole with an inside diameter not less than 24 inches (610 mm). The design and installation of access openings shall prohibit surface water from entering the tank. Each manhole cover shall have an approved locking device or other approved method of securing access.

Exception: Storage tanks under 800 gallons (3028 L) in volume installed below grade shall not be required to be equipped with a manhole, but shall have an access opening not less than 8 inches (203 mm) in diameter to allow inspection and cleaning of the tank interior.

P2909.10.8 Venting. Storage tanks shall be vented. Vents shall not be connected to the sanitary drainage system. Vents shall be at least equal in size to the internal diameter of the drainage inlet pipe or pipes connected to the tank. Where installed at grade, vents shall be protected from contamination by means of a U-bend installed with the opening directed downward. Vent outlets shall extend a minimum of 12 inches (304.8 mm) above grade, or as necessary to prevent surface water from entering the storage tank. Vent openings shall be protected against the entrance of vermin and insects. Vents serving gray water tanks shall terminate in accordance with the applicable provisions of Sections P3103 and P2909.8.

P2909.10.9 Drain. Where drains are provided, they shall be located at the lowest point of the storage tank. The tank drain pipe shall discharge as required for overflow pipes and shall not be smaller in size than specified in Table P2909.10.6. A minimum of one cleanout shall be provided on each drain pipe in accordance with Section P3005.2.

P2909.10.10 Labeling and signage. Each nonpotable water storage tank shall be labeled with its rated capacity and the location of the upstream bypass valve. Underground and otherwise concealed storage tanks shall be labeled at all access points. The label shall read: “CAUTION: NONPOTABLE WATER – DO NOT DRINK.” Where an opening is provided that could allow the entry of personnel, the opening shall be marked with the words: “DANGER – CONFINED SPACE.” Markings shall be indelibly printed on a tag or sign constructed of corrosion-resistant waterproof material mounted on the tank or shall be indelibly printed on the tank. The letters of the words shall be not less than 0.5 inches (12.7 mm) in height and shall be of a color in contrast with the background on which they are applied.

P2909.10.11 Storage tank tests. Storage tanks shall be tested in accordance with the following:

1. Storage tanks shall be filled with water to the overflow line prior to and during inspection. All seams and joints shall be left exposed and the tank shall remain water tight without leakage for a period of 24 hours.

2. After 24 hours, supplemental water shall be introduced for a period of 15 minutes to verify proper drainage of the overflow system and verify that there are no leaks.

3. Following a successful test of the overflow system, the water level in the tank shall be reduced to a level that is at 2 inches (50.8 mm) below the makeup water offset point. The tank drain shall be observed for proper operation. The makeup water system shall be observed for proper operation, and successful automatic shutoff of the system at the refill threshold shall be verified. Water shall not be drained from the overflow at any time during the refill test.

4. Air tests shall be permitted in lieu of water testing as recommended by the tank manufacturer or the tank standard.

P2909.10.12 Structural strength. Storage tanks shall meet the applicable structural strength requirements of the IBC.

P2909.11 Trenching requirements for nonpotable water system piping. Underground nonpotable water system piping shall be horizontally separated from the building sewer and potable water piping by 5 feet (1524 m) of undisturbed or compacted earth. Nonpotable water system piping shall not be located in, under or above sewage systems cesspools, septic tanks, septic tank drainage fields or seepage pits. Buried nonpotable system piping shall comply with the requirements of this code for the piping material installed.

Exceptions:

1. The required separation distance shall not apply where the bottom of the nonpotable water pipe within 5 feet (1524 mm) of the sewer is equal to or greater than 12 inches (305 mm) above the top of the highest point of the sewer and the pipe materials conforms to Table P3002.2.

2. The required separation distance shall not apply where the bottom of the potable water service pipe within 5 feet (1524 mm) of the nonpotable water pipe is a minimum of 12 inches (305 mm) above the top of the highest point of the nonpotable water pipe and the pipe materials comply with the requirements of Table P2905.5.

3. Nonpotable water pipe is permitted to be located in the same trench with building sewer piping, provided that such sewer piping is constructed of materials that comply with the requirements of Table P3002.1(2).

4. The required separation distance shall not apply where a nonpotable water pipe crosses a sewer pipe, provided that the pipe is sleeved to at least 5 feet (1524 mm) horizontally from the sewer pipe centerline on both sides of such crossing with pipe materials that comply with Table P3002.1(2).

5. The required separation distance shall not apply where a potable water service pipe crosses a nonpotable water pipe provided that the potable water service pipe is sleeved for a distance of at least 5 feet (1524 mm) horizontally from the centerline of the nonpotable pipe on both sides of such crossing with pipe materials that comply with Table P3002.1(2).

P2909.12 Outdoor outlet access. Sillcocks, hose bibs, wall hydrants, yard hydrants, and other outdoor outlets that are supplied by nonpotable water shall be located in a locked vault or shall be operable only by means of a removable key.

P2909.13 Drainage and vent piping and fittings. Nonpotable drainage and vent pipe and fittings shall comply with the applicable material standards and installation requirements in accordance with provisions of Chapter 30.

P2909.13.1. Labeling and marking. Identification of nonpotable drainage and vent piping shall not be required.

P2909.14 Pumping and control system. Mechanical equipment, including pumps, valves, and filters, shall be accessible and removable in order to perform repair, maintenance and cleaning. The minimum flow rate and flow pressure delivered by the pumping system shall be designed for the intended application in accordance with the applicable provisions of Section P2903.

P2909.15 Water-pressure reducing valve or regulator. Where the water pressure supplied by the pumping system exceeds 80 psi (552 kPa) static, a pressure-reducing valve shall be installed to reduce the pressure in the nonpotable water distribution system piping to 80 psi (552 kPa) static or less. Pressure-reducing valves shall be specified and installed in accordance with the applicable provisions of Section P2903.3.1.

P2909.16 Distribution pipe. Distribution piping utilized in nonpotable water stems shall comply with Sections P2909.16.1 through P2909.16.4.

P2909.16.1 Materials, joints, and connections. Distribution piping and fittings shall comply with the applicable material standards and installation requirements in accordance with applicable provisions of Chapter 29.

P2909.16.2 Design. Distribution piping shall be designed and sized in accordance with the applicable provisions of Chapter 29.

P2909.16.3 Labeling and marking. Distribution piping labeling and marking shall comply with Section P2901.1.

P2909.16.4 Backflow prevention. Backflow preventers shall be installed in accordance with the applicable provisions of Section P2902.

P2909.17 Tests and inspections. Tests and inspections shall be performed in accordance with Sections P2909.17.1 through P2909.17.5.

P2909.17.1 Drainage and vent pipe test. Drain, waste and vent piping used for gray water and rainwater nonpotable water systems shall be tested in accordance with the applicable provisions of Section P2503.

P2909.17.2 Storage tank test. Storage tanks shall be tested in accordance with the Section P2909.10.11.

P2909.17.3 Water supply system test. Nonpotable distribution piping shall be tested in accordance with Section P2503.7.

P2909.17.4 Inspection and testing of backflow prevention assemblies. The testing of backflow preventers and backwater valves shall be conducted in accordance with Section P2503.8.

P2909.17.5 Inspection of vermin and insect protection. Inlets and vent terminations shall be visually inspected to verify that each termination is installed in accordance with Section P2909.10.8.

P2909.18 Operation and maintenance manuals. Operations and maintenance materials for nonpotable water systems shall be provided as prescribed by the system component manufacturers and supplied to the owner to be kept in a readily accessible location.

[~~73.~~ 107.] Add Section P2910 Gray Water Nonpotable Water Systems.

[~~74.~~ 108.] Add Sections P2910.1 through P2910.6, including subsections, to read:

P2910.1 Gray water nonpotable water systems. This code is applicable to the plumbing fixtures, piping or piping systems, storage tanks, drains, appurtenances and appliances that are part of the distribution system for gray water within buildings and to storage tanks and associated piping that are part of the distribution system for gray water outside of buildings. This code does not regulate equipment used for, or the methods of, processing, filtering or treating gray water, which may be regulated by the Virginia Department of Health or the Virginia Department of Environmental Quality.

P2910.1.1 Separate systems. Gray water nonpotable water systems, unless approved otherwise under the permit from the Virginia Department of Health, shall be separate from the potable water system of a building with no cross connections between the two systems except as permitted by the Virginia Department of Health.

P2910.2 Water quality. Each application of gray water reuse shall meet the minimum water quality requirements set forth in Sections P2910.2.1 through P2910.2.4 unless otherwise superseded by other state agencies.

P2910.2.1 Disinfection. Where the intended use or reuse application for nonpotable water requires disinfection or other treatment or both, it shall be disinfected as needed to ensure that the required water quality is delivered at the point of use or reuse.

P2910.2.2 Residual disinfectants. Where chlorine is used for disinfection, the nonpotable water shall contain not more than 4 parts per million (4 mg/L) of free chlorine, combined chlorine or total chlorine. Where ozone is used for disinfection, the nonpotable water shall not exceed 0.1 parts per million (by volume) of ozone at the point of use.

P2910.2.3 Filtration. Water collected for reuse shall be filtered as required for the intended end use. Filters shall be accessible for inspection and maintenance. Filters shall utilize a pressure gauge or other approved method to indicate when a filter requires servicing or replacement. Shutoff valves installed immediately upstream and downstream of the filter shall be included to allow for isolation during maintenance

P2910.2.4 Filtration required. Gray water utilized for water closet and urinal flushing applications shall be filtered by a 100 micron or finer filter.

P2910.3 Storage tanks. Storage tanks utilized in gray water nonpotable water systems shall comply with Section P2909.10.

P2910.4 Retention time limits. Untreated gray water shall be retained in storage tanks for a maximum of 24 hours.

P2910.5 Tank Location. Storage tanks shall be located with a minimum horizontal distance between various elements as indicated in Table P2910.5.1.

Table P2910.5.1
Location of Nonpotable Gray Water Reuse Storage Tanks

Element	Minimum Horizontal Distance from Storage Tank (feet)
Lot line adjoining private lots	5
Sewage systems	5
Septic tanks	5
Water wells	50
Streams and lakes	50
Water service	5
Public water main	10

P2910.6 Valves. Valves shall be supplied on gray water nonpotable water drainage systems in accordance with Sections P2910.6.1 and P2910.6.2.

P2910.6.1 Bypass valve. One three-way diverter valve certified to NSF 50 or other approved device shall be installed on collection piping upstream of each storage tank, or drainfield, as applicable, to divert untreated gray water to the sanitary sewer to allow servicing and inspection of the system. Bypass valves shall be installed downstream of fixture traps and vent connections. Bypass valves shall be labeled to indicate the direction of flow, connection and storage tank or drainfield connection. Bypass valves shall be provided with access for operation and maintenance. Two shutoff valves shall not be installed to serve as a bypass valve.

P2910.6.2 Backwater valve. Backwater valves shall be installed on each overflow and tank drain pipe to prevent unwanted water from draining back into the storage tank. If the overflow and drain piping arrangement is installed to physically not allow water to drain back into the tank, such as in the form of an air gap, backwater valves shall not be required. Backwater valves shall be constructed and installed in accordance with Section P3008.

[~~75.~~ 109.] Add Section P2911 Rainwater NonPotable Water Systems.

[~~76.~~ 110.] Add Sections P2911.1 through P2911.10, including subsections, to read:

P2911.1 General. The provisions of this section shall govern the design, construction, installation, alteration, and repair of rainwater nonpotable water systems for the collection, storage, treatment, and distribution of rainwater for nonpotable applications.

P2911.2 Water quality. Each application of rainwater reuse shall meet the minimum water quality requirements set forth in Sections P2911.2.1 through P2911.2.4 unless otherwise superseded by other state agencies.

P2911.2.1 Disinfection. Where the intended use or reuse application for nonpotable water requires disinfection or other treatment or both, it shall be disinfected as needed to ensure that the required water quality is delivered at the point of use or reuse.

P2911.2.2 Residual disinfectants. Where chlorine is used for disinfection, the nonpotable water shall contain not more than 4 parts per million (4 mg/L) of free chlorine, combined chlorine or total chlorine. Where ozone is used for disinfection, the nonpotable water shall not exceed 0.1 parts per million (by volume) of ozone at the point of use.

P2911.2.3 Filtration. Water collected for reuse shall be filtered as required for the intended end use. Filters shall be accessible for inspection and maintenance. Filters shall utilize a pressure gauge or other approved method to indicate when a filter requires servicing or replacement. Shutoff valves installed immediately upstream and downstream of the filter shall be included to allow for isolation during maintenance.

P2911.2.4 Filtration required. Rainwater utilized for water closet and urinal flushing applications shall be filtered by a 100 micron or finer filter.

P2911.3 Collection surface. Rainwater shall be collected only from aboveground impervious roofing surfaces constructed from approved materials. Overflow or discharge piping from appliances or equipment or both, including but not limited to evaporative coolers, water heaters, and solar water heaters shall not discharge onto rainwater collection surfaces.

P2911.4 Collection surface diversion. At a minimum, the first 0.04 inches (1.016 mm) of each rain event of 25 gallons (94.6 L) per 1000 square feet (92.9 m^2) shall be diverted from the storage tank by automatic means and not require the operation of manually operated valves or devices. Diverted water shall not drain onto other collection surfaces that are discharging to the rainwater system or to the sanitary sewer. Such water shall be diverted from the storage tank and discharged in an approved location.

P2911.5 Pre-tank filtration. Downspouts, conductors, and leaders shall be connected to a pre-tank filtration device. The filtration device shall not permit materials larger than 0.015 inches (0.4 mm).

P2911.6 Roof gutters and downspouts. Gutters and downspouts shall be constructed of materials that are compatible with the collection surface and the rainwater quality for the desired end use. Joints shall be made watertight.

P2911.6.1 Slope. Roof gutters, leaders, and rainwater collection piping shall slope continuously toward collection inlets. Gutters and downspouts shall have a slope of not less than 1 unit in 96 units along their entire length, and shall not permit the collection or pooling of water at any point.

P2911.6.2 Size. Gutters and downspouts shall be installed and sized in accordance with local rainfall rates.

P2911.6.3 Cleanouts. Cleanouts or other approved openings shall be provided to permit access to all filters, flushes, pipes and downspouts.

P2911.7 Storage tanks. Storage tanks utilized in rainwater nonpotable water systems shall comply with Section P2909.10.

P2911.8 Location. Storage tanks shall be located with a minimum horizontal distance between various elements as indicated in Table P2911.8.1.

Table P2911.8.1 Location of Rainwater Storage Tanks	
Element	Minimum Horizontal Distance from Storage Tank (feet)
Lot line adjoining private lots	5
Sewage systems	5
Septic tanks	5

P2911.9 Valves. Valves shall be installed in collection and conveyance drainage piping of rainwater nonpotable water systems in accordance with Sections P2911.9.1 and P2911.9.2.

P2911.9.1 Influent diversion. A means shall be provided to divert storage tank influent to allow maintenance and repair of the storage tank system.

P2911.9.2 Backwater valve. Backwater valves shall be installed on each overflow and tank drain pipe to prevent unwanted water from draining back into the storage tank. If the overflow and drain piping arrangement is installed to physically not allow water to drain back into the tank, such as in the form of an air gap, backwater valves shall not be required. Backwater valves shall be constructed and installed in accordance with Section P3008.

P2911.10 Tests and inspections. Tests and inspections shall be performed in accordance with Sections P2911.10.1 through P2911.10.2.

P2911.10.1 Roof gutter inspection and test. Roof gutters shall be inspected to verify that the installation and slope is in accordance with Section P2911.6.1. Gutters shall be tested by pouring a minimum of one gallon of water into the end of the gutter opposite the collection point. The gutter being tested shall not leak and shall not retain standing water.

P2911.10.2 Collection surface diversion test. A collection surface diversion test shall be performed by introducing water into the gutters or onto the collection surface area. Diversion of the first quantity of water in accordance with the requirements of Section P2911.4 shall be verified.

~~67.~~ [~~77.~~ 111.] Add Section E3601.8 to read:

E3601.8 Energizing service equipment. The building official shall give permission to energize the electrical service equipment of a one- or two-family dwelling unit when all of the following requirements have been approved:

1. The service wiring and equipment, including the meter socket enclosure, shall be installed and the service wiring terminated.

2. The grounding electrode system shall be installed and terminated.

3. At least one receptacle outlet on a ground fault protected circuit shall be installed and the circuit wiring terminated.

4. Service equipment covers shall be installed.

5. The building roof covering shall be installed.

6. Temporary electrical service equipment shall be suitable for wet locations unless the interior is dry and protected from the weather.

~~68.~~ [~~78.~~ 112.] Change Section E3802.4 to read:

E3802.4 In unfinished basements. Where ~~type~~ Type SE or NM cable is run at angles with joists in unfinished basements, cable assemblies containing two or more conductors of sizes 6 AWG and larger and assemblies containing three or more conductors of sizes 8 AWG and larger shall not require additional protection where attached directly to the bottom of the joists. Smaller cables shall be run either through bored holes in joists or on running boards. Type NM or SE cable installed on the wall of an unfinished basement shall be permitted to be installed in a listed conduit or tubing or shall be protected in accordance with Table E3802.1. Conduit or tubing shall be provided with a suitable insulating bushing or adapter at the point the where cable enters the raceway. The sheath of the Type NM or SE cable ~~sheath~~ shall extend through the conduit or tubing and into the outlet or device box not less than 1/4 inch (6.4 mm). The cable shall be secured within 12 inches (305 mm) of the point where

the cable enters the conduit or tubing. Metal conduit, tubing, and metal outlet boxes shall be connected to an equipment grounding conductor complying with Section E3908.13.

~~69.~~ [~~79.~~ 113.] Change Section ~~E3902.11~~ E3902.12 to read:

~~E3902.11~~ E3902.12 Arc-fault protection of bedroom outlets. All branch circuits that supply 120-volt, single phase, 15-ampere and 20-ampere outlets installed in bedrooms shall be protected by a combination type arc-fault circuit interrupter installed to provide protection of the branch circuit.

Exceptions:

1. Where ~~a combination~~ an outlet branch-circuit Type AFCI is installed at the first outlet to provide protection for the remaining portion of the branch circuit, the portion of the branch circuit between the branch-circuit overcurrent device and ~~such~~ the first outlet shall be ~~wired~~ installed with metal outlet and junction boxes and RMC, IMC, EMT, Type MC or steel armored ~~cable,~~ Type AC cables meeting the requirements of Section E3908.8.

2. Where an outlet branch-circuit Type AFCI is installed at the first outlet to provide protection for the remaining portion of the branch circuit, the portion of the branch circuit between the branch-circuit overcurrent device and the first outlet shall be installed with metal or nonmetallic conduit or tubing that is encased in not less than 2 inches (51 mm) of concrete.

3. AFCI protection is not required for ~~a~~ an individual branch circuit supplying only a fire alarm system where the branch circuit is wired with metal outlet and junction boxes and RMC, IMC, EMT or ~~steel~~ steel-sheathed armored cable Type AC, or Type MC meeting the requirements of Section E3908.8.

[~~80.~~ 114.] Add the following referenced standards to Chapter 44:

Standard Reference Number	Title	Referenced in Code Section Number
ICC ISPSC-12	International Swimming Pool and Spa Code	R325.1
NFPA 13R-10	Installation of Sprinkler Systems in Residential Occupancies Up to and Including Four Stories in Height	R310.1
NSF/ANSI 50-09	Equipment for Swimming Pools, Spas, Hot Tubs and Other Recreational Water Facilities	P2910.6.1

[~~S.~~ T.] Add “Marinas” to the list of occupancies in Section 312.1 of the IBC.

13VAC5-63-220. Chapter 4 Special detailed requirements based on use and occupancy.

A. Delete Section 403.4.4 of the IBC.

B. ~~Add~~ Change Section ~~407.10 to~~ 407.4.1.1 of the IBC to read:

~~407.10~~ 407.4.1.1 Special locking arrangement. Means of egress doors shall be permitted to contain locking devices restricting the means of egress in areas in which the clinical needs of the patients require restraint of movement, where all of the following conditions are met:

1. The locks release upon activation of the fire alarm system or the loss of power.

2. The building is equipped with an approved automatic sprinkler system in accordance with Section 903.3.1.1.

3. A manual release device is provided at a nursing station responsible for the area.

4. A key-operated switch or other manual device is provided adjacent to each door equipped with the locking device. Such switch or other device, when operated, shall result in direct interruption of power to the lock -- independent of the control system electronics.

5. All staff shall have keys or other means to unlock the switch or other device or each door provided with the locking device.

C. Add Section 407.11 to the IBC to read:

407.11 Emergency power systems. Emergency power shall be provided for medical life support equipment, operating, recovery, intensive care, emergency rooms, fire detection and alarm systems in any Group I-2 occupancy licensed by the Virginia Department of Health as a hospital, nursing home or hospice facility.

[D. Add Section 408.2.1 to the IBC to read:

408.2.1 Short-term holding areas. Short-term holding areas shall be permitted to comply with Section 427.

~~D.~~ E.] Change ~~the title~~ Section 408.6 of the IBC ~~Section 410~~ to read:

~~Stages, Platforms and Technical Production Areas.~~

~~E. Delete the following definitions in IBC Section 410.2:~~

~~Fly gallery.~~

~~Gridiron.~~

~~F. Add the following definition to IBC Section 410.2 to read:~~

~~Technical production area. Open elevated areas or spaces intended for entertainment technicians to walk on and occupy for servicing and operating entertainment technology systems and equipment. Galleries, including fly and lighting galleries, gridirons, catwalks and similar areas are designed for these purposes.~~

~~G. Delete Section 410.5.3 of the IBC, add new Section 410.6 to the IBC and renumber Sections 410.6 and 410.7 of the IBC to Sections 410.7 and 410.8 respectively.~~

~~410.6 Means of egress. Except as modified or as provided for in this section, the provisions of Chapter 10 shall apply.~~

~~410.6.1 Arrangement. Where two or more exits or exit access doorways are required per Section 1015.1 from the stage, at least one exit or exit access doorway shall be provided on each side of the stage.~~

~~410.6.2 Stairway and ramp enclosure. Stairways and ramps provided from stages, platforms and technical production areas are not required to be enclosed.~~

~~410.6.3 Technical production areas. Technical production areas shall be provided with means of egress and means of escape in accordance with Section 410.6.3.1 through 410.6.3.5.~~

~~410.6.3.1 Means of egress. At least one means of egress shall be provided from technical production areas.~~

~~410.6.3.2 Travel distance. The maximum length of exit access travel shall not exceed 300 feet (91 440 mm) for buildings without a sprinkler system and 400 feet (121 920 mm) for buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.~~

~~410.6.3.3 Two means of egress. Where two means of egress are required, the common path of travel shall not exceed 100 feet (30 480 mm).~~

~~Exception: A means of egress to a roof in place of a second means of egress is permitted.~~

~~410.6.3.4 Path of egress travel. The following exit access components are permitted when serving technical production areas:~~

~~1. Stairways.~~

~~2. Ramps.~~

~~3. Spiral stairways.~~

~~4. Catwalks.~~

~~5. Alternating tread devices.~~

~~6. Permanent ladders.~~

~~410.6.3.5 Width. The path of egress travel within and from technical production areas shall be a minimum of 22 inches (559 mm).~~

408.6 Smoke barrier. Occupancies classified as Group I-3 shall have smoke barriers complying with Sections 408.8 and 709 to divide every story occupied by residents for sleeping, or any other story having an occupant load of 50 or more persons, into no fewer than two smoke compartments.

[~~E.~~ F.] Change Section 408.9 of the IBC and add Sections 408.9.1 through 408.9.3 to the IBC to read:

408.9 Smoke control. Smoke control for each smoke compartment shall be in accordance with Sections 408.9.1 through 408.9.3.

Exception: Smoke compartments with operable windows or windows that are readily breakable.

408.9.1 Locations. An engineered smoke control system shall comply with Section 909 and shall be provided in the following locations:

1. Dormitory areas.

2. Celled areas.

3. General housing areas.

4. Intake areas.

5. Medical celled or medical dormitory areas.

6. Interior recreation areas.

408.9.2 Compliance. The engineered smoke control system shall provide and maintain a tenable environment in the area of origin and shall comply with all of the following:

1. Shall facilitate the timely evacuation and relocation of occupants from the area of origin.

2. Shall be independent of exhaust systems under Chapter 5 of the IMC.

3. Duration of operation in accordance with Section 909.4.6.

4. The pressurization method shall be permitted and shall provide a minimum of 24 air changes per hour of exhaust, and 20 air changes per hour of makeup, and shall comply with Section 909.6. If the pressurization method is not utilized, the exhaust method shall be provided and shall comply with Section 909.8.

408.9.3 Corridors. Egress corridors within smoke compartments shall be kept free and clear of smoke.

[G. Add Section 414.1.1.1 to the IBC to read:

414.1.1.1 Amendments. The following changes shall be made to the IFC for the use of this section:

1. Change Section 2306.8.1 of the IFC and add Section 2306.8.6 to the IFC to read:

2306.8.1 Listed. Dispensers shall be listed in accordance with UL 87A. Hoses, nozzles, breakaway fittings, swivels, flexible connectors or dispenser emergency shutoff valves, vapor recovery systems, leak detection devices, and pumps used in alcohol-blended fuel-dispensing systems shall be listed for the specific purpose.

2306.8.6 Compatibility. Dispensers shall only be used with the fuels for which they have been listed, which are marked on the product. Field installed components including hose assemblies, breakaway couplings, swivel connectors, and hose nozzle valves shall be provided in accordance with the listing and the marking on the unit.

2. Add the following reference standard to Chapter 80 of the IFC:

Standard reference number	Title	Referenced in code section number
UL 87A-12	Outline of Investigation for Power-Operated Dispensing Devices for Gasoline and Gasoline/ethanol Blends with Nominal Ethanol Concentrations up to 85 Percent	2306.8.1

H. Add Section 414.6.2 to the IBC to read:

414.6.2 Other regulations. The installation, repair, upgrade and closure of underground and aboveground storage tanks subject to the Virginia State Water Control Board regulations 9VAC25-91 and 9VAC25-580 shall be governed by those regulations, which are hereby incorporated by reference to be an enforceable part of this code. Where differences occur between the provisions of this code and the incorporated provisions of the State Water Control Board regulations, the provisions of the State Water Control Board regulations shall apply. Provisions of the International Fire Code addressing closure of such tanks which are subject to the Virginia State Water Control Board regulations 9VAC25-91 and 9VAC25-580 shall not be applicable.]

~~H.~~ [~~F. Add Section 415.1.1 to the IBC to read:~~

~~415.1.1 Flammable and combustible liquids.~~] ~~Notwithstanding the provisions of this chapter,~~ [~~Construction associated with~~ ~~the storage, handling, processing, and transporting of flammable and combustible liquids shall be in accordance with the mechanical code and the fire code listed in Chapter 35 of this code~~]~~. Regulations~~ [~~and regulations~~ ~~governing the installation, repair, upgrade, and closure of underground and aboveground storage tanks under the Virginia State Water Control Board regulations 9VAC25-91 and 9VAC25-580,~~

~~which~~ ~~are~~ ~~hereby~~ ~~adopted and incorporated by reference to be an enforceable part of this code. Where differences occur between the provisions of this code and the~~] ~~incorporated~~ [~~provisions of~~] ~~the~~ [~~such~~ ~~State Water Control Board regulations, the provisions of the State Water Control Board regulations shall apply.~~

~~G.~~ I.] Change the title of Section 420 and change Sections 420.1 and 420.4 of the IBC to read:

Section 420
Groups I-1, R-1, R-2, R-3, and R-4.

420.1 General. Occupancies in Groups I-1, R-1, R-2, R-3, and R-4 shall comply with the provisions of Sections 420.1 through 420.6 and other applicable provisions of this code.

420.4 Smoke barriers in Group I-1 Condition 2. Smoke barriers shall be provided in Group I-1 Condition 2 to subdivide every story used by persons receiving care or treatment or sleeping and to divide other stories with an occupant load of 50 or more persons, into no fewer than two smoke compartments. Such stories shall be divided into smoke compartments with an area of not more than 22,500 square feet (2092 m^2) and the travel distance from any point in a smoke compartment to a smoke barrier door shall not exceed 200 feet (60 960 mm). The smoke barrier shall be in accordance with Section 709.

[~~H.~~ J.] Add Section 420.4.1 to the IBC to read:

420.4.1 Refuge area. Refuge areas shall be provided within each smoke compartment. The size of the refuge area shall accommodate the occupants and care recipients from the adjoining smoke compartment. Where a smoke compartment is adjoined by two or more smoke compartments, the minimum area of the refuge area shall accommodate the largest occupant load of the adjoining compartments. The size of the refuge area shall provide the following:

1. Not less than 15 net square feet (1.4 m^2) for each care recipient.

2. Not less than 6 net square feet (0.56 m^2) for other occupants.

Areas or spaces permitted to be included in the calculation of the refuge area are corridors, lounge or dining areas and other low hazard areas.

[~~I.~~ K.] Change Section 420.5 of the IBC and add Section 420.6 to the IBC to read:

420.5 Automatic sprinkler system. Group R occupancies shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.2.8. Group I-1 occupancies shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.2.6. Quick response or residential automatic sprinklers shall be installed in accordance with Section 903.3.2.

420.6 Fire alarm systems and smoke alarms. Fire alarm systems and smoke alarms shall be provided in Groups I-1, R-1, R-2, and R-4 occupancies in accordance with Sections 907.2.6, 907.2.8, 907.2.9 and 907.2.10, respectively. Single-station or multiple-station smoke alarms shall be provided in Groups I-1, R-2, R-3, and R-4 in accordance with Section 907.2.11.

~~I.~~ [~~J.~~ L.] Add IBC Section ~~424~~ 425 Manufactured Homes and Industrialized Buildings.

~~J.~~ [~~K.~~ M.] Add Section ~~424.1~~ 425.1 to the IBC to read:

~~424.1~~ 425.1 General. The provisions of this section shall apply to the installation or erection of manufactured homes subject to the Virginia Manufactured Home Safety Regulations (13VAC5-95) and industrialized buildings subject to the Virginia Industrialized Building Safety Regulations (13VAC5-91).

[Note: Local building departments are also responsible for the enforcement of certain provisions of the Virginia Manufactured Home Safety Regulations (13VAC5-95) and the Virginia Industrialized Building Safety Regulations (13VAC5-91) as set out in those regulations.]

~~K.~~ [~~L.~~ N.] Add Section ~~424.2~~ 425.2 to the IBC to read:

~~424.2~~ 425.2 Site work for manufactured homes. ~~The aspects for the installation and set up of a new manufactured home covered by this code rather than the Virginia Manufactured Home Safety Regulations (13VAC5-95) include, but are not limited to, footings, foundations systems, anchoring of the home, exterior, interior close-up, and additions and alterations done during initial installation. Such aspects shall be subject to and shall comply with the manufacturer's installation instructions provided by the manufacturer of the home. To the extent that the manufacturer's installation instructions do not address any aspect enumerated above or when the manufacturer's installation instructions are not available, such aspects shall be subject to and comply with 24 CFR Part 3285 – Model Manufactured Home Installation Standards. To the extent that the manufacturer's installation instructions and 24 CFR Part 3285 do not address any aspect enumerated above, the installer must first attempt to obtain Design Approval Primary Inspection Agency (DAPIA) as defined in 24 CFR Part 3285.5, approved designs and instructions prepared by the manufacturer; or if designs and instructions are not available from the manufacturer, obtain an alternate design prepared and certified by an RDP that is consistent with the manufactured home design, conforms to the requirements of the Manufactured Housing Consensus Committee (MHCSS) as defined in 24 CFR Part 3285.5, and has been approved by the manufacturer and the DAPIA. Stoops decks, porches and used manufactured homes~~ Footing design, basements, grading, drainage, decks, stoops, porches and utility connections shall comply with the [~~applicable~~] provisions of this code~~, which shall include the option of using the IRC for the technical requirements for the installation and set up of the home and the use of Appendix E of the IRC for additions, alterations and repairs to the home~~ [applicable to Group R-5 occupancies]. Additionally, all applicable provisions of Chapter 1 of this code, including but not limited to requirements for permits, inspections, certificates of occupancy and requiring compliance, are applicable to the installation and ~~set up~~ set-up of a manufactured home. Where the installation or erection of a manufactured home utilizes components that are to be concealed, the installer shall notify the building official that an inspection is necessary and assure that an inspection is performed and approved prior to concealment of such components, unless the building official has agreed to an alternative method of verification.

[~~M.~~ O.] Add Section 425.2.1 to the IBC to read:

425.2.1 Relocated manufactured homes. Installation, set up and site work for relocated manufactured homes shall comply with the provisions of this code and shall include the option of using the manufacturer's installations instructions or the federal Model Manufactured Home Installation Standards (24 CFR Part 3285) for the technical requirements.

[~~N.~~ P.] Add Section 425.2.2 to the IBC to read:

425.2.2 Alterations and repairs to manufactured homes. Alterations and repairs to manufactured homes shall either be in accordance with federal Manufactured Home Construction and Safety Standards (24 CFR Part 3280) or in accordance with the alteration and repair provisions this code.

[~~O.~~ Q.] Add Section 425.2.3 to the IBC to read:

425.2.3 Additions to manufactured homes. Additions to manufactured homes shall comply with this code and shall be structurally independent of the manufactured home, or when not structurally independent, shall be evaluated by an RDP to determine that the addition does not cause the manufactured home to become out of compliance with federal Manufactured Home Construction and Safety Standards (24 CFR Part 3280).

~~L.~~ [~~P.~~ R.] Add Section ~~424.3~~ 425.3 to the IBC to read:

~~424.3~~ 425.3 Wind load requirements for manufactured homes. Manufactured homes shall be anchored to withstand the wind loads established by the federal regulation for the area in which the manufactured home is installed. For the purpose of this code, Wind Zone II of the federal regulation shall include the cities of Chesapeake, Norfolk, Portsmouth, and Virginia Beach.

~~M.~~ [~~Q.~~ S.] Add Section ~~424.4~~ 425.4 to the IBC to read:

~~424.4~~ 425.4 Skirting requirements for manufactured homes. As used in this section, "skirting" means a weather-resistant material used to enclose the space from the bottom of the manufactured home to grade. In accordance with § 36-99.8 of the Code of Virginia, manufactured homes installed or relocated shall have skirting installed within 60 days of occupancy of the home. Skirting materials shall be durable, suitable for exterior exposures and installed in accordance with the manufacturer's installation instructions. Skirting shall be secured as necessary to ensure stability, to minimize vibrations, to minimize susceptibility to wind damage and to compensate for possible frost heave. Each manufactured home shall have a minimum of one opening in the skirting providing access to any water supply or sewer drain connections under the home. Such openings shall be a minimum of 18 inches (457 mm) in any dimension and not less than three square feet (.28 m^2) in area. The access panel or door shall not be fastened in a manner requiring the use of a special tool to open or remove the panel or door. On-site fabrication of the skirting by the owner or installer of the home shall be acceptable, provided that the material meets the requirements of this code. In addition, as a requirement of this code, skirting for the installation and set-up of a new manufactured home shall also comply with the requirements of 24 CFR Part 3285 – Model Manufactured Home Installation Standards.

~~N.~~ [~~R.~~ T.] Add Section ~~424.5~~ 425.5 to the IBC to read:

~~424.5~~ 425.5 Site work for industrialized buildings. Site work for the erection and installation of an industrialized building shall comply with the manufacturer's installation instructions. To the extent that any aspect of the erection or installation of an industrialized building is not covered by the manufacturer's installation instructions, this code shall be applicable, including the use of the IRC for any construction work where the industrialized building would be classified as a Group R-5 building. In addition, all administrative requirements of this code for permits, inspections, and certificates of occupancy are also applicable. Further, the building official may require the submission of plans and specifications for details of items needed to comprise the finished building that are not included or specified in the manufacturer's instructions, including, but not limited to, footings, foundations, supporting structures, proper anchorage, and the completion of the plumbing, mechanical, and electrical systems. Where the installation or erection of an industrialized building utilizes components that are to be concealed, the installer shall notify the building official that an inspection is necessary and assure that an inspection is performed and approved prior to concealment of such components, unless the building official has agreed to an alternative method of verification.

Exception: Temporary family health care structures installed pursuant to § 15.2-2292.1 of the Code of Virginia shall not be required or permitted to be placed on a permanent foundation, but shall otherwise remain subject to all pertinent provisions of this section.

~~O.~~ [~~S.~~ U.] Add Section ~~424.6~~ 425.6 to the IBC to read:

~~424.6~~ 425.6 Relocated industrialized buildings; alterations and additions. Industrialized buildings constructed prior to January 1, 1972, shall be subject to Section 117 when relocated. Alterations and additions to any existing industrialized buildings shall be subject to pertinent provisions of this code. Building officials shall be permitted to require the submission of plans and specifications for the model to aid in the evaluation of the proposed alteration or addition. Such plans and specifications shall be permitted to be submitted in electronic or other available format acceptable to the building official.

[~~T.~~ V.] Add Section 425.7 to the IBC to read:

425.7 Change of occupancy of industrialized buildings. Change of occupancy of industrialized buildings is regulated by the Virginia Industrialized Building Safety Regulations (13VAC5-91). When the industrialized building complies with those regulations for the new occupancy, the building official shall issue a new certificate of occupancy under the USBC.

~~P.~~ [~~U.~~ W.] Add IBC Section ~~425~~ 426 Aboveground Liquid Fertilizer Tanks.

~~Q.~~ [~~V.~~ X.] Add Sections ~~425.1~~ 426.1 through ~~425.6~~ 426.6 to the IBC to read:

~~425.1~~ 426.1 General. This section shall apply to the construction of ALFSTs and shall supersede any conflicting requirements in other provisions of this code. ALFSTs shall also comply with any applicable ~~non-conflicting~~ nonconflicting requirements of this code.

~~425.1.1~~ 426.1.1 When change of occupancy rules apply. A change of occupancy to use a tank as an ALFST occurs when there is a change in the use of a tank from storing liquids other than liquid fertilizers to a use of storing liquid fertilizer and when the type of liquid fertilizer being stored has a difference of at least 20% of the specific gravity or operating temperature, or both, or a significant change in the material's compatibility.

~~425.2~~ 426.2 Standards. Newly constructed welded steel ALFSTs shall comply with API 650 and TFI RMIP, as applicable. Newly constructed ALFSTs constructed of materials other than welded steel shall be constructed in accordance with accepted engineering practice to prevent the discharge of liquid fertilizer and shall be constructed of materials that are resistant to corrosion, puncture or cracking. In addition, newly constructed ALFSTs constructed of materials other than welded steel shall comply with TFI RMIP, as applicable. For the purposes of this code, the use of TFI RMIP shall be construed as mandatory and any language in TFI RMIP, such as, but not limited to, the terms "should" or "may" which indicate that a provision is only a recommendation or a guideline shall be taken as a requirement. ALFSTs shall be placarded in accordance with NFPA 704.

Exception: Sections 4.1.4, 4.2.5, 5.1.2, 5.2.8, 5.3 and 8.1(d)(i) of TFI RMIP shall not be construed as mandatory.

~~425.3~~ 426.3 Secondary containment. When ALFSTs are newly constructed and when there is a change of occupancy to use a tank as an ALFST, a secondary containment system designed and constructed to prevent any liquid fertilizer from reaching the surface water, groundwater or adjacent land before cleanup occurs shall be provided. The secondary containment system may include dikes, berms or retaining walls, curbing, diversion ponds, holding tanks, sumps, vaults, double-walled tanks, liners external to the tank, or other approved means and shall be capable of holding up to 110% of the capacity of the ALFST as certified by an RDP.

~~425.4~~ 426.4 Repair, alteration and reconstruction of ALFSTs. Repair, alteration and reconstruction of ALFSTs shall comply with applicable provisions of API 653 and TFI RMIP.

~~425.5~~ 426.5 Inspection. Applicable inspections as required by and in accordance with API 653 and TFI RMIP shall be performed for repairs and alterations to ALFSTS, the reconstruction of ALFSTs and when there is a change of occupancy to use a tank as an ALFST. When required by API 653 or TFI RMIP, such inspections shall occur prior to the use of the ALFST.

~~425.6~~ 426.6 Abandoned ALFSTs. Abandoned ALFSTs shall comply with applicable provisions of Section ~~3404.2.13.2~~ 5704.2.13.2 of the IFC.

[Y. Add IBC Section 427 Short-term Holding Areas.

Z. Add Section 427.1 to the IBC to read:

427.1 General. In all groups other than Group E, short-term holding areas shall be permitted to be classified as the main occupancy, provided all of the following are met:

1. Provisions are made for the release of all restrained or retained occupants of short-term holding areas at all times.

2. Aggregate area of short-term holding areas shall not occupy more than 10 percent of the building area of the story in which they are located and shall not exceed the tabular values for building area in Table 503, without building area increases.

3. Restrained or detained occupant load of each short-term holding area shall not exceed 20.

4. Aggregate restrained or detained occupant load in short-term holding areas per building shall not exceed 80.

5. Compliance with Sections 408.3.7, 408.3.8, 408.4, and 408.7, as would be applicable to I-3 occupancies.

6. Requirements of the main occupancy in which short-term holding areas are located shall be met.

7. Fire areas containing short-term holding areas shall be provided with a fire alarm system and automatic smoke detection system complying with Section 907.2.6.3, as would be applicable to I-3 occupancies.

8. Where each fire area containing short-term holding areas exceeds 12,000 square feet (1115 m^2), such fire areas shall be provided with an automatic sprinkler system complying with Section 903.3.

9. Short-term holding areas shall be separated from other short-term holding areas and adjacent spaces by smoke partitions complying with Section 710.]

13VAC5-63-225. Chapter 5 General building heights and areas.

A. Change Section 504.2 of the IBC to read:

504.2 Automatic sprinkler system increase. Where a building is equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, the value specified in Table 503 for maximum building height is increased by 20 feet (6096 mm) and the maximum number of stories is increased by one. These increases are permitted in addition to the building area increase in accordance with Sections 506.2 and 506.3. For Group R buildings equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.2, the value specified in Table 503 for maximum building height is increased by 20 feet (6096 mm) and the maximum number of stories is increased by one, but shall not exceed 60 feet (18 288 mm) or four stories, respectively.

Exception: The use of an automatic sprinkler system to increase building heights shall not be permitted for the following conditions:

1. Buildings, or portions of buildings, classified as Group I-1 Condition 2, of Type IIB, III, IV, or V construction or Group I-2 occupancies of Type IIB, III, IV, or V construction.

2. Buildings, or portions of buildings, classified as a Group H-1, H-2, H-3, or H-5 occupancy.

3. Buildings where an automatic sprinkler system is substituted for fire-resistance rated construction in accordance with Table 601, Note d.

B. Change Section 508.2.3 of the IBC to read:

508.2.3 Allowable building area and height. The allowable building area and height of the building containing accessory occupancies shall be based on the allowable building area and height for the main occupancy in accordance with Section 503.1. The building area of the accessory occupancies shall be in accordance with Section 508.2.1.

13VAC5-63-230. Chapter 7 ~~Fire-resistant-rated construction~~ Fire and smoke protection features.

A. Change Section ~~703.6~~ 703.7 of the IBC to read:

~~703.6~~ 703.7 Fire-resistance assembly marking. ~~Concealed~~ Where there is a concealed floor, floor-ceiling, or attic space, the fire walls~~, vertical fire separation assemblies~~, fire barriers, fire partitions ~~and~~, smoke barriers or any other wall required to have protected openings or penetrations shall be designated above ceilings and on the inside of all ceiling access doors ~~which~~ that provide access to such fire rated assemblies by signage having letters no smaller than one inch (25.4 mm) in height. Such signage shall indicate the fire-resistance rating of the assembly and the type of assembly and be provided at horizontal intervals of no more than eight feet (2438 mm).

Note: An example of suggested formatting for the signage would be “ONE HOUR FIRE PARTITION.”

B. Change the exceptions to Section 705.2 of the IBC to read:

~~705.2 Projections. Except for decks and open porches of buildings in Groups R-3 and R-4, cornices, eave overhangs, exterior balconies and similar projections extending beyond the exterior wall shall conform to the requirements of this section and Section 1406. Exterior egress balconies and exterior exit stairways shall also comply with Sections 1019 and 1026, respectively. Projections shall not extend beyond the distance determined by the following three methods, whichever results in the lesser projection:~~

~~1. A point one-third the distance from the exterior face of the wall to the lot line where protected openings or a combination of protected and unprotected openings are required in the exterior wall.~~

~~2. A point one-half the distance from the exterior face of the wall to the lot line where all openings in the exterior wall are permitted to be unprotected or the building is equipped~~

~~throughout with an automatic sprinkler system installed under the provisions of Section 705.8.2.~~

~~3. More than 12 inches (305 mm) into areas where openings are prohibited.~~

Exceptions:

1. Buildings on the same lot and considered as portions of one building in accordance with Section 705.3 are not required to comply with this section.

2. Decks and open porches of buildings of Groups R-3 and R-4.

C. Add Exception 4 to Section 706.5.2 of the IBC to read:

4. Decks and open porches of buildings in Groups R-3 and R-4.

D. Change Section 709.5 of the IBC to read:

709.5 Openings. Openings in a smoke barrier shall be protected in accordance with Section 716.

Exceptions:

1. In Group I-1 Condition 2, Group I-2 and ambulatory care facilities, where doors are installed across corridors, a pair of opposite-swinging doors without a center mullion shall be installed having vision panels with fire-protection-rated glazing materials in fire-protection-rated frames, the area of which shall not exceed that tested. The doors shall be close fitting within operational tolerances, and shall not have undercuts in excess of 3/4-inch, louvers or grilles. The doors shall have head and jamb stops, astragals or rabbets at meeting edges and shall be automatic-closing by smoke detection in accordance with Section 716.5.9.3. Where permitted by the door manufacturer's listing, positive-latching devices are not required.

2. In Group I-1 Condition 2, Group I-2 and ambulatory care facilities, horizontal sliding doors installed in accordance with Section 1008.1.4.3 and protected in accordance with Section 716.

E. Delete Sections ~~708.14.1 through 708.14.2.11~~ 713.14.1 and 713.14.1.1.

~~E.~~ F. Change Section ~~716.5.3~~ 716.5.3.1 of the IBC to read:

~~716.5.3 Penetrations of shaft enclosures. Shaft enclosures that are permitted to be penetrated by ducts and air transfer openings shall be protected with approved fire and smoke dampers installed in accordance with their listing.~~

~~Exceptions:~~

~~1. Fire and smoke dampers are not required where steel exhaust subducts extend at least 22 inches (559 mm) vertically in exhaust shafts provided there is a continuous airflow upward to the outside.~~

~~2. Fire dampers are not required where penetrations are tested in accordance with ASTM E 119 as part of the fire-resistance rated assembly.~~

~~3. Fire and smoke dampers are not required where ducts are used as part of an approved smoke-control system in accordance with Section 909.~~

~~4. Fire and smoke dampers are not required where the penetrations are in parking garage exhaust or supply shafts that are separated from other building shafts by not less than two-hour fire-resistance-rated construction.~~

~~5. Smoke dampers are not required where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.~~

716.5.3.1 Smoke and draft control. Fire door assemblies located in smoke barrier walls shall also meet the requirements for a smoke and draft control door assembly tested in accordance with UL 1784. The air leakage rate of the door assembly shall not exceed 3.0 cubic feet per minute per square foot (0.01524 $m^3/s \cdot m^2$) of door opening at 0.10 inch (24.9 Pa) of water for both the ambient temperature and elevated temperature tests. Louvers shall be prohibited. Installation of smoke doors shall be in accordance with NFPA 105.

13VAC5-63-235. Chapter 8 Interior finishes.

Change Section 806.1.2 of the IBC to read:

806.1.2 Combustible decorative materials. The permissible amount of decorative materials meeting the flame propagation performance criteria of NFPA 701 shall not exceed 10 percent of the specific wall or ceiling area to which it is attached.

Exceptions:

1. In auditoriums or similar types of spaces in Group A, the permissible amount of decorative material meeting the flame propagation performance criteria of NFPA 701 shall not exceed 75 percent of the aggregate wall area where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and where the material is installed in accordance with Section 803.11.

2. In auditoriums or similar types of spaces in Group A, the permissible amount of decorative materials suspended from the ceiling, located no more than 12 inches (305 mm) from the wall, not supported by the floor, and meeting the flame propagation performance criteria of NFPA 701, shall not exceed 75 percent of the aggregate wall area when the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

3. The amount of fabric partitions suspended from the ceiling and not supported by the floor in Groups B and M occupancies shall not be limited.

13VAC5-63-240. Chapter 9 Fire protection systems.

A. Add the following ~~definitions~~ to the list of terms in Section ~~902~~ 902.1 of the IBC ~~to read~~:

Emergency communication equipment. ~~Emergency communication equipment, includes but is not limited to, two-way radio communications, signal booster, bi-directional amplifiers, radiating cable systems or internal multiple antenna, or a combination of the foregoing.~~

Emergency public safety personnel. ~~Emergency public safety personnel includes firefighters, emergency medical personnel, law enforcement officers and other emergency public safety personnel routinely called upon to provide emergency assistance to members of the public in a wide variety of emergency situations, including, but not limited to, fires, medical emergencies, violent crimes and terrorist attacks.~~

~~B. Change the following definition in Section 902 of the IBC to read:~~

~~Automatic fire-extinguishing system. An approved system of devices and equipment which automatically detects a fire and discharges an approved fire-extinguishing agent onto or in the area of a fire and shall include among other systems an automatic sprinkler system, unless otherwise expressly stated.~~

~~C.~~ B. Change Section 903.2.1.2 of the IBC to read:

903.2.1.2 Group A-2. An automatic sprinkler system shall be provided for Group A-2 occupancies where one of the following conditions exists:

1. The fire area exceeds 5,000 square feet (464.5m^2);

2. The fire area has an occupant load of 100 or more in night clubs or 300 or more in other Group A-2 occupancies; or

3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.

~~D.~~ C. Change Item 2 of Section 903.2.1.3 of the IBC to read:

2. In Group A-3 occupancies other than ~~churches~~ places of religious worship, the fire area has an occupant load of 300 or more; or

~~E.~~ D. Change Section 903.2.3 of the IBC to read:

903.2.3 Group E. An automatic sprinkler system shall be provided for Group E occupancies as follows:

1. Throughout all Group E fire areas greater than 20,000 square feet (1858 m^2) in area.

2. Throughout every portion of educational buildings below the lowest level of exit discharge serving that portion of the building.

Exception: An automatic sprinkler system is not required in any area below the lowest level of exit discharge serving that area where every classroom throughout the building has at least one exterior exit door at ground level.

[E. Add Exception 5 to Section 903.2.6 to read:

5. An automatic sprinkler system shall not be required for open-sided or chain link-sided buildings and overhangs over exercise yards 200 square feet (18.58 m^2) or less in Group I-3 facilities, provided such buildings and overhangs are of noncombustible construction.]

[F. ~~E.~~] Change Section 903.2.7 of the IBC to read:

903.2.7 Group M. An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:

1. A Group M fire area exceeds 12,000 square feet (1115 m^2).

2. A Group M fire area is located more than three stories above grade plane.

3. The combined area of all Group M fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m^2).

[G. ~~F.~~] Change ~~Section~~ Sections 903.2.8, 903.2.8.1 and 908.2.8.2 of the IBC to read:

~~903.2.7~~ 903.2.8 Group R. An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area, except ~~in the following~~ for Group R-2 occupancies listed in the exceptions to this section when the necessary water pressure or volume, or both, for the system is not available:

Exceptions:

1. ~~Buildings which~~ Group R-2 occupancies that do not exceed two stories, including basements ~~which~~ that are not considered as a story above grade, and with a maximum of 16 dwelling units per fire area. Each dwelling unit shall have at least one door opening to an exterior exit access that leads directly to the exits required to serve that dwelling unit.

2. ~~Buildings~~ Group R-2 occupancies where all dwelling units are not more than two stories above the lowest level of exit discharge and not more than one story below the highest level of exit discharge of exits serving the dwelling unit and a two-hour fire barrier is provided between each pair of dwelling units. Each bedroom of a dormitory or boarding house shall be considered a dwelling unit under this exception.

903.2.8.1 Group R-3. An automatic sprinkler system installed in accordance with Section 903.3.1.3 shall be permitted in Group R-3.

903.2.8.2 Group R-4 Condition 1. An automatic sprinkler system installed in accordance with Section 903.3.1.3 shall be permitted in Group R-4 Condition 1.

[~~G.~~ H.] Add Sections 903.2.8.3, 903.2.8.3.1, 903.2.8.3.2 and 903.2.8.4 to the IBC to read:

903.2.8.3 Group R-4 Condition 2. An automatic sprinkler system installed in accordance with Section 903.3.1.2 shall be permitted in Group R-4 Condition 2. Attics shall be protected in accordance with Sections 903.2.8.3.1 or 903.2.8.3.2.

903.2.8.3.1 Attics used for living purposes, storage or fuel fired equipment. Attics used for living purposes, storage or fuel fired equipment shall be protected throughout with automatic sprinkler system installed in accordance with Section 903.3.1.2.

903.2.8.3.2 Attics not used for living purposes, storage or fuel fired equipment. Attics not used for living purposes, storage or fuel fired equipment shall be protected in accordance with one of the following:

1. Attics protected throughout by a heat detector system arranged to activate the building fire alarm system in accordance with Section 907.2.10.

2. Attics constructed of noncombustible materials.

3. Attics constructed of fire-retardant-treated wood framing complying with Section 2303.2.

4. The automatic fire sprinkler system shall be extended to provide protection throughout the attic space.

903.2.8.4 Care facilities. An automatic sprinkler system installed in accordance with 903.3.1.3 shall be permitted in care facilities with 5 or fewer individuals in a single-family dwelling.

~~H. Add Item 6 to Section 903.3.1.1.1 of the IBC to read:~~

~~6. Elevator machine rooms and elevator machine spaces for occupant evacuation elevators.~~

[I. ~~H.~~] Add Section 903.3.1.2.2 to the IBC to read:

903.3.1.2.2 Attics. Sprinkler protection shall be provided for attics in buildings of Type III, IV or V construction in Group R-2 occupancies that are designed or developed and marketed to senior citizens 55 years of age or older and in Group I-1 occupancies in accordance with Section [~~6.7.2~~ 7.2] of NFPA 13R.

[~~I.~~ J.] Change Section 903.3.1.3 of the IBC to read:

903.3.1.3 NFPA 13D sprinkler systems. Automatic sprinkler systems installed in one-family and two-family dwellings, Group R-3, Group R-4 Condition 1 and townhouses shall be permitted to be installed throughout in accordance with NFPA 13D.

[~~J.~~ K.] Change Section 903.4.2 of the IBC to read:

903.4.2 Alarms. Approved audible devices shall be connected to every automatic sprinkler system. Such sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Alarm devices shall be provided on the exterior of the building in an approved location. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system. Group R-2 occupancies that contain 16 or more dwelling units or sleeping units, any dwelling unit or sleeping unit two or more stories above the lowest level of exit discharge, or any dwelling unit or sleeping unit more than one story below the highest level of exit discharge of exits serving the dwelling unit or sleeping unit shall provide a manual fire alarm box at an approved location to activate the suppression system alarm.

[~~K.~~ L.] Add an exception to Section 905.2 of the IBC to read:

Exception: The residual pressure of 100 psi for 2-1/2 inch hose connection and 65 psi for 1-1/2 inch hose connection is not required in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 and where the highest floor level is not more than 150 feet above the lowest level of fire department vehicle access.

[~~L.~~ M.] Change Item 1 of Section 906.1 of the IBC to read:

1. In ~~Group~~ Groups A, B, E, F, H, I, M, R-1, R-4, and S occupancies.

Exceptions:

1. In ~~Group~~ Groups A, B, and E occupancies equipped throughout with quick response sprinklers, portable fire extinguishers shall be required only in locations specified in Items 2 through 6.

2. In Group I-3 occupancies, portable fire extinguishers shall be permitted to be located at staff locations and the access to such extinguishers shall be permitted to be locked.

[~~M.~~ N.] Change Section 907.2.1.1 of the IBC to read:

907.2.1.1 System initiation in Group A occupancies with a occupant load of 1,000 or more and in certain night clubs. Activation of the fire alarm in Group A occupancies with an occupant load of 1,000 or more and in night clubs with an occupant load of 300 or more shall initiate a signal using an emergency voice and alarm communications system in accordance with Section 907.5.2.2.

Exception: Where approved, the prerecorded announcement is allowed to be manually deactivated for a period of time, not to exceed three minutes, for the sole purpose of allowing a live voice announcement from an approved, constantly attended location.

[~~N.~~ O.] Change Section 907.2.3 of the IBC to read:

907.2.3 Group E. A manual fire alarm system that activates the occupant notification system meeting the requirements of Section 907.5 and installed in accordance with Section 907.6 shall be installed in Group E occupancies. When automatic sprinkler systems or smoke

detectors are installed, such systems or detectors shall be connected to the building fire alarm system.

Exceptions:

1. A manual fire alarm system is not required in Group E occupancies with an occupant load of 50 or less.

2. Manual fire alarm boxes are not required in Group E occupancies where all of the following apply:

2.1. Interior corridors are protected by smoke detectors.

2.2. Auditoriums, cafeterias, gymnasiums and similar areas are protected by heat detectors or other approved detection devices.

2.3. Shops and laboratories involving dusts or vapors are protected by heat detectors or other approved detection devices.

3. Manual fire alarm boxes shall not be required in Group E occupancies where the building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1, the occupant notification system will activate on sprinkler water flow and manual activation is provided from a normally occupied location.

[~~O.~~ P.] Change Section 907.2.6.1 of the IBC to read:

907.2.6.1 Group I-1. In Group I-1 occupancies, an automatic smoke detection system shall be installed in corridors, waiting areas open to corridors and habitable spaces other than sleeping units and kitchens. The system shall be activated in accordance with Section 907.5.

Exceptions:

1. For Group I-1 Condition 1, smoke detection in habitable spaces is not required where the facility is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

2. Smoke detection is not required for exterior balconies.

[~~P.~~ Q.] Add an exception to Section 907.5.2.1.1 of the IBC to read:

Exception: Sound pressure levels in Group I-3 occupancies shall be permitted to be limited to only the notification of occupants in the affected smoke compartment.

~~O. Add Sections 908.7, 908.7.1 and 908.7.2 to the IBC to read:~~

~~908.7 Carbon monoxide alarms. Carbon monoxide alarms shall be provided in new buildings and structures in accordance with this section.~~

~~908.7.1 Alarm requirements. Carbon monoxide alarms shall be single-station, hard wired, plug-in or battery type, listed as complying with UL 2034, and shall be installed in accordance with this code and the manufacturer's installation instructions.~~

~~908.7.2 Where required. Carbon monoxide alarms shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms in dwelling units and outside of, but in the immediate vicinity of, each sleeping unit in all Group R occupancies located within buildings containing fuel-fired appliances or where a dwelling unit or sleeping unit in a Group R occupancy is attached to a Group U private garage.~~

[R. Change Sections 908.7 and 908.7.1 of the IBC and add Sections 908.7.2 and 908.7.3 to the IBC to read:

908.7 Carbon monoxide alarms. Carbon monoxide alarms shall comply with this section.

908.7.1 Group I or R. Group I or R occupancies located in a building containing a fuel-burning appliance or in a building which has an attached garage shall be equipped with single-station carbon monoxide alarms. The carbon monoxide alarms shall be listed as complying with UL 2034 and be installed and maintained in accordance with NFPA 720 and the manufacturer's instructions. An open parking garage, as defined in Chapter 2, or an enclosed parking garage ventilated in accordance with Section 404 of the IMC shall not be considered an attached garage.

Exception: Sleeping units or dwelling units which do not themselves contain a fuel-burning appliance or have an attached garage, but which are located in a building with a fuel-burning appliance or an attached garage, need not be equipped with single-station carbon monoxide alarms provided that:

1. The sleeping unit or dwelling unit is located more than one story above or below any story which contains a fuel-burning appliance or an attached garage;

2. The sleeping unit or dwelling unit is not connected by duct work or ventilation shafts to any room containing a fuel-burning appliance or to an attached garage; and

3. The building is equipped with a common area carbon monoxide alarm system.

908.7.2 Group E. Classrooms in E occupancies located in a building containing a fuel-burning appliance or in a building which has an attached garage or small engine or vehicle shop shall be equipped with single-station carbon monoxide alarms. The carbon monoxide alarms shall be listed as complying with UL 2034 and be installed and maintained in accordance with NFPA 720 and the manufacturer's instructions. An open parking garage, as defined in Chapter 2, or an enclosed parking garage ventilated in accordance with Section 404 of the IMC shall not be considered an attached garage.

Exception: Classrooms which do not themselves contain a fuel-burning appliance or have an attached garage, but which are located in a building with a fuel-burning appliance or an attached garage, need not be equipped with single-station carbon monoxide alarms provided that:

1. The classroom is located more than 100 feet from the fuel burning appliance or attached garage or located more than one story above or below any story which contains a fuel-burning appliance or attached garage; and

2. The classroom is not connected by duct work or ventilation shafts to any room containing a fuel-burning appliance.

908.7.3 Carbon monoxide detection systems. Carbon monoxide detection systems, which include carbon monoxide detectors and audible notification appliances, installed and maintained in accordance with this section for carbon monoxide alarms and NFPA 720 shall be permitted. The carbon monoxide detectors shall be listed as complying with UL 2075.]

~~P.~~ [~~Q.~~ S.] Change Section 909.6 of the IBC to read:

909.6 Pressurization method. When approved by the building official, the means of controlling smoke shall be permitted by pressure differences across smoke barriers. Maintenance of a tenable environment is not required in the smoke-control zone of fire origin.

~~Q.~~ [~~R.~~ T.] Change Section 911.1.3 of the IBC to read:

911.1.3 Size. The fire command center shall be a minimum of 96 square feet (9 m^2) in area with a minimum dimension of eight feet (2438 mm).

Exception: Where it is determined by the building official, after consultation with the fire chief, that specific building characteristics require a larger fire command center, the building official may increase the minimum required size of the fire command center up to 200 square feet (19 m^2) in area with a minimum dimension of up to 10 feet (3048 mm).

~~R.~~ [~~S.~~ U.] Change the title of IBC Section 915 to read:

In-Building Emergency Communications Coverage.

~~S.~~ [~~T.~~ V.] Change Section 915.1 of the IBC to read:

915.1 General. For localities utilizing public safety wireless communications, dedicated infrastructure to accommodate and perpetuate continuous in-building emergency communication equipment to allow emergency public safety personnel to send and receive emergency communications shall be provided in new buildings and structures in accordance with this section.

Exceptions:

1. Buildings of Use Groups A-5, I-4, within dwelling units of R-2, R-3, R-4, R-5, and U.

2. Buildings of ~~Type~~ Types IV and V construction without basements, that are not considered unlimited area buildings in accordance with Section 507.

3. Above grade single story buildings of less than 20,000 square feet.

4. Buildings or leased spaces occupied by federal, state, or local governments, or the contractors thereof, with security requirements where the building official has approved an alternative method to provide emergency communication equipment for emergency public safety personnel.

5. Where the owner provides technological documentation from a qualified individual that the structure or portion thereof does not impede emergency communication signals.

~~T.~~ [~~U.~~ W.] Add Sections 915.1.1, 915.1.2 and 915.1.3 to the IBC to read:

915.1.1 Installation. The building owner shall install radiating cable, such as coaxial cable or equivalent. The radiating cable shall be installed in dedicated conduits, raceways, plenums, attics, or roofs, compatible for these specific installations as well as other applicable provisions of this code. The locality shall be responsible for the installation of any additional communication equipment required for the operation of the system.

915.1.2 Operations. The locality will assume all responsibilities for the operation and maintenance of the emergency communication equipment. The building owner shall provide sufficient operational space within the building to allow the locality access to and the ability to operate in-building emergency communication equipment.

915.1.3 Inspection. In accordance with Section 113.3, all installations shall be inspected prior to concealment.

~~U.~~ [~~V.~~ X.] Add Section 915.2 to the IBC to read:

915.2 Acceptance test. Upon completion of installation, after providing reasonable notice to the owner or their representative, emergency public safety personnel shall have the right during normal business hours, or other mutually agreed upon time, to enter onto the property to conduct field tests to verify that the required level of radio coverage is present at no cost to the owner. Any noted deficiencies in the installation of the radiating cable or operational space shall be provided in an inspection report to the owner or the owner's representative.

13VAC5-63-245. Chapter 10 Means of egress.

A. Delete Section 1001.4 of the IBC.

B. Change Section 1004.3 of the IBC to read:

1004.3 Posting of occupant load. Every room or space that is an assembly occupancy and where the occupant load of that room or space is 50 or more shall have the occupant load of the room or space posted in a conspicuous place, near the main exit or exit access doorway from the room or space. Posted signs shall be of an approved legible permanent design and shall be maintained by the owner or authorized agent.

~~B.~~ C. Change the exception to Section ~~1005.1~~ 1005.3.1 of the IBC to read:

~~1005.1 Minimum required egress width. The means of egress width shall not be less than required by this section. The total width of means of egress in inches (mm) shall not be less than the total occupant load served by the means of egress multiplied by 0.3 inches (7.62 mm) per occupant for stairways and by 0.2 inches (5.08 mm) per occupant for other egress components. The width shall not be less than specified elsewhere in this code. Multiple means of egress shall be sized such that the loss of any one means of egress shall not reduce the available capacity to less than 50% of the required capacity. The maximum capacity required from any story of a building shall be maintained to the termination of the means of egress.~~

~~Exceptions~~ Exception:

~~1. Means of egress complying with Section 1028.~~

~~2.~~ For ~~occupancies~~ other than ~~Groups H-1, H-2, H-3, H-4~~ Groups H and I-2 occupancies, the capacity, in inches (mm), of means of egress stairways shall be calculated by multiplying the occupant load served by such stairway by a means of egress capacity factor of 0.2 inch (5.1 mm) per occupant in buildings equipped with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2~~, the total width of means of egress in inches (mm) shall not be less than the total occupant load served by the means of egress multiplied by 0.2 inches (5.08 mm) per occupant for stairways and by 0.15 inches (3.81 mm) per occupant for other egress components~~.

~~C.~~ D. Change the exception to Section ~~1007.2~~ 1005.3.2 of the IBC to read:

~~1007.2 Continuity and components. Each required accessible means of egress shall be continuous to a public way and shall consist of one or more of the following components:~~

~~1. Accessible routes complying with Section 1104.~~

~~2. Interior exit stairways complying with Sections 1007.3 and 1022.~~

~~3. Exterior exit stairways complying with Sections 1007.3 and 1026 and serving levels other than the level of exit discharge.~~

~~4. Elevators complying with Section 1007.4.~~

~~5. Platform lifts complying with Section 1007.5.~~

~~6. Horizontal exits complying with Section 1025.~~

~~7. Ramps complying with Section 1010.~~

~~8. Areas of refuge complying with Section 1007.6.~~

~~9. Exterior area for assisted rescue complying with Section 1007.7 serving exits at the level of exit discharge.~~

Exception: For other than Groups H and I-2 occupancies, the capacity, in inches (mm), of means of egress components other than stairways shall be calculated by multiplying the occupant load served by such [~~stairway~~ component] by a means of egress capacity factor of 0.15 inch (3.8 mm) per occupant in buildings equipped with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.

~~D.~~ E. Change Section 1007.6.2 of the IBC to read:

1007.6.2 Separation. Each area of refuge shall be separated from the remainder of the story by a smoke barrier complying with Section 709 or a horizontal exit complying with Section 1025. Each area of refuge shall be designed to minimize the intrusion of smoke.

Exceptions:

1. Areas of refuge located within an exit enclosure.

2. Areas of refuge where the area of refuge and areas served by the area of refuge are equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.

~~E. Change Section 1007.7, including subsections, of the IBC to read:~~

~~1007.7 Exterior area for assisted rescue. The exterior area for assisted rescue shall be an area provided on the exterior landing serving an exit door on an accessible route. The exterior area of assisted rescue shall meet the size and access requirements of Section 1007.6.1.~~

~~1007.7.1 Separation. Exterior walls separating the exterior area of assisted rescue from the interior of the building shall have a minimum fire resistance rating of one hour, rated for exposure to fire from the inside. The fire resistance rated exterior wall construction shall extend horizontally 10 feet (3048 mm) beyond the landing on either side of the landing or equivalent fire resistance rated construction is permitted to extend out perpendicular to the exterior wall four feet (1220 mm) minimum on the side of the landing. The fire resistance rated construction shall extend vertically from the ground to a point 10 feet (3048 mm) above the floor level of the area for assisted rescue or to the roof line, whichever is lower. Openings within such fire resistance rated exterior walls shall be protected in accordance with Section 715.~~

~~1007.7.2 Openness. The exterior area for assisted rescue shall be at least 50% open, and the open area above the guards shall be so distributed as to minimize the accumulation of smoke or toxic gases.~~

~~1007.7.3 Exterior stairway. Exterior stairways that are part of the means of egress for the exterior area for assisted rescue shall provide a clear width of 48 inches (1219 mm) between handrails.~~

F. Change Item 2 of Section 1008.1.9.3 of the IBC to read:

2. In buildings in occupancy Groups B, F, M and S, the main exterior door or doors are permitted to be equipped with key-operated locking devices from the egress side provided:

2.1. The locking device is readily distinguishable as locked.

2.2. A readily visible durable sign is posted on the egress side on or adjacent to the door stating: THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED. The sign shall be in letters one inch (25 mm) high on a contrasting background.

2.3. The use of the key-operated locking device is revokable by the building official for due cause.

G. Delete Section 1008.1.9.6 of the IBC.

H. Change Section 1008.1.9.7 of the IBC to read:

1008.1.9.7 Delayed egress locks. Approved, listed, delayed egress locks shall be permitted to be installed on doors serving any occupancy including Group A-3, airport facilities, except Group A, E and H occupancies in buildings which are equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or an approved automatic smoke or heat detection system installed in accordance with Section 907, provided that the doors unlock in accordance with Items 1 through 6 below. A building occupant shall not be required to pass through more than one door equipped with a delayed egress lock before entering an exit.

1. The doors unlock upon actuation of the automatic sprinkler system or automatic fire detection system.

2. The doors unlock upon loss of power controlling the lock or lock mechanism.

3. The door locks shall have the capability of being unlocked by a signal from the fire command center.

4. The initiation of an irreversible process which will release the latch in not more than 15 seconds when a force of not more than 15 pounds (67 N) is applied for 1 second to the release device. Initiation of the irreversible process shall activate an audible signal in the vicinity of the door. Once the door lock has been released by the application of force to the releasing device, relocking shall be by manual means only.

Exception: Where approved, a delay of not more than 30 seconds is permitted.

5. A sign shall be provided on the door located above and within 12 inches (305 mm) of the release device reading: PUSH UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 SECONDS.

Exception: Where approved, such sign shall read: PUSH UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 30 SECONDS.

6. Emergency lighting shall be provided at the door.

I. Delete the exception in Section 1008.1.10 of the IBC.

J. Add Section 1008.1.11 to the IBC to read:

1008.1.11 Locking certain residential sliding doors. In dwelling units of Group R-2 buildings, exterior sliding doors which are one story or less above grade, or shared by two dwelling units, or are otherwise accessible from the outside, shall be equipped with locks. The mounting screws for the lock case shall be inaccessible from the outside. The lock bolt shall engage the strike in a manner that will prevent it from being disengaged by movement of the door.

Exception: Exterior sliding doors which are equipped with removable metal pins or charlie bars.

K. Add Section 1008.1.12 to the IBC to read:

1008.1.12 Door viewers in certain residential buildings. Entrance doors to dwelling units of Group R-2 buildings shall be equipped with door viewers with a field of vision of not less than 180 degrees.

Exception: Entrance doors having a vision panel or side vision panels.

L. Change Exception 5 of Section ~~1009.4.2~~ 1009.7.2 of the IBC to read:

5. In Group R-3 occupancies; within dwelling units in Group R-2 occupancies; and in Group U occupancies that are accessory to a Group R-3 occupancy or accessory to individual dwelling units in Group R-2 occupancies; the maximum riser height shall be 8.25 inches (210 mm); the minimum tread depth shall be 9 inches (229 mm); the minimum winder tread depth at the walk line shall be 10 inches (254 mm); and the minimum winder tread depth shall be 6 inches (152 mm). A nosing not less than 0.75 inch (19.1 mm) but not more than 1.25 inches (32 mm) shall be provided on stairways with solid risers where the tread depth is less than 11 inches (279 mm).

M. ~~Add Exception 3 to~~ Change Section ~~1009.7~~ 1013.8 of the IBC to read:

~~3. Spiral stairways used as a means of egress from technical production areas.~~ 1013.8 Window sills. In Occupancy Groups R-2 and R-3, one-family and two-family and multiple-family dwellings, where the opening of the sill portion of an operable window is located more than 72 inches (1829 mm) above the finished grade or other surface below, the lowest part of the clear opening of the window shall be at a height not less than 18 inches (457 mm) above the finished floor surface of the room in which the window is located. Operable sections of windows shall not permit openings that allow passage of a 4-inch-diameter (102 mm) sphere where such openings are located within 18 inches (457 mm) of the finished floor.

Exceptions:

1. Operable windows where the sill portion of the opening is located more than 75 feet (22 860 mm) above the finished grade or other surface below and that are provided with window fall prevention devices that comply with ASTM F 2006.

2. Windows whose openings will not allow a 4-inch diameter (102 mm) sphere to pass through the opening when the window is in its largest opened position.

3. Openings that are provided with window fall prevention devices that comply with ASTM F 2090.

4. Windows that are provided with window opening control devices that comply with Section 1013.8.1.

N. Add Exception 3 to Item 4 of Section 1014.2 of the IBC to read:

3. A maximum of one exit access is permitted to pass through kitchens, store rooms, closets or spaces used for similar purposes provided such a space is not the only means of exit access.

O. Change Exception 1 in Item 1 of Section 1015.1 of the IBC to read:

1. In Groups R-2 and R-3 occupancies, one means of egress is permitted within and from individual dwelling units with a maximum occupant load of 20 where the dwelling unit is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2. This exception shall also apply to Group R-2 occupancies where Section 903.2.8, Exception 1 or 2 is applicable.

P. Change Table 1015.1 of the IBC to read:

Table 1015.1 Spaces With One Exit or Exit Access Doorway	
Occupancy	Maximum Occupant Load
A, B, E[a], F, M, U	50
H-1, H-2, H-3	3
H-4, H-5, I-1, I-3, I-4, R	10
S	29
a. Day care maximum occupant load is 10.	

~~P.~~ Q. Change Exception 2 of Section 1015.2.1 of the IBC to read:

2. Where a building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2, the separation distance of the exit doors or exit access doorways shall not be less than one-fourth of the length of the maximum overall diagonal dimension of the area served.

~~Q. Delete Sections 1015.6 and 1015.6.1 of the IBC.~~

[R. Add Section 1016.2.2 to the IBC to read:

1016.2.2 Group F-1 and S-1 increase. The maximum exit access travel distance shall be 400 feet (122 m) in Group R-1 or S-1 occupancies where all of the following are met:

1. The portion of the building classified as Group F-1 or S-1 is limited to one story in height;

2. The minimum height from the finished floor to the bottom of the ceiling or roof slab or deck is 24 feet (7315 mm); and

3. The building is equipped throughout with an automatic fire sprinkler system in accordance with Section 903.3.1.1.

S. Add the following text to footnote "a" of Table 1016.2 of the IBC to read:

Section 1016.2.2: For increase distance limitation in Group F-1 and Group S-1.

~~R.~~ T.] Change Exception 2 of Section 1018.1 of the IBC to read:

2. A fire-resistance rating is not required for corridors contained within a dwelling or sleeping unit in an occupancy in Group I-1 and Group R.

[~~S.~~ U.] Change Table 1018.1 of the IBC to read:

Table 1018.1 Corridor Fire-Resistance Rating			
Occupancy	Occupant Load Served By Corridor	Required Fire-Resistance Rating (hours)	
		Without sprinkler system	With sprinkler system[b]
H-1, H-2, H-3	All	Not Permitted	1
H-4, H-5	Greater than 30	Not Permitted	1
A, B, E, F, M, S, U	Greater than 30	1	0
R	Greater than 10	1	0.5
I-2[a], I-4	All	Not Permitted	0
I-1, I-3	All	Not Permitted	0
a. For requirements for occupancies in Group I-2, see Sections 407.2 and 407.3. b. Buildings equipped throughout with an automatic sprinkler system in accordance with ~~Sections~~ Section 903.3.1.1 or 903.3.1.2 where allowed.			

~~S.~~ [~~T.~~ V.] Add ~~Exception 7 to Section~~ an additional row to Table 1018.2 of the IBC to read:

~~7. Forty-four inches (1118 mm) – In corridors of Group I-2 assisted living facilities serving areas with wheelchair, walker and gurney traffic where residents are capable of self-preservation or where resident rooms have a means of egress door leading directly to the outside.~~

Occupancy	Width (minimum)
In corridors of Group I-2 assisted living facilities licensed by the Virginia Department of Social Services serving areas with wheelchair, walker and gurney traffic where residents are capable of	44 inches

self-preservation or where resident rooms have a means of egress door leading directly to the outside.	

~~T.~~ [~~U.~~ W.] Change the first row in Table ~~1021.2~~ 1021.2(2) to read:

~~Table 1021.2~~ Table 1021.2(2) ~~Stories With One Exit~~		
~~Story~~	~~Occupancy~~	~~Maximum Occupants (or Dwelling Units) Per Floor and Travel Distance~~
~~First story or basement~~	~~A, B[d], E[e], F[d], M, U, S[d]~~	~~50 occupants and 75 feet travel distance~~
	~~H-2, H-3~~	~~3 occupants and 25 feet travel distance~~
	~~H-4, H-5, I, R~~	~~10 occupants and 75 feet travel distance~~
	~~S[a]~~	~~29 occupants and 100 feet travel distance~~
~~Second story~~	~~B[b], F, M, S[a]~~	~~29 occupants and 75 feet travel distance~~
	~~R-2~~	~~4 dwelling units and 50 feet travel distance~~
~~Third story~~	~~R-2[c]~~	~~4 dwelling units and 50 feet travel distance~~
~~For SI: 1 foot = 304.8 mm~~ ~~a. For the required number of exits for parking structures, see Section 1021.1.2.~~ ~~b. For the required number of exits for air traffic control towers, see Section 412.3.~~ ~~c. Buildings classified as Group R-2 equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 and provided with emergency escape and rescue openings in accordance with Section 1029.~~ ~~d. Group B, F and S occupancies in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 shall have a maximum travel distance of 100 feet.~~ ~~e. Day care occupancies shall have a maximum occupant load of 10.~~		

Story	Occupancy	Maximum Occupants per Story	Maximum Exit Access Travel Distance
First story or basement	A, B[b], E, F[b], M, U, S[b]	50 occupants	75 feet

~~U. Change Exception 6 of Section 1022.1 of the IBC to read:~~

> ~~6. Means of egress stairways as provided for in Section 410.6.2 are not required to be enclosed.~~

[~~V.~~ X.] Change Section ~~1022.8~~ 1022.9 of the IBC to read:

> ~~1022.8~~ 1022.9 Floor identification signs. A sign shall be provided at each floor landing in exit enclosures connecting more than three stories designating the floor level, the terminus of

the top and bottom of the exit enclosure and the identification of the stair or ramp by designation with a letter of the alphabet. The signage shall also state the story of, and the direction to, the exit discharge and the availability of roof access from the enclosure for the fire department. The sign shall be located five feet (1524 mm) above the floor landing in a position that is readily visible when the doors are in the open and closed positions. Floor level identification signs in tactile characters complying with ICC A117.1 shall be located at each floor level landing adjacent to the door leading from the enclosure into the corridor to identify the floor level.

[~~W.~~ Y.] Change Section 1024.1 of the IBC to read:

1024.1 General. Approved luminous egress path markings delineating the exit path shall be provided in buildings of Groups A, B, E, I, M and R-1 having occupied floors located more than 420 feet (128 016 mm) above the lowest level of fire department vehicle access in accordance with Sections 1024.1 through 1024.5.

~~Exceptions 1.~~ Exception: Luminous egress path markings shall not be required on the level of exit discharge in lobbies that serve as part of the exit path in accordance with Section 1027.1, Exception 1.

~~2. Luminous egress path markings shall not be required in areas of open parking garages that serve as part of the exit path in accordance with Section 1027.1, Exception 3.~~

13VAC5-63-250. Chapter 11 Accessibility.

A. Add an exception to Section 1101.2 of the IBC to read:

Exception: Wall-mounted visible alarm notification appliances in Group I-3 occupancies shall be permitted to be a maximum of 120 inches (3048 mm) above the floor or ground, measured to the bottom of the appliance. Such appliances shall otherwise comply with all applicable requirements.

B. Add Section 1103.2.16 to the IBC to read:

1103.2.16 Raised and lowered areas in places of religious worship. Raised or lowered areas in places of religious worship are not required to be accessible or to be served by an accessible route provided such areas are used exclusively for the performance of religious ceremonies and are located within an accessible story or mezzanine.

C. Change Section 1106.1 of the IBC and replace Table 1106.1 of the IBC with Tables 1106.1(1) and 1106.1(2) to read:

1106.1 Required. Where parking is provided, accessible parking spaces shall be provided in compliance with Tables 1106.1(1) and 1106.1(2), as applicable, except as required by Sections 1106.2 through 1106.4. Where more than one parking facility is provided on a site, the number of parking spaces required to be accessible shall be calculated separately for each parking facility.

Exception: This section does not apply to parking spaces used exclusively for buses, trucks, other delivery vehicles, law enforcement vehicles or vehicular impound and motor pools where lots accessed by the public are provided with an accessible passenger loading zone.

Table 1106.1(1) Accessible Parking Spaces for Groups A, B, E, M, R-1, R-2 and I[a]	
Total Parking Spaces Provided	Required Minimum Number of Accessible Spaces
1-25	1
26-50	2
51-75	3
76-100	4
101-125	5
126-150	6
151-200	7
201-300	8
301-400	9
401-500	10
501-1,000	2.33% of total
1,001 and over	23, plus one for each 100, or fraction thereof, over 1,000
a. Condominium parking in Group R-2 occupancies where parking is part of the unit purchase shall be in accordance with Table 1106.1(2).	

Table 1106.1(2) Accessible Parking Spaces for Groups F, S, H, R-3, R-4 and U	
Total Parking Spaces Provided	Required Minimum Number of Accessible Spaces
1-25	1
26-50	2
51-75	3
76-100	4
101-150	5
151-200	6
201-300	7
301-400	8
401-500	9
501-1,000	2.0% of total
1,001 and over	20, plus one for each 100, or fraction thereof, over 1,000

D. Add Section 1106.8 to the IBC to read:

1106.8 Identification of accessible parking spaces. In addition to complying with applicable provisions of this chapter, all accessible parking spaces shall be identified by above grade signs. A sign or symbol painted or otherwise displayed on the pavement of a parking space

shall not constitute an above grade sign. All above grade parking space signs shall have the bottom edge of the sign no lower than four feet (1219 mm) nor higher than seven feet (2133 mm) above the parking surface. All disabled parking signs shall include the following language: PENALTY, $100-500 Fine, TOW-AWAY ZONE. Such language may be placed on a separate sign and attached below existing above grade disabled parking signs, provided that the bottom edge of the attached sign is no lower than four feet above the parking surface.

~~D.~~ E. Add Sections 1109.16 and 1109.16.1 to the IBC to read:

1109.16 Dwellings containing universal design features for accessibility. Group R-5 occupancies not subject to Section R320.1 of the IRC and Group R-3 occupancies not subject to Section 1107.6.3 may comply with this section and be approved by the local building department as dwellings containing universal design features for accessibility.

1109.16.1 Standards for dwellings containing universal design features for accessibility. When the following requirements are met, approval shall be issued by the local building department indicating that a dwelling has been constructed in accordance with these standards and is deemed to be a dwelling containing universal design features for accessibility.

1. The dwelling must comply with the requirements for Type C units under Section 1005 of ICC A117.1 with the following changes to the those requirements.

1.1. That at least one bedroom be added to the interior spaces required by Section 1005.4 of ICC A117.1.

1.2. In the toilet room or bathroom required by Section 1005 of ICC A117.1, in addition to the lavatory and water closet, a shower or bathtub complying with Section 1004.11.3.2.3 of ICC A117.1 shall be provided and shall include reinforcement for future installation of grab bars in accordance with Section 1004.11.1 of ICC A117.1.

1.3. That the exception to Section 1005.4 of ICC A117.1 is not applicable.

1.4. That there be a food preparation area complying with Section 1005.7 of ICC A117.1 on the entrance level.

1.5. That any thermostat for heating or cooling on the entrance level comply with Section 1005.8 of ICC A117.1.

F. Change Item 1 of Section 1110.1 of the IBC to read:

1. Accessible parking spaces required by Section 1106.1.

13VAC5-63-260. Chapter 12 Interior environment.

A. Add the following ~~definitions~~ to the list of terms in Section 1202.1 of the IBC:

Day-night average sound level (Ldn). ~~A 24-hour energy average sound level expressed in dBA, with a 10 decibel penalty applied to noise occurring between 10 p.m. and 7 a.m.~~

Sound transmission class (STC) rating. ~~A single number characterizing the sound reduction performance of a material tested in accordance with ASTM E90-90, "Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions."~~

B. Add Section 1203.4.4 to the IBC to read:

1203.4.4 Insect screens in occupancies other than Group R. Every door, window and other outside opening for natural ventilation serving structures classified as other than a residential group containing habitable rooms, food preparation areas, food service areas, or any areas where products to be included or utilized in food for human consumption are processed, manufactured, packaged, or stored, shall be supplied with approved tightly fitting screens of not less than 16 mesh per inch (16 mesh per 25 mm) and every screen door used for insect control shall have a self-closing device.

Exception: Screen doors shall not be required for out swinging doors or other types of openings which make screening impractical, provided other approved means, such as air curtains or insect repellent fans are provided.

C. Add Section 1203.4.5 to the IBC to read:

1203.4.5 Insect screens in Group R occupancies. Every door, window and other outside opening required for natural ventilation purposes which serves a structure classified as a residential group shall be supplied with approved tightly fitted screens of not less than 16 mesh per inch (16 mesh per 25 mm) and every screen door used for insect control shall have a self-closing device.

[D. Add Section 1203.6 to the IBC to read:

1203.6 Smoking areas in restaurants. Smoking areas in restaurants, as defined in § 15.2-2820 of the Code of Virginia, shall comply with the following:

1. The area where smoking may be permitted shall be structurally separated from the portion of the restaurant in which smoking is prohibited. For the purposes of this section, structurally separated means a stud wall covered with drywall or other building material or like barrier, which, when completed, extends from the floor to the ceiling, resulting in a physically separated room. Such wall or barrier may include portions that are glass or other gas-impervious building material and shall be permitted to have a door leading to areas in which smoking is prohibited, provided the door is capable of being closed at all times.

2. The area where smoking may be permitted shall be separately vented to prevent the recirculation of air from such area to the area of the restaurant where smoking is prohibited.

Exception: The above requirements do not apply if a restaurant is exempt from, or meets any of the exceptions to, the Virginia Indoor Clean Air Act (Chapter 28.2 of Title 15.2 (§ 15.2-2820 et seq.) of the Code of Virginia).

~~D.~~ E.] Change Section 1207.1 of the IBC to read:

1207.1 Scope. Sections 1207.2 and 1207.3 shall apply to common interior walls, partitions and floor/ceiling assemblies between adjacent dwelling units or between dwelling units and adjacent public areas such as halls, corridors, stairs or service areas. Section 1207.4 applies to the construction of the exterior envelope of Group R occupancies within airport noise zones and to the exterior envelope of Group A, B, E, I and M occupancies in any locality in whose jurisdiction, or adjacent jurisdiction, is located a United States Master Jet Base, a licensed airport or United States government or military air facility, when such requirements are enforced by a locality pursuant to § 15.2-2295 of the Code of Virginia.

[~~E.~~ F.] Add Section 1207.4 to the IBC to read:

1207.4 Airport noise attenuation standards. Where the Ldn is determined to be 65 dBA or greater, the minimum STC rating of structure components shall be provided in compliance with Table 1207.4. As an alternative to compliance with Table 1207.4, structures shall be permitted to be designed and constructed so as to limit the interior noise level to no greater than 45 Ldn. Exterior structures, terrain and permanent plantings shall be permitted to be included as part of the alternative design. The alternative design shall be certified by an RDP.

[~~F.~~ G.] Add Table 1207.4 to the IBC to read:

Table 1207.4. Airport Noise Attenuation Standards.		
Ldn	STC of exterior walls and roof/ceiling assemblies	STC of doors and windows
65-69	39	25
70-74	44	33
75 or greater	49	38

13VAC5-63-264. Chapter 13 Energy efficiency.

Add Section 1301.1.1.1 to the IBC to read:

1301.1.1.1 Changes to the ~~International Energy Conservation Code (IECC)~~ IECC. The following ~~change~~ changes shall be made to the IECC:

1. Add Exception 3 to Section C402.4.5.2 to read:

   3. Any grease duct serving a Type I hood installed in accordance with IMC Section 506.3 shall not be required to have a motorized or gravity damper.

2. Change Section C402.4.8 to read:

   C402.4.8 Recessed lighting. Recessed luminaires installed in the building thermal envelope shall be sealed to limit air leakage between conditioned and unconditioned spaces. All recessed luminaires shall be IC-rated and labeled as having an air leakage rate or not more 2.0 cfm (0.944 L/s) when tested in accordance with ASTM E 283 at

a 1.57 psf (75 Pa) pressure differential. All recessed luminaires installed in the thermal envelope shall be sealed with a gasket or caulk between the housing and interior wall or ceiling covering.

3. Add Exception 4 to Section C403.2.4.4 to read:

4. Any grease duct serving a Type I hood installed in accordance with IMC, Section 506.3, shall not be required to have a motorized or gravity damper.

4. Change the exception to Section C405.1 to read:

Exception: Dwelling units within commercial buildings shall not be required to comply with Sections C405.2 through C405.5 provided that not less than 75 percent of the permanently installed luminaires, other than low-voltage lighting, shall be fitted for, and contain only, high-efficacy lamps.

5. Change Section C405.6 to read:

C405.6 Exterior lighting (Mandatory). All exterior lighting, other than low-voltage landscape lighting, shall comply with Sections C405.6.1 and C405.6.2.

Exception: Where approved because of historical, safety, signage, or emergency considerations.

6. Delete Section ~~401.3~~ R401.3.

7. Change the ceiling R-value and wood frame wall R-value categories for climate zone "4 except Marine" in Table R402.1.1 to read:

Ceiling R-Value	Wood Frame Wall R-Value
38	15 or 13 + 1[h]

8. Change the ceiling U-factor and frame wall U-factor categories for climate zone "4 except Marine" in Table R402.1.3 to read:

Ceiling U-Factor	Frame Wall U-Factor
0.030	0.079

9. Change Sections R402.2.1 and R402.2.4 to read:

R402.2.1 Ceilings with attic spaces. When Section R402.1.1 would require R-38 in the ceiling, installing R-30 over 100 percent of the ceiling area shall be deemed to satisfy the requirement for R-38 wherever the full height of uncompressed R-30 insulation extends over the wall top plate at the eaves. Similarly, when Section R402.1.1 would require R-49 in the ceiling, installing R-38 over 100 percent of the ceiling area shall be deemed to satisfy the requirement for R-49 wherever the full height of uncompressed R-38 insulation extends over the wall top plate at the eaves.

This reduction shall not apply to the U-factor alternative approach in Section R402.1.3 and the total UA alternative in Section R402.1.4.

R402.2.4 Access hatches and doors. Access doors from conditioned spaces to unconditioned spaces (e.g., attics and crawl spaces) shall be weatherstripped and insulated in accordance with the following values:

1. Hinged vertical doors shall have a minimum overall R-5 insulation value;

2. Hatches and scuttle hole covers shall be insulated to a level equivalent to the insulation on the surrounding surfaces; and

3. Pull down stairs shall have a minimum of 75 percent of the panel area having R-5 rigid insulation.

Access shall be provided to all equipment that prevents damaging or compressing the insulation. A wood framed or equivalent baffle or retainer is required to be provided when loose fill insulation is installed, the purpose of which is to prevent the loose fill insulation from spilling into the living space when the attic access is opened and to provide a permanent means of maintaining the installed R-value of the loose fill insulation.

10. Delete Section R402.3.6 and change Sections R402.4 and R402.4.1.1 to read:

R402.4 Air leakage. The building thermal envelope shall be constructed to limit air leakage in accordance with the requirements of Sections R402.4.1 through R402.4.4.

R402.4.1.1 Installation (Mandatory). The components of the building thermal envelope as listed in Table R402.4.1.1 shall be installed in accordance with the manufacturer's instructions and the criteria listed in Table R402.4.1.1, as applicable to the method of construction. Where required by the code official, an approved third party shall inspect all components and verify compliance.

11. Change the title of the "Criteria" category of Table R402.4.1.1; change the "Walls," "Shower/tub on exterior wall" and "Fireplace" categories of Table R402.4.1.1, and add footnotes "b" and "c" to Table R402.4.1.1 to read:

Component	Criteria[a,b]
Walls	Cavities within corners and headers shall be insulated by completely filling the cavity with a material having a minimum thermal resistance of R-3 per inch. The junction of the foundation and sill plate shall be sealed. The junction of the top plate and top of exterior walls shall be sealed. Exterior thermal envelope insulation for framed walls shall be installed in substantial contact and

	continuous alignment with the air barrier. Knee walls shall be sealed.
Shower or tub on exterior wall[c]	Exterior walls adjacent to showers and tubs shall be insulated and an air barrier installed on the interior side of the exterior wall, adjacent to the shower or tub.
Fireplace	An air barrier shall be installed on fireplace walls. Fireplaces shall have gasketed doors or tight-fitting flue dampers.
b. Structural integrity of headers shall be in accordance with the applicable building code. c. Air barriers used behind showers and tubs on exterior walls shall be of a permeable material that does not cause the entrapment of moisture in the stud cavity.	

12. Change Section R402.4.1.2 and add Sections R402.4.1.2.1, R402.4.1.2.2 and R402.4.1.3 to read:

R402.4.1.2 Air sealing. Building envelope air tightness shall be demonstrated to comply with either Section R402.4.1.2.1 or R402.4.1.2.2.

R402.4.1.2.1 Testing option. The building or dwelling unit shall be tested for air leakage. Testing shall be conducted with a blower door at a pressure of 0.2 inches w.g. (50 Pascals). Where required by the building official, testing shall be conducted by an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the building official. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope.

During testing:

1. Exterior windows and doors and fireplace and stove doors shall be closed, but not sealed beyond the intended weatherstripping or other infiltration control measures;

2. Dampers, including exhaust, intake, makeup air, backdraft and flue dampers, shall be closed, but not sealed beyond intended infiltration control measures;

3. Interior doors, if installed at the time of the test, shall be open;

4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed;

5. Heating and cooling systems, if installed at the time of the test, shall be turned off; and

6. Supply and return registers, if installed at the time of the test, shall be fully open.

R402.4.1.2.2 Visual inspection option. Building envelope tightness shall be considered acceptable when the items listed in Table R402.4.1.1, applicable to the method of construction, are field verified. Where required by the building official, an approved party, independent from the installer, shall inspect the air barrier.

R402.4.1.3 Leakage rate (Prescriptive). The building or dwelling unit shall have an air leakage rate not exceeding 5 changes per hour as verified in accordance with Section R402.4.1.2.

13. Change Section R403.1.1 to read:

R403.1.1 Programmable thermostat. The thermostat controlling the primary heating or cooling system of the dwelling unit shall be capable of controlling the heating and cooling system on a daily schedule to maintain different temperature set points at different times of the day. This thermostat shall include the capability to set back or temporarily operate the system to maintain zone temperatures down to 55°F (13°C) or up to 85°F (29°C). The thermostat shall initially be programmed with a heating temperature set point no higher than 70°F (21°C) and a cooling temperature set point no lower than 78°F (26°C).

~~2.~~ 14. Change Section ~~403.2.2~~ R403.2.2 to read:

~~403.2.2~~ R403.2.2 Sealing (Mandatory). ~~All ducts~~ Ducts, air handlers, and filter boxes ~~and building cavities used as ducts~~ shall be sealed. Joints and seams shall comply with ~~Section M1601.4.1 of~~ either the IMC or the ~~International Residential Code~~ IRC, as applicable. Verification of compliance with this section shall be in accordance with either Section ~~403.2.2.1~~ R403.2.2.1 or Section ~~403.2.2.2~~ R403.2.2.2.

Exceptions:

1. Air-impermeable spray foam products shall be permitted to be applied without additional joint seals.

2. Where a duct connection is made that is partially inaccessible, three screws or rivets shall be equally spaced on the exposed portion of the joint so as to prevent a hinge effect.

3. Continuously welded and locking-type longitudinal joints and seams in ducts operating at static pressures less than 2 inches of water column (500 Pa) pressure classification shall not require additional closure systems.

~~3.~~ 15. ~~Add~~ Change Section ~~403.2.2.1~~ R403.2.2.1 to read:

~~403.2.2.1~~ R403.2.2.1 Testing option. Duct tightness shall be verified by either of the following:

1. Post-construction test: ~~Leakage to outdoors~~ Total leakage shall be less than or equal to ~~8~~ 6 cfm ~~(3.78 L/s)~~ (169.9 L/min) per 100 ~~ft²~~ square feet (9.29 m^2) of conditioned floor area ~~or a total leakage less than or equal to 12 cfm (5.66 L/s) per~~

~~100 ft^2 (9.29m^2) of conditioned floor area~~ when tested at a pressure differential of 0.1 inch w.g. (25 Pa) across the entire system, including the manufacturer's air handler ~~end closure~~ enclosure. All register boots shall be taped or otherwise sealed during the test.

2. Rough-in test: Total leakage shall be less than or equal to ~~6~~ 5 cfm ~~(2.83 L/s)~~ (141.5 L/min) per 100 ~~ft^2~~ square feet (9.29 m^2) of conditioned floor area when tested at a pressure differential of 0.1 inch w.g. (25 Pa) across the ~~roughed in~~ system, including the manufacturer's air handler enclosure. All register boots shall be taped or otherwise sealed during the test. If the air handler is not installed at the time of the test, total leakage shall be less than or equal to ~~4~~ 5 cfm ~~(1.89 L/s)~~ (141.5 L/min) per 100 ~~ft^2~~ square feet (9.29 m^2) of conditioned floor area.

Exception: ~~Duct tightness~~ The total leakage test is not required ~~if the~~ for ducts and air ~~handler and all ducts are~~ handlers located entirely within ~~conditioned space~~ the building thermal envelope.

When this option is chosen, testing shall be performed by approved qualified individuals, testing agencies or contractors. Testing and results shall be as prescribed in Section ~~403.2.2~~ R403.2.2 and approved recognized industry standards.

~~4.~~ 16. Add Section ~~403.2.2.2~~ R403.2.2.2 to read:

~~403.2.2.2~~ R403.2.2.2 Visual inspection option. In addition to the inspection of ducts otherwise required by this code, when the air handler and all ducts are not within conditioned space and this option is chosen to verify duct tightness, duct tightness shall be considered acceptable when the requirements of Section ~~403.2.2~~ R403.2.2 are field verified.

17. Add Section R403.2.2.3 to read:

R403.2.2.3 Sealed air handler. Air handlers shall have a manufacturer's designation for an air leakage of no more than 2 percent of the design air flow rate when tested in accordance with ASHRAE 193.

18. Change Section R403.4.2 to read:

R403.4.2 Hot water pipe insulation (Prescriptive). Insulation for hot water pipe with a minimum thermal resistance (R-value) of R-3 shall be applied to the following:

1. Piping larger than 3/4 inch nominal diameter.

2. Piping serving more than one dwelling unit.

3. Piping located outside the conditioned space.

4. Piping from the water heater to a distribution manifold.

5. Piping located under a floor slab.

6. Buried piping.

7. Supply and return piping in recirculation systems other than demand recirculation systems.

19. Delete Table R403.4.2.

20. Change Section R404.1 to read:

R404.1 Lighting equipment (Mandatory). A minimum of 50 percent of the lamps in permanently installed luminaires shall be high-efficacy lamps or a minimum of 50 percent of the permanently installed luminaires shall contain only high efficacy lamps.

Exception: Low-voltage lighting shall not be required to utilize high-efficiency lamps.

21. Change the "Glazing" and "Air exchange rate" categories of Table R405.5.2(1) and add footnote "b-1" to read:

Building Component	Standard Reference Design	Proposed Design
Glazing[a]	Total area[b] is 15% of the conditioned floor area.	As proposed
Glazing[a]	Orientation: equally distributed to four cardinal compass orientations (North, East, South & West).	As proposed
Glazing[a]	U-factor: from Table R402.1.3	As proposed
Glazing[a]	SHGC: From Table R402.1.1 except that for climates with no requirement (NR) SHGC = 0.40 shall be used.	As proposed
Glazing[a]	Interior shade fraction: [~~Summer (all hours when cooling is required) = 0.70~~ ~~Winter (all hours when heating is required) = 0.85~~[~~b-1~~] 0.92-(0.21 x SHGC for the standard reference design)]	[~~Same as standard referenced design~~[~~b-1~~] 0.92-(0.21 x SHGC as proposed)]
Glazing[a]	External shading: none	As proposed
Air exchange rate	Air leakage rate of 5 air changes per hour at a pressure of 0.2 inches w.g (50 Pa). The mechanical ventilation rate shall be in addition to the air leakage rate and the same as in the proposed design, but no greater than 0.01 × CFA + 7.5 × (N_{br} + 1) where:	For residences that are not tested, the same air leakage rate as the standard reference design. For tested residences, the

	CFA = conditioned floor area N_{br} = number of bedrooms Energy recovery shall not be assumed for mechanical ventilation.	measured air exchange rate[c]. The mechanical ventilation rate[d] shall be in addition to the air leakage rate and shall be as proposed.
[~~b-1. For fenestrations facing within 15 degrees (0.26 rad) of true south that are directly coupled to thermal storage mass, the winter interior shade fraction shall be permitted to be increased to .095 in the proposed design.~~]		

13VAC5-63-267. [Chapter 14 Exterior walls. ~~(Repealed.)~~

A.] ~~Change~~ [Delete Section] ~~1405.13.2~~ [1403.5 of the IBC.] ~~to read:~~

~~1405.13.2 Window sills. In Occupancy Groups R-2 and R-3, one- and two-family and multiple-family dwellings, where the opening of the sill portion of an operable window is located more than 72 inches (1829 mm) above the finished grade or other surface below, the lowest part of the clear opening of the window shall be at a height not less than 18 inches (457 mm) above the finished floor surface of the room in which the window is located. Glazing between the floor and a height of 18 inches (457 mm) shall be fixed or have openings through which a 4-inch (102 mm) diameter sphere cannot pass.~~

~~Exception: Openings that are provided with window guards that comply with ASTM F2006 or F2090.~~

[B. Add Section 1403.8 to the IBC to read:

1403.8 Air barriers. The exterior wall envelope shall be designed and constructed by providing air barriers that comply with the IECC.

C. Change Section 1407.10.4 of the IBC to read:

1407.10.4 Full-scale test. The MCM system shall be tested in accordance with, and comply with, the acceptance criteria of NFPA 285. Such testing shall be performed on the MCM system with the MCM in the maximum thickness intended for use. Where noncombustible materials or combustible materials permitted by Sections 603, 803, 806 or 1406 differ from assembly to assembly or within an assembly, multiple tests shall not be required.

Exception: The MCM system is not required to be tested in accordance with, and comply with, acceptance criteria of NFPA 285 in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.]

13VAC5-63-270. Chapter 16 Structural design.

A. Change Section 1609.3 of the IBC to read:

1609.3 Basic wind speed. The ~~basic~~ ultimate design wind speed, V_{ult}, in miles per hour (mph~~,~~), for the determination of the wind loads shall be determined by ~~Figure 1609~~ Figures 1609A, 1609B and 1609C. The ultimate design wind speed, V_{ult}, for use in the design of Risk Category II buildings and structures shall be obtained from Figure 1609A. The ultimate design wind speed, V_{ult}, for use in the design of Risk Category III and IV buildings and structures shall be obtained from Figure 1609B. The ultimate design wind speed, V_{ult}, for use in the design of Risk Category I buildings and structures shall be obtained from Figure 1609C. ~~Wind~~ The ultimate design wind speeds for localities in special wind regions, near mountainous terrains, and near gorges shall be based on elevation. Areas at 4,000 feet in elevation or higher shall use ~~110~~ 142 V mph ~~(48.4 m/s)~~ (62.5 m/s) and areas under 4,000 feet in elevation shall use ~~90~~ 116 V mph ~~(39.6 m/s)~~ (51 m/s). Gorge areas shall be based on the highest recorded speed per locality or in accordance with local jurisdiction requirements determined in accordance with Section ~~6.5.4~~ 26.5.1 of ASCE 7.

In nonhurricane-prone regions, when the ~~basic~~ ultimate design wind speed, V_{ult}, is estimated from regional climatic data, the ~~basic~~ ultimate design wind speed, V_{ult}, shall be ~~not less than the wind speed associated with an annual probability of 0.02 (50-year mean recurrence interval), and the estimate shall be adjusted for equivalence to a three-second gust wind speed at 33 feet (10 m) above ground in exposure Category C. The data analysis shall be performed~~ determined in accordance with Section ~~6.5.4.2~~ 26.5.3 of ASCE 7.

B. Add Section 1612.1.1 to the IBC to read:

1612.1.1 Elevation of manufactured homes. New or replacement manufactured homes to be located in any flood hazard zone shall be placed in accordance with the applicable elevation requirements of this code.

Exception: Manufactured homes installed on sites in an existing manufactured home park or subdivision shall be permitted to be placed so that the manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches (914 mm) above grade in lieu of being elevated at or above the base flood elevation provided no manufactured home at the same site has sustained flood damage exceeding 50% of the market value of the home before the damage occurred.

13VAC5-63-280. Chapter 17 [~~Structural tests and special~~ Special] inspections [and tests].

A. Change Section 1703.1 of the IBC to read:

1703.1 Approved agency. An approved agency responsible for laboratory testing or special inspections, or both, must comply with the qualification, certification and experience requirements of ASTM E329 or the alternatives listed herein.

B. Change Section 1703.1.1 of the IBC to read:

1703.1.1 ~~Independent~~ Independence. An approved agency shall be objective and competent. The agency shall also disclose possible conflicts of interest so that objectivity can be confirmed. The special inspector and their agents shall be independent from the person,

persons or contractor responsible for the physical construction of the project requiring special inspections.

C. Change Section 1703.1.3 of the IBC to read:

1703.1.3 Personnel. An approved agency shall employ experienced personnel educated in conducting, supervising and evaluating tests or inspections, or both. Upon request by the building official, documentation shall be provided demonstrating the applicable agency's accreditation as noted in ASTM E329 and individuals' resumes indicating pertinent training, certifications and other qualifications for special inspection personnel associated with the proposed construction requiring special inspections. The building official may prescribe the manner of qualification documentation and frequency of updating information regarding agency or individual inspector approval.

Firms providing special inspection services or individual inspectors seeking approval of alternative certifications or qualifications, or both, listed in ASTM E329 may submit documentation demonstrating equivalency. This documentation may include evidence of meeting other recognized standards or alternative certifications to demonstrate that the minimum qualifications, certification and experience intended by ASTM E329 have been met. The building official may, if satisfied that equivalency has been demonstrated, approve the credentials of the firm or individual.

D. Change Section ~~1704.1~~ 1704.2 of the IBC to read:

~~1704.1. General~~ 1704.2 Special inspections. Where application is made for construction as described in this section, the owner shall employ one or more special inspectors to provide inspections during construction on the types of work listed under Section 1704. All individuals or agents performing special inspection functions shall operate under the direct supervision of an RDP in responsible charge of special inspection activities, also known as the "special inspector." The special inspector shall ensure that the individuals under their charge are performing only those special inspections or laboratory testing that are consistent with their knowledge, training and certification for the specified inspection or laboratory testing.

Exceptions:

1. Special inspections are not required for work of a minor nature or as warranted by conditions in the jurisdiction as approved by the building official.

2. Special inspections are not required for building components unless the design involves the practice of professional engineering or architecture as defined by the laws of this Commonwealth and regulations governing the professional registration and certification of engineers and architects.

3. Unless otherwise required by the building official, special inspections are not required for occupancies in Groups R-3, R-4 or R-5 and occupancies in Group U that are accessory to a residential occupancy including, but not limited to, those listed in Section 312.1.

E. Change Section ~~1704.1.1~~ 1704.2.3 of the IBC to read:

~~1704.1.1~~ 1704.2.3 Statement of special inspections. The permit applicant shall submit a statement of special inspections prepared by the RDP in responsible charge in accordance with Section 111.1. This statement shall be in accordance with Section ~~1705~~ 1704.3.

Exceptions:

1. A statement of special inspections is not required for structures designed and constructed in accordance with the conventional construction provisions of Section 2308.

2. The statement of special inspections is permitted to be prepared by a qualified person approved by the building official for construction not designed by a registered design professional.

F. Change category "12" of Table ~~1704.4~~ 1705.3 of the IBC to read:

Verification and inspection	Continuous	Periodic	Referenced Standard [[a]]	IBC Reference
12. Inspect formwork for shape, location and dimensions of the concrete member being formed, shoring and reshoring.	--	X	ACI 318: ~~6.1, 6.2~~ 6.1.1	~~1906~~ --

13VAC5-63-290. Chapter 18 Soils and foundations.

A. Change the exception to Section 1804.5 of the IBC to read:

Exception: Compacted fill material less than 12 inches (305 mm) in depth need not comply with an approved report, provided it is a natural non-organic material that is not susceptible to swelling when exposed to moisture and it has been compacted to a minimum of 90% Modified Proctor in accordance with ASTM D1557. The compaction shall be verified by a qualified inspector approved by the building official. Material other than natural material may be used as fill material when accompanied by a certification from an RDP and approved by the building official.

B. Add an exception to Section 1808.1 of the IBC to read:

Exception: One-story detached accessory structures not exceeding 256 square feet (23.78m^2) of building area, provided all of the following conditions are met:

1. The building eave height is 10 feet (3048 mm) or less.

2. The maximum height from the finished floor level to grade does not exceed 18 inches (457.2 mm).

3. The supporting structural elements in direct contact with the ground shall be placed level on firm soil and when such elements are wood they shall be approved pressure preservative treated suitable for ground contact use.

4. The structure is anchored to withstand wind loads as required by this code.

5. The structure shall be of light-frame construction with walls and roof of light weight material, not slate, tile, brick or masonry.

13VAC5-63-295. Chapter 23 Wood.

[A.] Change Item 3.2 of Section 2308.2 of the IBC to read:

3.2 Live loads shall not exceed 40 psf (1916 N/m^2) for floors.

Exception: Concrete slab-on-grade live load limited only by allowable soil bearing pressure.

[B. Change the indicated rows of Table 2308.8(1) of the IBC to read:

Joist Spacing (inches)	Species and Grade	Dead Load = 10 psf				Dead load = 20 psf			
		2x6	2x8	2x10	2x12	2x6	2x8	2x10	2x12
		Maximum floor joist spans							
		(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)
12	Southern Pine SS	12-3	16-2	20-8	25-1	12-3	16-2	20-8	25-1
	Southern Pine #1	11-10	15-7	19-10	24-2	11-10	15-7	18-7	22-0
	Southern Pine #2	11-3	14-11	18-1	21-4	10-9	13-8	16-2	19-1
	Southern Pine #3	9-2	11-6	14-0	16-6	8-2	10-3	12-6	14-9
16	Southern Pine SS	11-2	14-8	18-9	22-10	11-2	14-8	18-9	22-10
	Southern Pine #1	10-9	14-2	18-0	21-4	10-9	13-9	16-1	19-1
	Southern Pine #2	10-3	13-3	15-8	18-6	9-4	11-10	14-0	16-6
	Southern Pine #3	7-11	10-0	12-1	14-4	7-1	8-11	10-10	12-10
19.2	Southern Pine SS	10-6	13-10	17-8	21-6	10-6	13-10	17-8	21-6
	Southern Pine #1	10-1	13-4	16-5	19-6	9-11	12-7	14-8	17-5
	Southern Pine #2	9-6	12-1	14-4	16-10	8-6	10-10	12-10	15-1
	Southern Pine #3	7-3	9-1	11-0	13-1	6-5	8-2	9-10	11-8
24	Southern Pine SS	9-9	12-10	16-5	19-11	9-9	12-10	16-5	19-8
	Southern Pine #1	9-4	12-4	14-8	17-5	8-10	11-3	13-1	15-7
	Southern Pine #2	8-6	10-10	12-10	15-1	7-7	9-8	11-5	13-6
	Southern Pine #3	6-5	8-2	9-10	11-8	5-9	7-3	8-10	10-5

C. Change the indicated rows of Table 2308.8(2) of the IBC to read:

Joist Spacing (inches)	Species and Grade	Dead Load = 10 psf				Dead load = 20 psf			
		2x6	2x8	2x10	2x12	2x6	2x8	2x10	2x12
		Maximum floor joist spans							
		(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)
12	Southern Pine SS	11-2	148	18-9	22-10	11-2	14-8	18-9	22-10

	Southern Pine #1	10-9	14-2	18-0	21-11	10-9	14-2	16-11	20-1
	Southern Pine #2	10-3	13-6	16-2	19-1	9-10	12-6	14-9	17-5
	Southern Pine #3	8-2	10-3	12-6	14-9	7-5	9-5	11-5	13-6
16	Southern Pine SS	10-2	13-4	17-0	20-9	10-2	13-4	17-0	20-9
	Southern Pine #1	9-9	12-10	16-1	19-1	9-9	12-7	14-8	17-5
	Southern Pine #2	9-4	11-10	14-0	16-6	8-6	10-10	12-10	15-1
	Southern Pine #3	7-1	8-11	10-10	12-10	6-5	8-2	9-10	11-8
19.2	Southern Pine SS	9-6	12-7	16-0	19-6	9-6	12-7	16-0	19-6
	Southern Pine #1	9-2	12-1	14-8	17-5	9-0	11-5	13-5	15-11
	Southern Pine #2	8-6	10-10	12-10	15-1	7-9	9-10	11-8	13-9
	Southern Pine #3	6-5	8-2	9-10	11-8	5-11	7-5	9-0	10-8
24	Southern Pine SS	8-10	11-8	14-11	18-1	8-10	11-8	14-11	18-0
	Southern Pine #1	8-6	11-3	13-1	15-7	8-1	10-3	12-0	14-3
	Southern Pine #2	7-7	9-8	11-5	13-6	7-0	8-10	10-5	12-4
	Southern Pine #3	5-9	7-3	8-10	10-5	5-3	6-8	8-1	9-6

D. Change the title and footnote "b" of Table 2308.9.5 of the IBC to read:

Table 2308.9.5
Header and Girder Spans[a,b] for Exterior Bearing Walls
(Maximum Spans for Douglas Fir-Larch, Hem-Fir, Southern Pine and Spruce-Pine-Fir and Required Number of Jack Studs)

b. Spans are based on minimum design properties for No. 2 Grade lumber of Douglas fir-larch, hem-fir, and spruce-pine-fir. No. 1 or better grade lumber shall be used for southern pine.

E. Change the title and footnote "b" of Table 2308.9.6 of the IBC to read:

Table 2308.9.6
Header and Girder Spans[a,b] for Interior Bearing Walls
(Maximum Spans for Douglas Fir-Larch, Hem-Fir, Southern Pine and Spruce-Pine-Fir and Required Number of Jack Studs)

b. Spans are based on minimum design properties for No. 2 Grade lumber of Douglas fir-larch, hem-fir, and spruce-pine-fir. No. 1 or better grade lumber shall be used for southern pine.

F. Change the indicated rows of Table 2308.10.2(1) of the IBC to read:

Ceiling Joist Spacing	Species and Grade	Dead Load = 5 pounds per square foot			
		2x4	2x6	2x8	2x10
		Maximum ceiling joist spans			
		(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)
12	Southern Pine SS	12-11	20-3	26-0	26-0
	Southern Pine #1	12-5	19-6	25-8	26-0
	Southern Pine #2	11-10	18-8	24-7	26-0
	Southern Pine #3	10-1	14-11	18-9	22-9

16	Southern Pine SS	11-9	18-5	24-3	26-0
	Southern Pine #1	11-3	17-8	23-4	26-0
	Southern Pine #2	10-9	16-11	21-7	25-7
	Southern Pine #3	8-9	12-11	16-3	19-9
19.2	Southern Pine SS	11-0	17-4	22-10	26-0
	Southern Pine #1	10-7	16-8	22-0	26-0
	Southern Pine #2	10-2	15-7	19-8	23-5
	Southern Pine #3	8-0	11-9	14-10	18-0
24	Southern Pine SS	10-3	16-1	21-2	26-0
	Southern Pine #1	9-10	15-6	20-5	24-0
	Southern Pine #2	9-3	13-11	17-7	20-11
	Southern Pine #3	7-2	10-6	13-3	16-1

G. Change the indicated rows of Table 2308.10.2(2) of the IBC to read:

Ceiling Joist Spacing	Species and Grade	Dead Load = 10 pounds per square foot			
		2x4	2x6	2x8	2x10
		Maximum ceiling joist spans			
		(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)
12	Southern Pine SS	10-3	16-1	21-2	26-0
	Southern Pine #1	9-10	15-6	20-5	24-0
	Southern Pine #2	9-3	13-11	17-7	20-11
	Southern Pine #3	7-2	10-6	13-3	16-1
16	Southern Pine SS	9-4	14-7	19-3	24-7
	Southern Pine #1	8-11	14-0	17-9	20-9
	Southern Pine #2	8-0	12-0	15-3	18-1
	Southern Pine #3	6-2	9-2	11-6	14-0
19.2	Southern Pine SS	8-9	13-9	18-2	23-1
	Southern Pine #1	8-5	12-9	16-2	18-11
	Southern Pine #2	7-4	11-0	13-11	16-6
	Southern Pine #3	5-8	8-4	10-6	12-9
24	Southern Pine SS	8-1	12-9	16-10	21-6
	Southern Pine #1	7-8	11-5	14-6	16-11
	Southern Pine #2	6-7	9-10	12-6	14-9
	Southern Pine #3	5-1	7-5	9-5	11-5

H. Change the indicated rows of Table 2308.10.3(1) of the IBC to read:

Rafter Spacing (inches)	Species and Grade	Dead Load = 10 pounds per square foot					Dead Load = 20 pounds per square foot				
		2x4	2x6	2x8	2x10	2x12	2x4	2x6	2x8	2x10	2x12
		Maximum rafter spans									
		(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)
12	Southern Pine SS	11-3	17-8	23-4	26-0	26-0	11-3	17-8	23-4	26-0	26-0
	Southern Pine #1	10-10	17-0	22-5	26-0	26-0	10-6	15-8	19-10	23-2	26-0
	Southern Pine #2	10-4	15-7	19-8	23-5	26-0	9-0	13-6	17-1	20-3	23-10
	Southern Pine #3	8-0	11-9	14-10	18-0	21-4	6-11	10-2	12-10	15-7	18-6
16	Southern Pine SS	10-3	16-1	21-2	26-0	26-0	10-3	16-1	21-2	25-7	26-0
	Southern Pine #1	9-10	15-6	19-10	23-2	26-0	9-1	13-7	17-2	20-1	23-10
	Southern Pine #2	9-0	13-6	17-1	20-3	23-10	7-9	11-8	14-9	17-6	20-8
	Southern Pine #3	6-11	10-2	12-10	15-7	18-6	6-0	8-10	11-2	13-6	16-0

19.2	Southern Pine SS	9-8	15-2	19-11	25-5	26-0	9-8	15-2	19-7	23-4	26-0
	Southern Pine #1	9-3	14-3	18-1	21-2	25-2	8-4	12-4	15-8	18-4	21-9
	Southern Pine #2	8-2	12-3	15-7	18-6	21-9	7-1	10-8	13-6	16-0	18-10
	Southern Pine #3	6-4	9-4	11-9	14-3	16-10	5-6	8-1	10-2	12-4	14-7
24	Southern Pine SS	8-11	14-1	18-6	23-8	26-0	8-11	13-10	17-6	20-10	24-8
	Southern Pine #1	8-7	12-9	16-2	18-11	22-6	7-5	11-1	14-0	16-5	19-6
	Southern Pine #2	7-4	11-0	13-11	16-6	19-6	6-4	9-6	12-1	14-4	16-10
	Southern Pine #3	5-8	8-4	10-6	12-9	15-1	4-11	7-3	9-1	11-0	13-1

I. Change the indicated rows of Table 2308.10.3(2) of the IBC to read:

Rafter Spacing (inches)	Species and Grade	Dead Load = 10 pounds per square foot					Dead Load = 20 pounds per square foot				
		2x4	2x6	2x8	2x10	2x12	2x4	2x6	2x8	2x10	2x12
		Maximum rafter spans									
		(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)
12	Southern Pine SS	10-3	16-1	21-2	26-0	26-0	10-3	16-1	21-2	26-0	26-0
	Southern Pine #1	9-10	15-6	20-5	26-0	26-0	9-10	15-6	19-10	23-2	26-0
	Southern Pine #2	9-5	14-9	19-6	23-5	26-0	9-0	13-6	17-1	20-3	23-10
	Southern Pine #3	8-0	11-9	14-10	18-0	21-4	6-11	10-2	12-10	15-7	18-6
16	Southern Pine SS	9-4	14-7	19-3	24-7	26-0	9-4	14-7	19-3	24-7	26-0
	Southern Pine #1	8-11	14-1	18-6	23-2	26-0	8-11	13-7	17-2	20-1	23-10
	Southern Pine #2	8-7	13-5	17-1	20-3	23-10	7-9	11-8	14-9	17-6	20-8
	Southern Pine #3	6-11	10-2	12-10	15-7	18-6	6-0	8-10	11-2	13-6	16-0
19.2	Southern Pine SS	8-9	13-9	18-2	23-1	26-0	8-9	13-9	18-2	23-1	26-0
	Southern Pine #1	8-5	13-3	17-5	21-2	25-2	8-4	12-4	15-8	18-4	21-9
	Southern Pine #2	8-1	12-3	15-7	16-6	21-9	7-1	10-8	13-6	16-0	18-10
	Southern Pine #3	6-4	9-4	11-9	14-3	16-10	5-6	8-1	10-2	12-4	14-7
24	Southern Pine SS	8-1	12-9	16-10	21-6	26-0	8-1	12-9	16-10	20-10	24-8
	Southern Pine #1	7-10	12-3	16-2	18-11	22-6	7-6	11-1	14-0	16-5	19-6
	Southern Pine #2	7-4	11-0	13-11	16-6	19-6	6-4	9-6	12-1	14-4	16-10
	Southern Pine #3	5-8	8-4	10-6	12-9	15-1	4-11	7-3	9-1	11-0	13-1

J. Change the indicated rows of Table 2308.10.3(3) of the IBC to read:

Rafter Spacing (inches)	Species and Grade	Dead Load = 10 pounds per square foot					Dead Load = 20 pounds per square foot				
		2x4	2x6	2x8	2x10	2x12	2x4	2x6	2x8	2x10	2x12
		Maximum rafter spans									
		(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)
12	Southern Pine SS	9-10	15-6	20-5	26-0	26-0	9-10	15-6	20-5	25-4	26-0
	Southern Pine #1	9-6	14-10	19-0	22-3	26-0	9-0	13-5	17-0	19-11	23-7
	Southern Pine #2	8-7	12-11	16-4	19-5	22-10	7-8	11-7	14-8	17-4	20-5
	Southern Pine #3	6-7	9-9	12-4	15-0	17-9	5-11	8-9	11-0	13-5	15-10
16	Southern Pine SS	8-11	14-1	18-6	23-8	26-0	8-11	14-1	18-5	21-11	25-11
	Southern Pine #1	8-7	13-0	16-6	19-3	22-10	7-10	11-7	14-9	17-3	20-5
	Southern Pine #2	7-6	11-2	14-2	16-10	19-10	6-8	10-0	12-8	15-1	17-9
	Southern Pine #3	5-9	8-6	10-8	13-0	15-4	5-2	7-7	9-7	11-7	13-9
19.2	Southern Pine SS	8-5	13-3	17-5	22-3	26-0	8-5	13-3	16-10	20-0	23-7
	Southern Pine #1	8-0	11-10	15-1	17-7	20-11	7-1	10-7	13-5	15-9	18-8
	Southern Pine #2	6-10	10-2	12-11	15-4	18-1	6-1	9-2	11-7	13-9	16-2
	Southern Pine #3	5-3	7-9	9-9	11-10	14-0	4-8	6-11	8-9	10-7	12-6
24	Southern Pine SS	7-10	12-3	16-2	20-0	23-7	7-10	11-10	15-0	17-11	21-2
	Southern Pine #1	7-1	10-7	13-5	15-9	18-8	6-4	9-6	12-0	14-1	16-8
	Southern Pine #2	6-1	9-2	11-7	13-9	16-2	5-5	8-2	10-4	12-3	14-6
	Southern Pine #3	4-8	6-11	8-9	10-7	12-6	4-2	6-2	7-10	9-6	11-2

K. Change the indicated rows of Table 2308.10.3(4) of the IBC to read:

Rafter Spacing (inches)	Species and Grade	Dead Load = 10 pounds per square foot					Dead Load = 20 pounds per square foot				
		2x4	2x6	2x8	2x10	2x12	2x4	2x6	2x8	2x10	2x12
		Maximum rafter spans									
		(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)
12	Southern Pine SS	8-4	13-1	17-2	21-11	26-0	8-4	13-1	17-2	21-5	25-3
	Southern Pine #1	8-0	12-3	15-6	18-2	21-7	7-7	11-4	14-5	16-10	20-0
	Southern Pine #2	7-0	10-6	13-4	15-10	18-8	6-6	9-9	12-4	14-8	17-3
	Southern Pine #3	5-5	8-0	10-1	12-3	14-6	5-0	7-5	9-4	11-4	13-5
16	Southern Pine SS	7-6	11-10	15-7	19-11	23-7	7-6	11-10	15-7	18-6	21-10
	Southern Pine #1	7-1	10-7	13-5	15-9	18-8	6-7	9-10	12-5	14-7	17-3
	Southern Pine #2	6-1	9-2	11-7	13-9	16-2	5-8	8-5	10-9	12-9	15-0
	Southern Pine #3	4-8	6-11	8-9	10-7	12-6	4-4	6-5	8-1	9-10	11-7
19.2	Southern Pine SS	7-1	11-2	14-8	18-3	21-7	7-1	11-2	14-2	16-11	20-0
	Southern Pine #1	6-6	9-8	12-3	14-4	17-1	6-0	9-0	11-4	13-4	15-9
	Southern Pine #2	5-7	8-4	10-7	12-6	14-9	5-2	7-9	9-9	11-7	13-8
	Southern Pine #3	4-3	6-4	8-0	9-8	11-5	4-0	5-10	7-4	8-11	10-7
24	Southern Pine SS	6-7	10-4	13-8	16-4	19-3	6-7	10-0	12-8	15-2	17-10
	Southern Pine #1	5-10	8-8	11-0	12-10	15-3	5-5	8-0	10-2	11-11	14-1
	Southern Pine #2	5-0	7-5	9-5	11-3	13-2	4-7	6-11	8-9	10-5	12-3
	Southern Pine #3	3-10	5-8	7-1	8-8	10-3	3-6	5-3	6-7	8-0	9-6

L. Change the indicated rows of Table 2308.10.3(5) of the IBC to read:

Rafter Spacing (inches)	Species and Grade	Dead Load = 10 pounds per square foot					Dead Load = 20 pounds per square foot				
		2x4	2x6	2x8	2x10	2x12	2x4	2x6	2x8	2x10	2x12
		Maximum rafter spans									
		(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)
12	Southern Pine SS	8-11	14-1	18-6	23-8	26-0	8-11	14-1	18-6	23-8	26-0
	Southern Pine #1	8-7	13-6	17-10	22-3	26-0	8-7	13-5	17-0	19-11	23-7
	Southern Pine #2	8-3	12-11	16-4	19-5	22-10	7-8	11-7	14-8	17-4	20-5
	Southern Pine #3	6-7	9-9	12-4	15-0	17-9	5-11	8-9	11-0	13-5	15-10
16	Southern Pine SS	8-1	12-9	16-10	21-6	26-0	8-1	12-9	16-10	21-6	25-11
	Southern Pine #1	7-10	12-3	16-2	19-3	22-10	7-10	11-7	14-9	17-3	20-5
	Southern Pine #2	7-6	11-2	14-2	16-10	19-10	6-8	10-0	12-8	15-1	17-9
	Southern Pine #3	5-9	8-6	10-8	13-0	15-4	5-2	7-7	9-7	11-7	13-9
19.2	Southern Pine SS	7-8	12-0	15-10	20-2	24-7	7-8	12-0	15-10	20-0	23-7
	Southern Pine #1	7-4	11-7	15-1	17-7	20-11	7-1	10-7	13-5	15-9	18-8
	Southern Pine #2	6-10	10-2	12-11	15-4	18-1	6-1	9-2	11-7	13-9	16-2
	Southern Pine #3	5-3	7-9	9-9	11-10	14-0	4-8	6-11	8-9	10-7	12-6
24	Southern Pine SS	7-1	11-2	14-8	18-9	22-10	7-1	11-2	14-8	17-11	21-2
	Southern Pine #1	6-10	10-7	13-5	15-9	18-8	6-4	9-6	12-0	14-1	16-8
	Southern Pine #2	6-1	9-2	11-7	13-9	16-2	5-5	8-2	10-4	12-3	14-6
	Southern Pine #3	4-8	6-11	8-9	10-7	12-6	4-2	6-2	7-10	9-6	11-2

M. Change the indicated rows of Table 2308.10.3(6) of the IBC to read:

Rafter Spacing (inches)	Species and Grade	Dead Load = 10 pounds per square foot					Dead Load = 20 pounds per square foot				
		2x4	2x6	2x8	2x10	2x12	2x4	2x6	2x8	2x10	2x12
		Maximum rafter spans									
		(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)
12	Southern Pine SS	7-6	11-0	15-7	19-11	24-3	7-6	11-10	15-7	19-11	24-3
	Southern Pine #1	7-3	11-5	15-0	18-2	21-7	7-3	11-4	14-5	16-10	20-0
	Southern Pine #2	6-11	10-6	13-4	15-10	18-8	6-6	9-9	12-4	14-8	17-3
	Southern Pine #3	5-5	8-0	10-1	12-3	14-6	5-0	7-5	9-4	11-4	13-5
16	Southern Pine SS	6-10	10-9	14-2	18-1	22-0	6-10	10-9	14-2	18-1	21-10

	Southern Pine #1	6-7	10-4	13-5	15-9	18-8	6-7	9-10	12-5	14-7	17-3
	Southern Pine #2	6-1	9-2	11-7	13-9	16-2	5-8	8-5	10-9	12-9	15-0
	Southern Pine #3	4-8	6-11	8-9	10-7	12-6	4-4	6-5	8-1	9-10	11-7
19.2	Southern Pine SS	6-5	10-2	13-4	17-0	20-9	6-5	10-2	13-4	16-11	20-0
	Southern Pine #1	6-2	9-8	12-3	14-4	17-1	6-0	9-0	11-4	13-4	15-9
	Southern Pine #2	5-7	8-4	10-7	12-6	14-9	5-2	7-9	9-9	11-7	13-8
	Southern Pine #3	4-3	6-4	8-0	9-8	11-5	4-0	5-10	7-4	8-11	10-7
24	Southern Pine SS	6-0	9-5	12-5	15-10	19-3	6-0	9-5	12-5	15-2	17-10
	Southern Pine #1	5-9	8-8	11-0	12-10	15-3	5-5	8-0	10-2	11-11	14-1
	Southern Pine #2	5-0	7-5	9-5	11-3	13-2	4-7	6-11	8-9	10-5	12-3
	Southern Pine #3	3-10	5-8	7-1	8-8	10-3	3-6	5-3	6-7	8-0	9-6

13VAC5-63-298. Chapter 26 Plastic.

Change Section 2603.5.5 of the IBC to read:

2603.5.5 Vertical and lateral fire propagation. Exterior wall assemblies shall be tested in accordance with, and comply with, acceptance criteria of NFPA 285. Where noncombustible materials or combustible materials permitted by Sections 603, 803, 806 or 1406 differ from assembly to assembly or within an assembly, multiple tests shall not be required.

Exception: Exterior wall assemblies are not required to be tested in accordance with, and comply with, acceptance criteria of NFPA 285 where any of the following conditions are met:

1. One-story buildings complying with Section 2603.4.1.4.

2. Wall assemblies where the foam plastic insulation is covered on each face by a minimum of 1-inch (25 mm) thickness of masonry or concrete complying with either of the following:

2.1. There is no air space between the insulation and the concrete or masonry; or

2.2. The insulation has a flame spread index of not more than 25 as determined in accordance with ASTM E 84 or UL 723 and the maximum air space between the insulation and the concrete or masonry is not more than 1 inch (25 mm).

3. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.]

13VAC5-63-300. Chapter 27 Electrical.

A. Change Section 2701.1 of the IBC to read:

2701.1 Scope. This chapter governs the electrical components, equipment and systems used in buildings and structures covered by this code. Electrical components, equipment and systems shall be designed and constructed in accordance with the provisions of this code and NFPA 70.

B. Add Section 2701.1.1 to the IBC to read:

2701.1.1 Changes to NFPA 70. The following change shall be made to NFPA 70:

1. Change Sections 334.10(2) and 334.10(3) of NFPA 70 to read:

(2) Multifamily dwellings not exceeding four floors above grade and multifamily dwellings of any height permitted to be of Types III, IV and V construction except in any case as prohibited in 334.12.

(3) Other structures not exceeding four floors above grade and other structures of any height permitted to be of Types III, IV and V construction except in any case as prohibited in 334.12. In structures exceeding four floors above grade, cables shall be concealed within walls, floors or ceilings that provide a thermal barrier of material that has at least a 15-minute finish rating as identified in listings of fire-rated assemblies.

For the purpose of Items 2 and 3 above, the first floor of a building shall be that floor that has 50% or more of the exterior wall surface area level with or above finished grade. One additional level that is the first level and not designed for human habitation and used only for vehicle parking, storage or similar use shall be permitted.

2. Change Exception 2 to Section 700.12(F) of NFPA 70 to read:

[~~2.~~ Exception No. 2] Where the normal power branch circuits that supply luminaries providing illumination immediately on the inside and outside of exit doors are supplied by the same service or feeder, the remote heads providing emergency illumination for the exterior of an exit door shall be permitted to be supplied by the unit equipment serving the area immediately inside the exit door.

C. Add Section 2701.1.2 to the IBC to read:

2701.1.2 Temporary connection to dwelling units. The building official shall give permission to energize the electrical service equipment of a one- or two-family dwelling unit when all of the following requirements have been approved:

1. The service wiring and equipment, including the meter socket enclosure, shall be installed and the service wiring terminated.

2. The grounding electrode system shall be installed and terminated.

3. At least one receptacle outlet on a ground fault protected circuit shall be installed and the circuit wiring terminated.

4. Service equipment covers shall be installed.

5. The building roof covering shall be installed.

6. Temporary electrical service equipment shall be suitable for wet locations unless the interior is dry and protected from the weather.

D. Add Section 2701.1.3 to the IBC to read:

2701.1.3 Assisted living facility generator requirements. Generators installed to comply with regulations for assisted living facilities licensed by the Virginia Department of Social Services shall be permitted to be optional standby systems.

E. Change Section 2702.2.17 of the IBC to read:

2702.2.17 Group I-2 and I-3 occupancies. Emergency power shall be provided in accordance with Section 407.11 for Group I-2 occupancies licensed by the Virginia Department of Health as a hospital, nursing or hospice facility. Emergency power shall be provided for doors in Group I-3 occupancies in accordance with Section 408.4.2.

13VAC5-63-310. Chapter 28 Mechanical systems.

A. Change Section 2801.1 of the IBC to read:

2801.1 Scope. Mechanical appliances, equipment and systems shall be constructed and installed in accordance with this chapter, the ~~International Mechanical Code~~ IMC and the ~~International Fuel Gas Code~~ IFGC. Masonry chimneys, fireplaces and barbecues shall comply with the ~~International Mechanical Code~~ IMC and Chapter 21 of this code.

Exception: This code shall not govern the construction of water heaters, boilers and pressure vessels to the extent which they are regulated by the Virginia Boiler and Pressure Vessel Regulations (16VAC25-50). However, the building official may require the owner of a structure to submit documentation to substantiate compliance with those regulations.

B. Add Section 2801.1.1 to the IBC to read:

2801.1.1 Required heating in dwelling units. Heating facilities shall be required in every dwelling unit or portion thereof which is to be rented, leased or let on terms, either expressed or implied, to furnish heat to the occupants thereof. The heating facilities shall be capable of maintaining the room temperature at 65°F (18°C) during the period from October 15 to May 1 during the hours between 6:30 a.m. and 10:30 p.m. of each day and not less than 60°F (16°C) during other hours when measured at a point three feet (914 mm) above the floor and three feet (914 mm) from the exterior walls. The capability of the heating system shall be based on the outside design temperature required for the locality by this code.

C. Add Section 2801.1.2 to the IBC to read:

2801.1.2 Required heating in nonresidential structures. Heating facilities shall be required in every enclosed occupied space in nonresidential structures. The heating facilities shall be capable of producing sufficient heat during the period from October 1 to May 15 to maintain a temperature of not less than 65°F (18°C) during all working hours. The required room temperature shall be measured at a point three feet (914 mm) above the floor and three feet (914 mm) from the exterior walls.

Processing, storage and operation areas that require cooling or special temperature conditions and areas in which persons are primarily engaged in vigorous physical activities are exempt from these requirements.

D. Add Section 2801.1.3 to the IBC to read:

2801.1.3 Changes to the ~~International Mechanical Code (IMC)~~ IMC. The following changes shall be made to the IMC:

1. Change Section 403.3 of the IMC to read:

403.3 Outdoor airflow rate. Ventilation systems shall be designed to have the capacity to supply the minimum outdoor airflow rate determined in accordance with this section. The occupant load utilized for design of the ventilation system shall not be less than the number determined from the estimated maximum occupant load rate indicated in Table 403.3. Ventilation rates for occupancies not represented in Table 403.3 shall be those for a listed occupancy classification that is most similar in terms of occupant density, activities and building construction; or shall be determined by an approved engineering analysis. The ventilation system shall be designed to supply the required rate of ventilation air continuously during the period the building is occupied, except as otherwise stated in other provisions of the code.

With the exception of smoking lounges and other designated areas where smoking is permitted, the ventilation rates in Table 403.3 are based on the absence of smoking in occupiable spaces.

Exception: The occupant load is not required to be determined based on the estimated maximum occupant load rate indicated in Table 403.3 where approved statistical data document the accuracy of an alternate anticipated occupant density.

2. Add the following areas to Table 403.3 of the IMC in the occupancy classifications shown:

OCCUPANCY CLASSIFICATION	~~People Outdoor Airflow Rate in Breathing Zone Cfm/person~~ Occupant Density #/1000 ft^2 [[a]]	~~Area~~ People Outdoor Airflow Rate in Breathing Zone, R_{ap} ~~cfm/ft^{2a}~~ cfm/person	~~Default Occupant Density #/1000 ft^{2a}~~ Area Outdoor Airflow Rate in Breathing Zone, R_a cfm/ft^{2a}	Exhaust Airflow Rate Cfm/ft^{2a}
Food and beverage service				
Bars or cocktail lounges designated as an area ~~when~~ where smoking is permitted[b]	~~30~~ 100	~~-~~ 30	~~100~~ -	[-]
Cafeteria or fast food designated as an area ~~when~~	~~20~~ 100	~~-~~ 20	~~100~~ -	[-]

where smoking is permitted				
Dining rooms designated as an area ~~when~~ where smoking is permitted	~~20~~ 70	- 20	~~70~~ -	[-]
Public spaces				
Lounges designated as an area where smoking is permitted[b]	~~30~~ 100	- 30	~~100~~ -	[-]

3. ~~Add~~ Change Section 505.1 of the IMC to read:

505.1 Domestic systems. Where domestic range hoods and domestic appliances equipped with downdraft exhaust are provided, such hoods and appliances shall discharge to the outdoors through sheet metal ducts constructed of galvanized steel, stainless steel, aluminum or copper. Such ducts shall have smooth inner walls, shall be air tight, shall be equipped with a backdraft damper, and shall be independent of all other exhaust systems.

Exceptions:

1. In Group R buildings, where installed in accordance with the manufacturer's installation instructions and where mechanical or natural ventilation is otherwise provided in accordance with Chapter 4, listed and labeled ductless range hoods shall not be required to discharge to the outdoors.

2. Ducts for domestic kitchen cooking appliances equipped with downdraft exhaust systems shall be permitted to be constructed of Schedule 40 PVC pipe and fittings provided that the installation complies with all of the following:

2.1. The PVC duct shall be installed under a concrete slab poured on grade.

2.2. The underfloor trench in which the PVC duct is installed shall be completely backfilled with sand or gravel.

2.3. The PVC duct shall extend not more than 1 inch (25 mm) above the indoor concrete floor surface.

2.4. The PVC duct shall extend not more than 1 inch (25 mm) above grade outside of the building.

2.5. The PVC duct shall be solvent cemented.

4. Add Section 505.3 to the IMC to read:

505.3 Other than Group R. In other than Group R occupancies, where electric domestic cooking appliances are utilized for domestic purposes, such appliances shall be provided with domestic range hoods. Hoods and exhaust systems for such electric domestic cooking appliances shall be in accordance with Sections 505.1 and 505.2. In

other than Group R occupancies, where fuel-fired domestic cooking appliances are utilized for domestic purposes, a Type I or Type II hood shall be provided as required for the type of appliances and processes in accordance with Section 507.2.

5. Change Section 507.2.3 of the IMC to read:

507.2.3 Domestic cooking appliances used for commercial purposes. Domestic cooking appliances utilized for commercial purposes shall be provided with a Type I or Type II hood as required for the type of appliances and processes in accordance with Sections 507.2, 507.2.1 and 507.2.2. Domestic cooking appliances utilized for domestic purposes shall comply with Section 505.

6. Change Section ~~801.1.1 to~~ 908.5 of the IMC to read:

~~801.1.1 Equipment changes. Upon the replacement or new installation of any fuel-burning appliances or equipment in existing buildings, an inspection or inspections shall be conducted to ensure that the connected vent or chimney systems comply with the following:~~

~~1. Vent or chimney systems are sized in accordance with this code.~~

~~2. Vent or chimney systems are clean, free of any obstruction or blockages, defects or deterioration and are in operable condition.~~

~~Where not inspected by the local building department, persons performing such changes or installations shall certify to the building official that the requirements of Items 1 and 2 of this section are met.~~

908.5 Water supply. Cooling towers, evaporative coolers, and fluid coolers shall be provided with an approved water supply and sized for peak demand. The quality of the water shall be provided in accordance the equipment manufacturer's recommendations. The piping system and protection of the potable water supply shall be installed as required by the IPC.

~~4.~~ 7. Change Item 4 of Section ~~1101.10~~ 928.1 of the IMC to read:

~~1101.10 Locking access port caps. Refrigerant circuit access ports located outdoors shall be fitted with locking-type tamper-resistant caps or shall be otherwise secured to prevent unauthorized access.~~

4. Be provided with an approved water supply and sized for peak demand. The quality of the water shall be provided in accordance the equipment manufacturer's recommendations. The piping system and protection of the potable water supply shall be installed as required by the IPC.

E. Add Section 2801.1.4 to the IBC to read:

2801.1.4 Changes to the ~~International Fuel Gas Code~~ IFGC. The following changes shall be made to the ~~International Fuel Gas Code~~ IFGC:

1. Change Section 301.1 of the ~~International Fuel Gas Code~~ IFGC to read:

301.1 Scope. This code shall apply to the installation of fuel gas piping systems, fuel gas utilization equipment, and related accessories as follows:

1. Coverage of piping systems shall extend from the point of delivery to the connections with gas utilization equipment. (See “point of delivery.”)

2. Systems with an operating pressure of 125 psig (862 kPa gauge) or less.

Piping systems for gas-air mixtures within the flammable range with an operating pressure of 10 psig (69 kPa gauge) or less.

LP-Gas piping systems with an operating pressure of 20 psig (140 kPa gauge) or less.

3. Piping systems requirements shall include design, materials, components, fabrication, assembly, installation, testing and inspection.

4. Requirements for gas utilization equipment and related accessories shall include installation, combustion and ventilation air and venting.

This code shall not apply to the following:

1. Portable LP-Gas equipment of all types that are not connected to a fixed fuel piping system.

2. Installation of farm equipment such as brooders, dehydrators, dryers, and irrigation equipment.

3. Raw material (feedstock) applications except for piping to special atmosphere generators.

4. Oxygen-fuel gas cutting and welding systems.

5. Industrial gas applications using gases such as acetylene and acetylenic compounds, hydrogen, ammonia, carbon monoxide, oxygen, and nitrogen.

6. Petroleum refineries, pipeline compressor or pumping stations, loading terminals, compounding plants, refinery tank farms, and natural gas processing plants.

7. Integrated chemical plants or portions of such plants where flammable or combustible liquids or gases are produced by chemical reactions or used in chemical reactions.

8. LP-Gas installations at utility gas plants.

9. Liquefied natural gas (LNG) installations.

10. Fuel gas piping in power and atomic energy plants.

11. Proprietary items of equipment, apparatus, or instruments such as gas generating sets, compressors, and calorimeters.

12. LP-Gas equipment for vaporization, gas mixing, and gas manufacturing.

13. Temporary LP-Gas piping for buildings under construction or renovation that is not to become part of the permanent piping system.

14. Installation of LP-Gas systems for railroad switch heating.

15. Installation of LP-Gas and compressed natural gas (CNG) systems on vehicles.

16. Except as provided in Section 401.1.1, gas piping, meters, gas pressure regulators, and other appurtenances used by the serving gas supplier in the distribution of gas, other than undiluted LP-Gas.

17. Building design and construction, except as specified herein.

2. Add Section ~~404.9.3~~ 404.11.3 to the ~~International Fuel Gas Code~~ IFGC to read:

~~404.9.3~~ 404.11.3 Coating application. Joints in gas piping systems shall not be coated prior to testing and approval.

~~3. Add Section 501.1.1 to the International Fuel Gas Code to read:~~

~~501.1.1 Equipment changes. Upon the replacement or new installation of any fuel-burning appliances or equipment in existing buildings, an inspection or inspections shall be conducted to ensure that the connected vent or chimney systems comply with the following:~~

~~1. Vent or chimney systems are sized in accordance with this code.~~

~~2. Vent or chimney systems are clean, free of any obstruction or blockages, defects or deterioration and are in operable condition.~~

~~Where not inspected by the local building department, persons performing such changes or installations shall certify to the building official that the requirements of Items 1 and 2 of this section are met.~~

13VAC5-63-320. Chapter 29 Plumbing systems.

A. Change Section 2901.1 of the IBC to read:

2901.1 Scope. The provisions of this chapter and the ~~International Plumbing Code (IPC)~~ IPC shall govern the design and installation of all plumbing systems and equipment, except that as provided for in Section [~~103.11~~ 103.10] for functional design, water supply sources and sewage disposal systems are regulated and approved by the Virginia Department of Health and the Virginia Department of Environmental Quality. The approval of pumping and electrical equipment associated with such water supply sources and sewage disposal systems shall, however, be the responsibility of the building official.

Note: See also the Memorandum of Agreement in the "Related Laws Package," which is available from DHCD.

~~B. Add Section 2901.1.1 to the IBC to read:~~

~~2901.1.1 Use of Appendix C of the IPC for gray water and rain water recycling systems. In addition to other applicable provisions of the IPC, gray water recycling systems and rain water recycling systems shall comply with the provisions in Appendix C of the IPC. In the use of Appendix C of the IPC for rain water recycling systems, the term "rain water" shall be substituted for the term "gray water." Gray water recycling systems and rain water recycling systems shall be separate systems and shall not be interconnected.~~

~~C.~~ B. Add Section ~~2901.1.2~~ 2901.1.1 to the IBC to read:

~~2901.1.2~~ 2901.1.1 Changes to the IPC. The following changes shall be made to the IPC:

1. Add the following definitions to the IPC to read:

Nonpotable fixtures and outlets. Fixtures and outlets that are not dependent on potable water for the safe operation to perform their intended use. Such fixtures and outlets may include, but are not limited to water closets, urinals, irrigation, mechanical equipment, and hose connections to perform operations, such as vehicle washing and lawn maintenance.

Nonpotable water systems. Water systems for the collection, treatment, storage, distribution and use or reuse of nonpotable water. Nonpotable systems include reclaimed water, rainwater, and gray water systems.

Rainwater. Natural precipitation, including snow melt, from roof surfaces only.

Reclaimed water. Reclaimed water means water resulting from the treatment of domestic, municipal, or industrial wastewater that is suitable for a water reuse that would not otherwise occur. Specifically excluded from this definition is "gray water."

Stormwater. Precipitation that is discharged across the land surface or through conveyances to one or more waterways and that may include stormwater runoff, snow melt runoff, and surface runoff and drainage.

2. Change the following definition in the IPC to read:

Gray water. Water discharged from lavatories, bathtubs, showers, clothes washers, and laundry trays.

3. Change the exception to Section 301.3 of the IPC to read:

~~301.3 Connections to drainage system. All plumbing fixtures, drains, appurtenances and appliances used to receive or discharge liquid wastes or sewage shall be directly connected to the sanitary drainage system of the building or premises, in accordance with the requirements of this code. This section shall not be construed to prevent indirect waste systems required by Chapter 8.~~

Exception: Bathtubs, showers, lavatories, clothes washers and laundry trays shall not be required to discharge to the sanitary drainage system where such fixtures discharge to an approved nonpotable gray water system ~~or rain water system for flushing of water closets and urinals or for subsurface landscape irrigation~~ in accordance with the applicable provisions of Chapter 13.

~~2.~~ 4. Delete Sections 311 and 311.1 of the IPC.

~~3. Change~~ 5. Modify the Group A-5 "Description" category of Table 403.1 of the IPC to read:

Stadiums, amusement parks, pools, bleachers and grandstands for outdoor sporting events and activities[h]

6. Add footnote "h" to Table 403.1 of the IPC to read:

h. The occupant load for pools shall be in accordance with the "Skating rinks, swimming pools" category of Table 1004.1.2 of the IBC.

7. Add Section 403.1.3 and Table 403.1.3 to the IPC to read:

403.1.3 Marina fixtures. Notwithstanding any provision to the contrary, plumbing fixtures shall be provided for marinas in the minimum number shown in Table 403.1.3. Fixtures shall be located within 500 feet walking distance from the shore end of any dock they serve. Separate facilities shall be provided for each sex with an equal number of fixtures of each type in each facility, except that separate facilities are not required where the number of slips is less than 25. Urinals may be substituted for up to 50 percent of water closets.

Table 403.1.3
Minimum Number of Required Plumbing Fixtures for Marinas

Number of Slips	Plumbing Fixtures		
	Water Closets	Lavatories	Showers
1-24	1	1	1

25-49	4	4	2
50-99	6	4	2
100-149	8	6	4
150-199	10	8	4
200-249	12	10	6
250 or greater	Two additional fixtures of each type for each 100 additional slips.		

8. Change Section 403.3.3 of the IPC to read:

403.3.3 Location of toilet facilities in occupancies other than malls. In occupancies other than covered and open mall buildings, the required public and employee toilet facilities shall be located not more than one story above or below the space required to be provided with toilet facilities, and the path of travel to such facilities shall not exceed a distance of 500 feet (152 m).

Exceptions:

1. The location and maximum travel distances to required employee facilities in factory and industrial occupancies are permitted to exceed that required by this section, provided that the location and maximum travel distance are approved.

2. The location and maximum travel distances to the required public facilities located on cemetery property are permitted to exceed that required by this section, provided that the location and maximum travel distance are located on the same property and approved.

9. Change Section 405.3.2 of the IPC to read:

405.3.2 Public lavatories. In employee and public toilet rooms, the required lavatory shall be located in the same room as the required water closet.

Exception: In educational use occupancies, the required lavatory shall be permitted to be located adjacent to the room or space containing the water closet provided that not more than one operational door is between the water closet and the lavatory.

10. Add Section ~~602.1 of~~ 602.2.1 [to] the IPC to read:

~~602.1 General. Every structure equipped with plumbing fixtures and utilized for human occupancy or habitation shall be provided with a potable supply of water in the amounts and at the pressures specified in this chapter. This shall not prohibit the use of reclaimed water distribution systems installed in accordance with this code and the Virginia Water Reclamation and Reuse Regulation (9VAC25-740).~~

602.2.1 Nonpotable fixtures and outlets. Nonpotable water shall be permitted to serve nonpotable type fixtures and outlets in accordance with Chapter 13.

~~4. Change Section 604.1 of the IPC to read:~~

~~604.1 General. The design of the water distribution system, including any reclaimed water distribution systems governed by the Virginia Water Reclamation and Reuse Regulation (9VAC25-740), shall conform to accepted engineering practice. Methods utilized to determine pipe sizes shall be approved.~~

~~5. Add an exception to Section 608.8 of the IPC to read:~~

~~Exception: Reclaimed water supply systems shall be identified in accordance with the provisions of the Virginia Water Reclamation and Reuse Regulation (9VAC25-740).~~

~~6. Change Section 608.8.2 of the IPC to read:~~

~~608.8.2 Color. The color of the pipe identification shall be discernable and consistent throughout the building. The color purple shall be used to identify rain and gray water distribution systems.~~

[11. Change Section 608.16.10 of the IPC to read:

608.16.10 Coffee machines and noncarbonated beverage dispensers. The water supply connection to coffee machines and noncarbonated beverage dispensers shall be protected against backflow by a backflow preventer conforming to ASSE 1022 or 1024, or by an air gap.]

~~7.~~ [~~11.~~ 12.] Delete Section 701.9 of the IPC.

~~8.~~ [~~12.~~ 13.] Add Section 703.6 [~~of~~ to] the IPC to read:

703.6 Tracer wire. Nonmetallic sanitary sewer piping that discharges to public systems shall be locatable. An insulated copper tracer wire, 18 AWG minimum in size and suitable for direct burial or an equivalent product, shall be utilized. The wire shall be installed in the same trench as the sewer within 12 inches (305 mm) of the pipe and shall be installed to within five feet (1524 mm) of the building wall to the point where the building sewer intersects with the public system. At a minimum, one end of the wire shall terminate above grade in an accessible location that is resistant to physical damage, such as with a cleanout or at the building wall.

[~~13.~~ 14.] Add an exception to Section 1101.2 of the IPC to read:

Exception. Rainwater nonpotable water systems shall be permitted in accordance with Chapter 13.

[~~14.~~ 15.] Add Chapter 13 entitled “Nonpotable Water Systems” to the IPC.

[~~15.~~ 16.] Add Section 1301 entitled “General” to the IPC.

[~~16.~~ 17.] Add Sections 1301.1 through 1301.18, including subsections, to the IPC to read:

1301.1 Scope. The provisions of Chapter 13 shall govern the materials, design, construction and installation of nonpotable water systems subject to this code. In addition to the applicable provision of this section, reclaimed water shall comply with the requirements of Section 1304.

1301.1.1 Design of nonpotable water systems. All portions of nonpotable water systems subject to this code shall be constructed using the same standards and requirements for the potable water systems or drainage systems as provided for in this code unless otherwise specified in this chapter.

1301.2 Makeup water. Makeup water shall be provided for all nonpotable water supply systems. The makeup water system shall be designed and installed to provide supply of water in the amounts and at the pressures specified in this code. The makeup water supply shall be potable and be protected against backflow in accordance with the applicable requirements of Section 608.

1301.2.1 Makeup water sources. Potable water shall be provided as makeup water for reclaimed water systems. Nonpotable water shall be permitted to serve as make up water for gray water and rainwater systems.

1301.2.2 Makeup water supply valve. A full-open valve shall be provided on the makeup water supply line.

1301.2.3 Control valve alarm. Makeup water systems shall be fitted with a warning mechanism that alerts the user to a failure of the inlet control valve to close correctly. The alarm shall activate before the water within the storage tank begins to discharge into the overflow system.

1301.3 Sizing. Non potable water distribution systems shall be designed and sized for peak demand in accordance with approved engineering practice methods that comply with the applicable provisions of Chapter 6.

1301.4 Signage required. All nonpotable water outlets, other than water closets and urinals, such as hose connections, open ended pipes, and faucets shall be identified at the point of use for each outlet with signage that reads as follows: “Nonpotable water is utilized for (application name). Caution: nonpotable water. DO NOT DRINK.” The words shall be legibly and indelibly printed on a tag or sign constructed of corrosion-resistant waterproof material or shall be indelibly printed on the fixture. The letters of the words shall be not less than 0.5 inches (12.7 mm) in height and in colors in contrast to the background on which they are applied. The pictograph shown in Figure 1301.4 shall appear on the signage required by this section.

Figure 1301.4
Pictograph DO NOT DRINK

1301.5 Potable water supply system connections. Where a potable water supply system is connected to a nonpotable water system, the potable water supply shall be protected against backflow in accordance with the applicable provisions of Section 608.

1301.6 Nonpotable water system connections. Where a nonpotable water system is connected and supplies water to another nonpotable water system, the nonpotable water system that supplies water shall be protected against backflow in accordance with the applicable provisions of Section 608.

1301.7 Approved components and materials. Piping, plumbing components, and materials used in the nonpotable water drainage and distribution systems shall be approved for the intended application and compatible with the water and any disinfection or treatment systems used.

1301.8 Insect and vermin control. Nonpotable water systems shall be protected to prevent the entrance of insects and vermin into storage and piping systems. Screen materials shall be compatible with system material and shall not promote corrosion of system components.

1301.9 Freeze protection. Nonpotable water systems shall be protected from freezing in accordance with the applicable provisions of Chapter 3.

1301.10 Nonpotable water storage tanks. Nonpotable water storage tanks shall be approved for the intended application and comply with Sections 1301.10.1 through 1301.10.12.

1301.10.1 Sizing. The holding capacity of storage tanks shall be sized for the intended use.

1301.10.2 Inlets. Storage tank inlets shall be designed to introduce water into the tank and avoid agitating the contents of the storage tank. The water supply to storage tanks shall be controlled by fill valves or other automatic supply valves designed to stop the flow of incoming water before the tank contents reach the overflow pipes.

1301.10.3 Outlets. Outlets shall be located at least 4 inches (102 mm) above the bottom of the storage tank and shall not skim water from the surface.

1301.10.4 Materials and location. Storage tanks shall be constructed of material compatible with treatment systems used to treat water. Above grade storage vessels shall be constructed using opaque, UV-resistant materials such as tinted plastic, lined metal, concrete or wood or painted to prevent algae growth. Above grade storage tanks shall be protected from direct sunlight unless their design specifically incorporates the use of the sunlight heat transfer. Wooden storage tanks shall be provided with a flexible liner. Storage tanks and their manholes shall not be located directly under soil or waste piping or sources of contamination.

1301.10.5 Foundation and supports. Storage tanks shall be supported on a firm base capable of withstanding the storage tank's weight when filled to capacity. Storage tanks shall be supported in accordance with the applicable provisions of the IBC.

1301.10.5.1 Ballast. Where the soil can become saturated, an underground storage tank shall be ballasted, or otherwise secured, to prevent the effects of buoyancy. The combined weight of the tank and hold down ballast shall meet or exceed the buoyancy force of the tank. Where the installation requires a foundation, the foundation shall be flat and shall be designed to support the storage tank weight when full, consistent with the bearing capability of adjacent soil.

1301.10.5.2 Structural support. Where installed below grade, storage tank installations shall be designed to withstand earth and surface structural loads without damage.

1301.10.6 Overflow. The storage tank shall be equipped with an overflow pipe having a diameter not less than that shown in Table 606.5.4. The overflow outlet shall discharge at a point not less than 6 inches (152 mm) above the roof or roof drain, floor or floor drain, or over an open water-supplied fixture. The overflow outlet shall terminate through a check valve. Overflow pipes shall not be directed on walkways. The overflow drain shall not be equipped with a shutoff valve. A minimum of one cleanout shall be provided on each overflow pipe in accordance with the applicable provisions of Section 708.

1301.10.7 Access. A minimum of one access opening shall be provided to allow inspection and cleaning of the tank interior. Access openings shall have an approved locking device or other approved method of securing access. Below grade storage tanks, located outside of the building, shall be provided with either a manhole not less than 24 inches (610 mm) square or a manhole with an inside diameter not less than 24 inches (610 mm). The design and installation of access openings shall prohibit surface water from entering the tank. Each manhole cover shall have an approved locking device or other approved method of securing access.

Exception: Storage tanks under 800 gallons (3028 L) in volume installed below grade shall not be required to be equipped with a manhole, but shall have an access opening not less than 8 inches (203 mm) in diameter to allow inspection and cleaning of the tank interior.

1301.10.8 Venting. Storage tanks shall be vented. Vents shall not be connected to sanitary drainage system. Vents shall be at least equal in size to the internal diameter of the drainage inlet pipe or pipes connected to the tank. Where installed at grade, vents shall be protected from contamination by means of a U-bend installed with the opening directed downward. Vent outlets shall extend a minimum of 12 inches (304.8 mm) above grade, or as necessary to prevent surface water from entering the storage tank. Vent openings shall be protected against the entrance of vermin and insects. Vents serving gray water tanks shall terminate in accordance with the applicable provisions of Sections 903 and 1301.8.

1301.10.9 Drain. Where drains are provided they shall be located at the lowest point of the storage tank. The tank drain pipe shall discharge as required for overflow pipes and shall not be smaller in size than specified in Table 606.5.7. A minimum of one cleanout shall be provided on each drain pipe in accordance with Section 708.

1301.10.10 Labeling and signage. Each nonpotable water storage tank shall be labeled with its rated capacity and the location of the upstream bypass valve. Underground and otherwise concealed storage tanks shall be labeled at all access points. The label shall read: "CAUTION: NONPOTABLE WATER – DO NOT DRINK." Where an opening is provided that could allow the entry of personnel, the opening shall be marked with the words: "DANGER – CONFINED SPACE." Markings shall be indelibly printed on a tag or sign constructed of corrosion-resistant waterproof material mounted on the tank or shall be indelibly printed on the tank. The letters of the words shall be not less than 0.5 inches (12.7 mm) in height and shall be of a color in contrast with the background on which they are applied.

1301.10.11 Storage tank tests. Storage tanks shall be tested in accordance with the following:

1. Storage tanks shall be filled with water to the overflow line prior to and during inspection. All seams and joints shall be left exposed and the tank shall remain watertight without leakage for a period of 24 hours.

2. After 24 hours, supplemental water shall be introduced for a period of 15 minutes to verify proper drainage of the overflow system and verify that there are no leaks.

3. Following a successful test of the overflow, the water level in the tank shall be reduced to a level that is at 2 inches (50.8 mm) below the makeup water offset point. The tank drain shall be observed for proper operation. The makeup water system shall be observed for proper operation, and successful automatic shutoff of the system at the refill threshold shall be verified. Water shall not be drained from the overflow at any time during the refill test.

4. Air tests shall be permitted in lieu of water testing as recommended by the tank manufacturer or the tank standard.

1301.10.12 Structural strength. Storage tanks shall meet the applicable structural strength requirements of the IBC.

1301.11 Trenching requirements for nonpotable water system piping. Underground nonpotable water system piping shall be horizontally separated from the building sewer and potable water piping by 5 feet (1524 m) of undisturbed or compacted earth. Nonpotable water system piping shall not be located in, under or above sewage systems cesspools, septic tanks, septic tank drainage fields or seepage pits. Buried nonpotable system piping shall comply with the requirements of this code for the piping material installed.

Exceptions:

1. The required separation distance shall not apply where the bottom of the nonpotable water pipe within 5 feet (1524 mm) of the sewer is equal to or greater than 12 inches (305 mm) above the top of the highest point of the sewer and the pipe materials conforms to Table 702.3.

2. The required separation distance shall not apply where the bottom of the potable water service pipe within 5 feet (1524 mm) of the nonpotable water pipe is a minimum of 12 inches (305 mm) above the top of the highest point of the nonpotable water pipe and the pipe materials comply with the requirements of Table 605.4.

3. Nonpotable water pipe is permitted to be located in the same trench with building sewer piping, provided that such sewer piping is constructed of materials that comply with the requirements of Table 702.2.

4. The required separation distance shall not apply where a nonpotable water pipe crosses a sewer pipe, provided that the pipe is sleeved to at least 5 feet (1524 mm) horizontally from the sewer pipe centerline on both sides of such crossing with pipe materials that comply with Table 702.2.

5. The required separation distance shall not apply where a potable water service pipe crosses a nonpotable water pipe provided that the potable water service pipe is sleeved for a distance of at least 5 feet (1524 mm) horizontally from the centerline of the nonpotable pipe on both sides of such crossing with pipe materials that comply with Table 702.2.

1301.12 Outdoor outlet access. Sillcocks, hose bibs, wall hydrants, yard hydrants, and other outdoor outlets that are supplied by nonpotable water shall be located in a locked vault or shall be operable only by means of a removable key.

1301.13 Drainage and vent piping and fittings. Nonpotable drainage and vent pipe and fittings shall comply with the applicable material standards and installation requirements in accordance with provisions of Chapter 7.

1301.13.1. Labeling and marking. Identification of nonpotable drainage and vent piping shall not be required.

1301.14 Pumping and control system. Mechanical equipment, including pumps, valves and filters shall be accessible and removable in order to perform repair, maintenance, and cleaning. The minimum flow rate and flow pressure delivered by the pumping system shall be designed for the intended application in accordance with the applicable provisions of Section 604.

1301.15 Water-pressure reducing valve or regulator. Where the water pressure supplied by the pumping system exceeds 80 psi (552 kPa) static, a pressure-reducing valve shall be installed to reduce the pressure in the nonpotable water distribution system piping to 80 psi (552 kPa) static or less. Pressure-reducing valves shall be specified and installed in accordance with the applicable provisions of Section 604.8.

1301.16 Distribution pipe. Distribution piping utilized in nonpotable water stems shall comply with Sections 1301.16.1 through 1301.16.4.

1301.16.1 Materials, joints and connections. Distribution piping and fittings shall comply with the applicable material standards and installation requirements in accordance with applicable provisions of Chapter 6.

1301.16.2 Design. Distribution piping shall be designed and sized in accordance with the applicable provisions of Chapter 6.

1301.16.3 Labeling and marking. Distribution piping labeling and marking shall comply with Section 608.8.

1301.16.4 Backflow prevention. Backflow preventers shall be installed in accordance with the applicable provisions of Section 608.

1301.17 Tests and inspections. Tests and inspections shall be performed in accordance with Sections 1301.17.1 through 1301.17.5.

1301.17.1 Drainage and vent pipe test. Drain, waste, and vent piping used for gray water and rainwater nonpotable water systems shall be tested in accordance with the applicable provisions of Section 312.

1301.17.2 Storage tank test. Storage tanks shall be tested in accordance with the Section 1301.10.11.

1301.17.3 Water supply system test. Nonpotable distribution piping shall be tested in accordance with Section 312.5.

1301.17.4 Inspection and testing of backflow prevention assemblies. The testing of backflow preventers and backwater valves shall be conducted in accordance with Section 312.10.

1301.17.5 Inspection of vermin and insect protection. Inlets and vent terminations shall be visually inspected to verify that each termination is installed in accordance with Section 1301.10.8.

1301.18 Operation and maintenance manuals. Operations and maintenance materials for nonpotable water systems shall be provided as prescribed by the system component manufacturers, and supplied to the owner to be kept in a readily accessible location.

[~~17.~~ 18.] Add Section 1302 entitled "Gray Water Nonpotable Water Systems" to the IPC.

[~~18.~~ 19.] Add Sections 1302.1 through 1302.6, including subsections, to the IPC to read:

1302.1 Gray water nonpotable water systems. This code is applicable to the plumbing fixtures, piping or piping systems, storage tanks, drains, appurtenances, and appliances that are part of the distribution system for gray water within buildings and to storage tanks and associated piping that are part of the distribution system for gray water outside of buildings. This code does not regulate equipment used for, or the methods of, processing, filtering, or treating gray water, that may be regulated by the Virginia Department of Health or the Virginia Department of Environmental Quality.

1302.1.1 Separate systems. Gray water nonpotable water systems, unless approved otherwise under the permit from the Virginia Department of Health, shall be separate from the potable water system of a building with no cross connections between the two systems except as permitted by the Virginia Department of Health.

1302.2 Water quality. Each application of gray water reuse shall meet the minimum water quality requirements set forth in Sections 1302.2.1 through 1302.2.4 unless otherwise superseded by other state agencies.

1302.2.1 Disinfection. Where the intended use or reuse application for nonpotable water requires disinfection or other treatment or both, it shall be disinfected as needed to ensure that the required water quality is delivered at the point of use or reuse.

1302.2.2 Residual disinfectants. Where chlorine is used for disinfection, the nonpotable water shall contain not more than 4 parts per million (4 mg/L) of free chlorine, combined chlorine or total chlorine. Where ozone is used for disinfection, the nonpotable water shall not exceed 0.1 parts per million (by volume) of ozone at the point of use.

1302.2.3 Filtration. Water collected for reuse shall be filtered as required for the intended end use. Filters shall be accessible for inspection and maintenance. Filters shall utilize a pressure gauge or other approved method to indicate when a filter requires servicing or replacement. Shutoff valves installed immediately upstream and downstream of the filter shall be included to allow for isolation during maintenance

1302.2.4 Filtration required. Gray water utilized for water closet and urinal flushing applications shall be filtered by a 100 micron or finer filter.

1302.3 Storage tanks. Storage tanks utilized in gray water nonpotable water systems shall comply with Section 1301.10.

1302.4 Retention time limits. Untreated gray water shall be retained in storage tanks for a maximum of 24 hours.

1302.5 Tank Location. Storage tanks shall be located with a minimum horizontal distance between various elements as indicated in Table 1302.5.1.

Table 1302.5.1 Location of Nonpotable Gray Water Reuse Storage Tanks	
Element	Minimum Horizontal Distance from Storage Tank (feet)
Lot line adjoining private lots	5
Sewage systems	5
Septic tanks	5
Water wells	50
Streams and lakes	50
Water service	5
Public water main	10

1302.6 Valves. Valves shall be supplied on gray water nonpotable water drainage systems in accordance with Sections 1302.6.1 and 1302.6.2.

1302.6.1 Bypass valve. One three-way diverter valve certified to NSF 50 or other approved device shall be installed on collection piping upstream of each storage tank, or drainfield, as applicable, to divert untreated gray water to the sanitary sewer to allow servicing and inspection of the system. Bypass valves shall be installed downstream of fixture traps and vent connections. Bypass valves shall be labeled to indicate the direction of flow, connection, and storage tank or drainfield connection. Bypass valves shall be provided with access for operation and maintenance. Two shutoff valves shall not be installed to serve as a bypass valve.

1302.6.2 Backwater valve. Backwater valves shall be installed on each overflow and tank drain pipe to prevent unwanted water from draining back into the storage tank. If the overflow and drain piping arrangement is installed to physically not allow water to drain back into the tank, such as in the form of an air gap, backwater valves shall not be required. Backwater valves shall be constructed and installed in accordance with Section 715.

[~~19.~~ 20.] Add Section 1303 entitled “Rainwater Nonpotable Water Systems” to the IPC.

[~~20.~~ 21.] Add Sections 1303.1 through 1303.10, including subsections, to the IPC to read:

1303.1 General. The provisions of this section shall govern the design, construction, installation, alteration, and repair of rainwater nonpotable water systems for the collection, storage, treatment, and distribution of rainwater for nonpotable applications.

1303.2 Water quality. Each application of rainwater reuse shall meet the minimum water quality requirements set forth in Sections 1303.2.1 through 1303.2.4 unless otherwise superseded by other state agencies.

1303.2.1 Disinfection. Where the intended use or reuse application for nonpotable water requires disinfection or other treatment or both, it shall be disinfected as needed to ensure that the required water quality is delivered at the point of use or reuse.

1303.2.2 Residual disinfectants. Where chlorine is used for disinfection, the nonpotable water shall contain not more than 4 parts per million (4 mg/L) of free chlorine, combined chlorine, or total chlorine. Where ozone is used for disinfection, the nonpotable water shall not exceed 0.1 parts per million (by volume) of ozone at the point of use.

1303.2.3 Filtration. Water collected for reuse shall be filtered as required for the intended end use. Filters shall be accessible for inspection and maintenance. Filters shall utilize a pressure gauge or other approved method to indicate when a filter requires servicing or replacement. Shutoff valves installed immediately upstream and downstream of the filter shall be included to allow for isolation during maintenance.

1303.2.4 Filtration required. Rainwater utilized for water closet and urinal flushing applications shall be filtered by a 100 micron or finer filter.

1303.3 Collection surface. Rainwater shall be collected only from aboveground impervious roofing surfaces constructed from approved materials. Overflow or discharge piping from appliances or equipment, or both, including but not limited to evaporative coolers, water heaters, and solar water heaters shall not discharge onto rainwater collection surfaces.

1303.4 Collection surface diversion. At a minimum, the first 0.04 inches (1.016 mm) of each rain event of 25 gallons (94.6 L) per 1000 square feet (92.9 m^2) shall be diverted from the storage tank, by automatic means and not require the operation of manually operated valves or devices. Diverted water shall not drain onto other collection surfaces that are discharging to the rainwater system or to the sanitary sewer. Such water shall be diverted from the storage tank and discharged in an approved location.

1303.5 Pre-tank filtration. Downspouts, conductors and leaders shall be connected to a pre-tank filtration device. The filtration device shall not permit materials larger than 0.015 inches (0.4 mm).

1303.6 Roof gutters and downspouts. Gutters and downspouts shall be constructed of materials that are compatible with the collection surface and the rainwater quality for the desired end use. Joints shall be made watertight.

1303.6.1 Slope. Roof gutters, leaders, and rainwater collection piping shall slope continuously toward collection inlets. Gutters and downspouts shall have a slope of not less than 1 unit in 96 units along their entire length and shall not permit the collection or pooling of water at any point.

Exception: Siphonic roof drainage systems installed in accordance with Chapter 11 shall not be required to have slope.

1303.6.2 Size. Gutters and downspouts shall be installed and sized in accordance with Section 1106.6 and local rainfall rates.

1303.6.3 Cleanouts. Cleanouts or other approved openings shall be provided to permit access to all filters, flushes, pipes and downspouts.

1303.7 Storage tanks. Storage tanks utilized in rainwater nonpotable water systems shall comply with Section 1301.10.

1303.8 Location. Storage tanks shall be located with a minimum horizontal distance between various elements as indicated in Table 1303.8.1.

Table 1303.8.1 Location of Rainwater Storage Tanks	
Element	Minimum Horizontal Distance from Storage Tank (feet)
Lot line adjoining private lots	5
Sewage systems	5
Septic tanks	5

1303.9 Valves. Valves shall be installed in collection and conveyance drainage piping of rainwater nonpotable water systems in accordance with Sections 1303.9.1 and 1303.9.2.

1303.9.1 Influent diversion. A means shall be provided to divert storage tank influent to allow maintenance and repair of the storage tank system.

1303.9.2 Backwater valve. Backwater valves shall be installed on each overflow and tank drain pipe to prevent unwanted water from draining back into the storage tank. If the overflow and drain piping arrangement is installed to physically not allow water to drain back into the tank, such as in the form of an air gap, backwater valves shall not be required. Backwater valves shall be constructed and installed in accordance with Section 715.

1303.10 Tests and inspections. Tests and inspections shall be performed in accordance with Sections 1303.10.1 through 1303.10.2.

1303.10.1 Roof gutter inspection and test. Roof gutters shall be inspected to verify that the installation and slope is in accordance with Section 1303.6.1. Gutters shall be tested by pouring a minimum of one gallon of water into the end of the gutter opposite the collection point. The gutter being tested shall not leak and shall not retain standing water.

1303.10.2 Collection surface diversion test. A collection surface diversion test shall be performed by introducing water into the gutters or onto the collection surface area. Diversion of the first quantity of water in accordance with the requirements of Section 1303.4 shall be verified.

[~~21.~~ 22.] Add Section 1304 entitled "Reclaimed Water Systems" to the IPC.

[~~22.~~ 23.] Add Sections 1304.1 and 1304.2 to the IPC to read:

1304.1 General. Reclaimed water, water reclamation systems, reclaimed water distribution systems and allowable nonpotable reuses of reclaimed water are as defined or specified in and governed by the Virginia Water Reclamation and Reuse Regulation (9VAC25-740). Permits from the Virginia State Water Control Board are required for such systems and reuses. The provisions of Section 1304 shall govern the design, construction, installation, alterations, and repair of plumbing fixtures, piping or piping systems, storage tanks, drains, appurtenances and appliances that are part of the distribution system for reclaimed water within buildings and to storage tanks for reclaimed water as defined in the Virginia Water Reclamation and Reuse Regulation (9VAC25-740) and associated piping outside of buildings that deliver reclaimed water into buildings. Where conflicts occur between this code and the Virginia Water Reclamation and Reuse Regulation (9VAC25-740), the provisions of the Virginia Water Reclamation and Reuse Regulation (9VAC25-740) shall apply unless determined otherwise by the Virginia Department of Environmental Quality and DHCD through a memorandum of agreement.

1304.2 Design of reclaimed water systems. The design of reclaimed water systems shall conform to applicable requirements of Section 1301.

Exception: The design of reclaimed water systems shall conform to applicable requirements of the Virginia Water Reclamation and Reuse Regulation (9VAC25-740) for the following:

1. Identification, labeling, and posting of signage for reclaimed water systems in lieu of signage requirements described in Section 1301.4.

2. Sizing of system storage as defined in the Virginia Water Reclamation and Reuse Regulation (9VAC25-740), in addition to storage sizing requirements described in Section 1301.10.1.

3. Signage and labeling for reclaimed water storage in addition to labeling and signage requirements described in Section 1301.10.10.

4. Minimum separation distances and configurations for in-ground reclaimed water distribution piping in lieu of trenching requirements for nonpotable water systems described in Section 1301.11.

[~~23.~~ 24.] Add the following referenced standard to Chapter 14 of the IPC:

Standard Reference Number	Title	Referenced in Code Section Number
NSF/ANSI 50-09	Equipment for Swimming Pools, Spas, Hot Tubs and Other Recreational Water Facilities	1302.6.1

C. Modify the Group A-5 "Description" category of Table 2902.1 of the IBC to read:

Stadiums, amusement parks, pools, bleachers and grandstands for outdoor sporting events and activities[h]

D. Add footnote "h" to Table 2902.1 of the IBC to read:

h. The occupant load for pools shall be in accordance with the "Skating rinks, swimming pools" category of Table 1004.1.2.

13VAC5-63-330. Chapter 30 Elevators and conveying systems.

A. Change Section 3002.4 of the IBC to read:

3002.4 Elevator car to accommodate ambulance stretcher. Where elevators are provided in buildings four or more stories above, or four or more stories below, grade plane, at least one elevator shall be provided for fire department emergency access to all floors. The elevator car shall be of such a size and arrangement to accommodate an ambulance stretcher 24 inches by 84 inches (610 mm by 2134 mm) with not less than five-inch (127 mm) radius corners, in the horizontal, open position and shall be identified by the international symbol for emergency medical services (star of life). The symbol shall not be less than three inches (76 mm) high and shall be placed inside on both sides of the hoistway door frame on the designated and alternate landing floors required to be established by ASME A17.1.

Exception: Elevators in multistory dwelling units or guest rooms.

B. ~~Add~~ Change Section ~~3003.2.1 to~~ 3003.3 of the IBC to read:

~~3003.2.1 Standardized fire~~ 3003.3 Fire service elevator keys. ~~Where a key is required to operate the emergency function of an elevator, the key shall be~~ All elevators shall be equipped to operate with either a standardized or non-standardized fire service elevator key in accordance with the ~~Virginia Statewide Fire Prevention Code (13VAC5-51)~~ IFC.

C. Change Section 3006.4 of the IBC to read:

3006.4 Machine [and control] rooms [, control spaces,] and machinery spaces. Elevator machine rooms, rooms [and spaces] housing elevator controllers, and machinery spaces shall be enclosed with fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section ~~712~~ 711, or both. The fire-resistance

rating shall not be less than the required rating of the hoistway enclosure [~~served by the machinery~~]. Openings in the fire barriers shall be protected with assemblies having a fire protection rating not less than that required for the hoistway enclosure doors.

[~~Exceptions:~~ Exception:

~~1. Where machine rooms, rooms housing elevator controllers, and machinery spaces do not abut and have no openings to the hoistway enclosure they serve, the fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section~~] ~~712~~ [~~711, or both, shall be permitted to be reduced to a one-hour fire-resistance rating.~~

~~2.~~] In buildings four stories or less above grade plane when [elevator] machine rooms, rooms [and spaces] housing elevator controllers, and machinery [~~rooms~~ spaces] do not abut and have no openings to the hoistway enclosure they serve, the [elevator] machine [~~room, room~~ rooms, rooms and spaces] housing elevator controllers, and machinery spaces are not required to be fire-resistance rated.

D. Add Section 3006.7 to the IBC to read:

3006.7 Machine-room-less designs. Where machine-room-less designs are utilized they shall comply with the provisions of ASME A17.1 and incorporate the following:

1. Where the elevator car-top will be used as a work platform, it shall be equipped with permanently installed guards on all open sides. Guards shall be permitted to be of collapsible design, but otherwise must conform to all applicable requirements of this code for guards.

2. Where the equipment manufacturer's procedures for machinery removal and replacement depend on overhead structural support or lifting points, such supports or lifting points shall be permanently installed at the time of initial equipment installation.

3. Where the structure that the elevator will be located in is required to be fully sprinklered by this code, the hoistway that the elevator machine is located in shall be equipped with a fire suppression system as a machine room in accordance with NFPA 13. Smoke detectors for the automatic initiation of Phase I Emergency Recall Operation, and heat detectors or other approved devices that automatically disconnect the main line power supply to the elevators, shall be installed within the hoistway.

E. Change Section 3008.1 of the IBC to read:

3008.1 General. Where elevators in buildings greater than 420 feet (128 016 mm) in building height are to be used for occupant self-evacuation during fires, all passenger elevators for general public use shall comply with this section.

13VAC5-63-335. [Chapter 31] Special construction.

A. Change the title of IBC Section 3109 to read:

Swimming Pools, Swimming Pool Enclosures and Aquatic Recreational Facilities.

B. Change Section 3109.1 of the IBC to read as follows [÷ ;] add Section 3109.1.1 to the IBC to read as follows [,] and delete the remainder of Section 3109 of the IBC:

3109.1 General. Swimming pools, swimming pool enclosures and aquatic recreational facilities, as that term is defined in the ISPSC, shall comply with applicable provisions of the ISPSC.

3109.1.1 Changes to the ISPSC. The following changes shall be made to the ISPSC:

1. Add Section 410.2 and related subsections to the ISPSC to read:

410.2 Showers. Showers shall be in accordance with Sections 410.2.1 through 410.2.5.

410.2.1 Deck hand shower or shower spray unit. Not less than one and not greater than half of the total number of showers required by Section 410.1 shall be a hand shower or spray shower unit located on the deck of or at the entrance of each pool.

410.2.2 Anti-scald device. Where heated water is provided to the showers, the shower water supply shall be controlled by an anti-scald device.

401.2.3 Water heater and mixing valve. Bather access to water heaters and thermostatically controlled mixing valves for showers shall be prohibited.

401.2.4 Flow rate. Each showerhead shall have a water flow of not less than 2 gallons per minute (7.6 lpm).

401.2.5 Temperature. At each showerhead, the heated shower water temperature shall not exceed 120°F (49°C) and shall not be less than 90°F (32°C).

2. Change the title of Section 609 of the ISPSC to read:

Dressing and Sanitary Facilities

3. Change Section 609.3.1 of the ISPSC to read:

609.3.1 Deck hand shower or shower spray unit. Not less than one and not greater than half of the total number of showers required by Section 609.2 shall be a hand shower or shower spray unit located on the deck of or at the entrance of each pool.

13VAC5-63-340. Chapter 33 Safeguards during construction.

Delete IBC Sections 3305 and 3305.1.

13VAC5-63-350. Chapter 34 Existing structures.

~~A. Change Section 3401.1 of the IBC to read:~~ Delete Chapter 34 of the IBC in its entirety.

~~3401.1 Scope. The provisions of this chapter and the applicable requirements of Chapter 1 shall control the alteration, repair, addition and change of occupancy of existing structures.~~

~~B. Delete IBC Sections 3401.2, 3401.3, 3401.4, and 3401.5.~~

~~C. Delete IBC Sections 3403, 3404, 3405, and 3406.~~

~~D. Change Section 3407.1 of the IBC to read:~~

~~3407.1 Standards for replacement glass. In accordance with § 36-99.2 of the Code of Virginia, any replacement glass installed in buildings constructed prior to the first edition of the USBC shall meet the quality and installation standards for glass installed in new buildings as are in effect at the time of installation. In addition, as a requirement of this code, the installation or replacement of glass in buildings constructed under any edition of the USBC shall be as required for new installations.~~

~~E. Delete IBC Section 3408.~~

~~F. Delete IBC Section 3410.~~

~~G. Change Section 3412.2 of the IBC to read:~~

~~3412.2 Applicability. When specifically requested by an owner or an owner's agent in structures where there is work involving additions, alterations or changes of occupancy, the provisions in Sections 3412.2.1 through 3412.2.5 shall apply to existing occupancies that will continue to be, or are proposed to be, in Groups A, B, E, F, M, R, S and U. These provisions shall not apply to buildings with occupancies in Group H or I.~~

~~H. Add an exception to Section 3412.2.1 of the IBC to read:~~

~~Exception: Plumbing, mechanical and electrical systems in buildings undergoing a change of occupancy shall be subject to any applicable requirements of Section 103.3 of this code.~~

~~I. Change Section 3412.2.5 of the IBC to read:~~

~~3412.2.5 Accessibility requirements. All portions of the buildings proposed for change of occupancy and all alterations to existing buildings shall conform to the applicable accessibility provisions of Section 3411.~~

~~J. Add IBC Section 3413 Retrofit Requirements.~~

~~K. Add Section 3413.1 to the IBC to read:~~

~~3413.1 Scope. In accordance with Section 103.7 and as setout herein, the following buildings are required to be provided with certain fire protection equipment or systems or other retrofitted components.~~

~~L. Add Section 3413.2 to the IBC to read:~~

~~3413.2 Smoke detectors in colleges and universities. In accordance with Section 36-99.3 of the Code of Virginia, college and university buildings containing dormitories for sleeping purposes shall be provided with battery-powered or AC-powered smoke detector devices installed therein in accordance with this code in effect on July 1, 1982. All public and private college and university dormitories shall have installed such detectors regardless of when the building was constructed. The chief administrative office of the college or university shall obtain a certificate of compliance with the provisions of this subsection from the building official of the locality in which the college or university is located or in the case of state-owned buildings, from the Director of the Virginia Department of General Services. The provisions of this section shall not apply to any dormitory at a state-supported military college or university which is patrolled 24 hours a day by military guards.~~

~~M. Add Section 3413.3 to the IBC to read:~~

~~3413.3 Smoke detectors in certain juvenile care facilities. In accordance with § 36-99.4 of the Code of Virginia, battery-powered or AC-powered smoke detectors shall be installed in all local and regional detention homes, group homes, and other residential care facilities for children and juveniles which are operated by or under the auspices of the Virginia Department of Juvenile Justice, regardless of when the building was constructed, by July 1, 1986, in accordance with the provisions of this code that were in effect on July 1, 1984. Administrators of such homes and facilities shall be responsible for the installation of the smoke detector devices.~~

~~N. Add Section 3413.4 to the IBC to read:~~

~~3413.4 Smoke detectors for the deaf and hearing-impaired. In accordance with Section 36-99.5 of the Code of Virginia, smoke detectors providing an effective intensity of not less than 100 candela to warn a deaf or hearing-impaired individual shall be provided, upon request by the occupant to the landlord or proprietor, to any deaf or hearing-impaired occupant of any of the following occupancies, regardless of when constructed:~~

~~1. All dormitory buildings arranged for the shelter and sleeping accommodations of more than 20 individuals;~~

~~2. All multiple-family dwellings having more than two dwelling units, including all dormitories, boarding and lodging houses arranged for shelter and sleeping accommodations of more than five individuals; or~~

~~3. All buildings arranged for use of one-family or two-family dwelling units.~~

~~A tenant shall be responsible for the maintenance and operation of the smoke detector in the tenant's unit.~~

~~A hotel or motel shall have available no fewer than one such smoke detector for each 70 units or portion thereof, except that this requirement shall not apply to any hotel or motel with fewer than 35 units. The proprietor of the hotel or motel shall post in a conspicuous place at the registration desk or counter a permanent sign stating the availability of smoke~~

~~detectors for the hearing impaired. Visual detectors shall be provided for all meeting rooms for which an advance request has been made.~~

~~O. Add Sections 3413.5, 3413.5.1, and 3413.5.2 to the IBC to read:~~

~~3413.5 Assisted living facilities (formerly known as adult care residences or homes for adults). Existing assisted living facilities licensed by the Virginia Department of Social Services shall comply with this section.~~

~~3413.5.1 Fire protective signaling system and fire detection system. A fire protective signaling system and an automatic fire detection system meeting the requirements of the USBC, Volume I, 1987 Edition, Third Amendment, shall be installed in assisted living facilities by August 1, 1994.~~

~~Exception: Assisted living facilities that are equipped throughout with a fire protective signaling system and an automatic fire detection system.~~

~~3413.5.2 Single and multiple station smoke detectors. Battery or AC-powered single and multiple station smoke detectors meeting the requirements of the USBC, Volume I, 1987 Edition, Third Amendment, shall be installed in assisted living facilities by August 1, 1994.~~

~~Exception: Assisted living facilities that are equipped throughout with single and multiple station smoke detectors.~~

~~P. Add Section 3413.6 to the IBC to read:~~

~~3413.6 Smoke detectors in buildings containing dwelling units. AC-powered smoke detectors with battery backup or an equivalent device shall be required to be installed to replace a defective or inoperative battery-powered smoke detector located in buildings containing one or more dwelling units or rooming houses offering to rent overnight sleeping accommodations, when it is determined by the building official that the responsible party of such building or dwelling unit fails to maintain battery-powered smoke detectors in working condition.~~

~~Q. Add Section 3413.7 to the IBC to read:~~

~~3413.7 Fire suppression, fire alarm and fire detection systems in nursing homes and facilities. Fire suppression systems as required by the edition of this code in effect on October 1, 1990, shall be installed in all nursing facilities licensed by the Virginia Department of Health by January 1, 1993, regardless of when such facilities or institutions were constructed. Units consisting of certified long-term care beds located on the ground floor of general hospitals shall be exempt from the requirements of this section.~~

~~Fire alarm or fire detector systems, or both, as required by the edition of this code in effect on October 1, 1990, shall be installed in all nursing homes and nursing facilities licensed by the Virginia Department of Health by August 1, 1994.~~

~~R. Add Section 3413.8 to the IBC to read:~~

~~3413.8 Fire suppression systems in hospitals. Fire suppression systems shall be installed in all hospitals licensed by the Virginia Department of Health as required by the edition of this code in effect on October 1, 1995, regardless of when such facilities were constructed.~~

~~S. Add Section 3413.9 to the IBC to read:~~

~~3413.9 Identification of disabled parking spaces by above grade signage. All parking spaces reserved for the use of persons with disabilities shall be identified by above grade signs, regardless of whether identification of such spaces by above grade signs was required when any particular space was reserved for the use of persons with disabilities. A sign or symbol painted or otherwise displayed on the pavement of a parking space shall not constitute an above grade sign. Any parking space not identified by an above grade sign shall not be a parking space reserved for the disabled within the meaning of this section. All above grade disabled parking space signs shall have the bottom edge of the sign no lower than four feet (1219 mm) nor higher than seven feet (2133 mm) above the parking surface. Such signs shall be designed and constructed in accordance with the provisions of Chapter 11 of this code. All disabled parking signs shall include the following language: PENALTY, $100-500 Fine, TOW-AWAY ZONE. Such language may be placed on a separate sign and attached below existing above grade disabled parking signs, provided that the bottom edge of the attached sign is no lower than four feet above the parking surface.~~

~~T. Add Section 3413.10 to the IBC to read:~~

~~3413.10 Smoke detectors in hotels and motels. Smoke detectors shall be installed in hotels and motels as required by the edition of VR 394-01-22, USBC, Volume II, in effect on March 1, 1990, by the dates indicated, regardless of when constructed.~~

~~U. Add Section 3413.11 to the IBC to read:~~

~~3413.11 Sprinkler systems in hotel and motels. By September 1, 1997, an automatic sprinkler system shall be installed in hotels and motels as required by the edition of VR 394-01-22, USBC, Volume II, in effect on March 1, 1990, regardless of when constructed.~~

~~V. Add Section 3413.12 to the IBC to read:~~

~~3413.12 Fire suppression systems in dormitories. An automatic fire suppression system shall be provided throughout all buildings having a Group R-2 fire area which are more than 75 feet (22,860 mm) or six stories above the lowest level of exit discharge and which are used, in whole or in part, as a dormitory to house students by any public or private institution of higher education, regardless of when such buildings were constructed, in accordance with the edition of this code in effect on August 20, 1997, and the requirements for sprinkler systems under the edition of the NFPA 13 standard referenced by that code. The automatic fire suppression system shall be installed by September 1, 1999. The chief administrative office of the college or university shall obtain a certificate of compliance from the building official of the locality in which the college or university is located or in the case of state-owned buildings, from the Director of the Virginia Department of General Services.~~

~~Exceptions:~~

~~1. Buildings equipped with an automatic fire suppression system in accordance with Section 903.3.1.1 or the 1983 or later editions of NFPA 13.~~

~~2. Any dormitory at a state-supported military college or university which is patrolled 24 hours a day by military guards.~~

~~3. Application of the requirements of this section shall be modified in accordance with the following:~~

~~3.1. Building systems, equipment or components other than the fire suppression system shall not be required to be added or upgraded except as necessary for the installation of the fire suppression system and shall only be required to be added or upgraded where the installation of the fire suppression system creates an unsafe condition.~~

~~3.2. Residential sprinklers shall be used in all sleeping rooms. Other sprinklers shall be quick response or residential unless deemed unsuitable for a space. Standard response sprinklers shall be used in elevator hoist ways and machine rooms.~~

~~3.3. Sprinklers shall not be required in wardrobes in sleeping rooms that are considered part of the building construction or in closets in sleeping rooms, when such wardrobes or closets (i) do not exceed 24 square feet (2.23 m^2) in area, (ii) have the smallest dimension less than 36 inches (914 mm), and (iii) comply with all of the following:~~

~~3.3.1. A single station smoke detector monitored by the building fire alarm system is installed in the room containing the wardrobe or closet that will activate the general alarm for the building if the single station smoke detector is not cleared within five minutes after activation.~~

~~3.3.2. The minimum number of sprinklers required for calculating the hydraulic demand of the system for the room shall be increased by two and the two additional sprinklers shall be corridor sprinklers where the wardrobe or closet is used to divide the room. Rooms divided by a wardrobe or closet shall be considered one room for the purpose of this requirement.~~

~~3.3.3. The ceiling of the wardrobe, closet or room shall have a fire resistance rating of not less than 1/2 hour.~~

~~3.4. Not more than one sprinkler shall be required in bathrooms within sleeping rooms or suites having a floor area between 55 square feet (5.12 m^2) and 120 square feet (11.16 m^2) provided the sprinkler is located to protect the lavatory area and the plumbing fixtures are of a noncombustible material.~~

~~3.5. Existing standpipe residual pressure shall be permitted to be reduced when the standpipe serves as the water supply for the fire suppression system provided the water supply requirements of NFPA 13-94 are met.~~

~~3.6. Limited service controllers shall be permitted for fire pumps when used in accordance with their listing.~~

~~3.7. Where a standby power system is required, a source of power in accordance with Section 701-11 (d) or 701-11 (e) of NFPA 70—96 shall be permitted.~~

~~W. Add Section 3413.13 to the IBC to read:~~

~~3413.13 Fire extinguishers and smoke detectors in SRCF's. SRCF's shall be provided with at least one approved type ABC portable fire extinguisher with a minimum rating of 2A10BC installed in each kitchen. In addition, SRCF's shall provide at least one approved and properly installed battery operated smoke detector outside of each sleeping area in the vicinity of bedrooms and bedroom hallways and on each additional floor.~~

~~X. Add Section 3413.14 to the IBC to read:~~

~~3413.14 Smoke detectors in adult day care centers. Battery-powered or AC-powered smoke detector devices shall be installed in all adult day care centers licensed by the Virginia Department of Social Services, regardless of when the building was constructed. The location and installation of the smoke detectors shall be determined by the provisions of this code in effect on October 1, 1990. The licensee shall obtain a certificate of compliance from the building official of the locality in which the center is located, or in the case of state-owned buildings, from the Director of the Virginia Department of General Services.~~

~~Y. Add Section 3413.15 to the IBC to read:~~

~~3413.15 Posting of occupant load. Every room or space that is an assembly occupancy, and where the occupant load of that room or space is 50 or more, shall have the occupant load of the room or space as determined by the building official posted in a conspicuous place, near the main exit or exit access doorway from the room or space. Posted signs shall be of an approved legible permanent design and shall be maintained by the owner or authorized agent.~~

~~Z. Add Section 3413.16 to the IBC to read:~~

~~3413.16 ALFSTs. Existing ALFSTs, regardless of when constructed, shall by October 1, 2011, meet the applicable requirements of API 653 and TFI RMIP for suitability for service and inspections and shall provide a secondary containment system complying with Section 425.3.~~

13VAC5-63-360. Chapter 35 Referenced standards.

Change the referenced standards in Chapter 35 of the IBC as follows (standards not shown remain the same):

Standard reference number	Title	Referenced in code section number
ASTM E329-02	Standard Specification for Agencies Engaged in the Testing and/or	1703.1, 1703.1.3

	Inspection of Materials Used in Construction	
API 650-09	Welded Steel Tanks for Oil Storage	~~425.2~~ 426.2
API 653-09	Tank Inspection, Repair, Alteration and Reconstruction	~~425.4, 425.5, 3413.16~~ 426.4, 426.5
~~ASME A17.1/CSA B44-2007~~ ASME A17.1-2010/CSA B44-10	Safety Code for Elevators and Escalators ~~with 2008 and 2009 Addenda~~	907.3.3, 911.1.5, 1007.4, ~~1607.8.1, 1613.6.5,~~ 1607.9.1, 3001.2, 3001.4, 3002.5, 3003.2, 3007.1, ~~3008.3, 3008.12, 3008.14.1, 3411.8.2~~ 3007.2, 3008.2, 3008.2.1, [~~3008.7.6m~~ 3008.7.6], 3008.8.1
ASME A18.1-2011	Safety Standard for Platform Lifts and Stairway Chairlifts	1109.8, 2702.2.6
~~NFPA 704-07~~	~~Identification of the Hazards of Materials for Emergency Response~~	~~425.2~~
ISPSC-12	International Swimming Pool and Spa Code	202, 3109.1, 3109.1.1
TFI RMIP-09	Aboveground Storage Tanks Containing Liquid Fertilizer, Recommended Mechanical Integrity Practices	~~425.2, 425.4, 425.5, 3413.16~~ 426.2, 426.4, 426.5
~~UL 2034-08~~	~~Standard for Single- and Multiple-station Carbon Monoxide Alarms~~	~~908.7.1~~

13VAC5-63-365. Appendix E Supplementary accessibility requirements.

Appendix E of the IBC shall be part of this code.

13VAC5-63-370. Appendix F Rodent proofing.

The following provisions of Appendix F of the IBC are part of this code:

F101.2 Foundation wall ventilation openings.

F101.6 Pier and wood construction. (Includes all provisions.)

13VAC5-63-380. Appendix H Signs.

The following provisions of Appendix H of the IBC are part of this code:

H101.2 Signs exempt from permits.

H102 Definitions. (Includes all definitions.)

H103 Location. (Includes Section H103.1.)

H105 through H114. (Includes all provisions.)

13VAC5-63-390. Appendix I Patio covers.

~~The following provisions from~~ Appendix I of the IBC ~~are~~ shall be part of this code~~:~~.

~~I101 through I104 (Includes all provisions.)~~

Part II
Rehabilitation

13VAC5-63-400. Chapter 1 Administration; Section 101 General.

A. Section 101.1 Short title. The Virginia Uniform Statewide Building Code, Part II, Rehabilitation, may be cited as the "Virginia Rehabilitation Code," or as the "VRC."

B. Section 101.2 Incorporation by reference. Chapters 2 – ~~15~~ 16 of the ~~2009~~ 2012 International Existing Building Code, published by the International Code Council, Inc., are adopted and incorporated by reference to be an enforceable part of the ~~Virginia Rehabilitation Code~~ VRC. The term "IEBC" means the ~~2009~~ 2012 International Existing Building Code, published by the International Code Council, Inc. Any codes and standards referenced in the IEBC are also considered to be part of the incorporation by reference, except that such codes and standards are used only to the prescribed extent of each such reference.

C. Section 101.3 Numbering system. A dual numbering system is used in the ~~Virginia Rehabilitation Code~~ VRC to correlate the numbering system of the Virginia Administrative Code with the numbering system of the IEBC. IEBC numbering system designations are provided in the catch-lines of the Virginia Administrative Code sections and cross references between sections or chapters of the ~~Virginia Rehabilitation Code~~ VRC use only the IEBC numbering system designations. The term "chapter" is used in the context of the numbering system of the IEBC and may mean a chapter in the ~~Virginia Rehabilitation Code~~ VRC, a chapter in the IEBC or a chapter in a referenced code or standard, depending on the context of the use of the term. The term "chapter" is not used to designate a chapter of the Virginia Administrative Code, unless clearly indicated.

D. Section 101.4 Arrangement of code provisions. The ~~Virginia Rehabilitation Code~~ VRC is comprised of the combination of (i) the provisions of Chapter 1, Administration, which are established herein, (ii) Chapters 2 – ~~15~~ 16 of the IEBC, which are incorporated by reference in Section 101.2, and (iii) the changes to the text of the incorporated chapters of the IEBC that are specifically identified, including any new chapters added. The terminology "changes to the text of the incorporated chapters of the IEBC that are specifically identified, including any new chapters added" shall also be referred to as the "state amendments to the IEBC." Such state amendments to the IEBC are set out using corresponding chapter and section numbers of the IEBC numbering system. In addition, since Chapter 1 of the IEBC is not incorporated as part of the ~~Virginia Rehabilitation Code~~ VRC, any reference to a provision of Chapter 1 of the IEBC in the provisions of Chapters 2 - ~~15~~ 16 of the IEBC is generally invalid. However, where the purpose of such a reference would clearly correspond to a provision of Chapter 1 established

herein, then the reference may be construed to be a valid reference to such corresponding Chapter 1 provision.

E. Section 101.5 Use of terminology and notes. The term “this code,” or “the code,” where used in the provisions of Chapter 1, in Chapters 2 - ~~15~~ 16 of the IEBC, or in the state amendments to the IEBC, means the ~~Virginia Rehabilitation Code~~ VRC, unless the context clearly indicates otherwise. The term “this code,” or “the code,” where used in a code or standard referenced in the IEBC, means that code or standard, unless the context clearly indicates otherwise. The term “USBC” where used in this code, means ~~Part I of~~ the ~~Virginia Uniform Statewide Building Code, also known as the “Virginia Construction Code~~ VCC,~~”~~ unless the context clearly indicates otherwise. In addition, where the phrase “of the International Building Code under which the building was constructed” is used in the IEBC, it shall be construed to mean the USBC or other code that was in effect when the building was built. Further, the use of notes in Chapter 1 is to provide information only and shall not be construed as changing the meaning of any code provision. Notes in the IEBC, in the codes and standards referenced in the IEBC and in the state amendments to the IEBC, may modify the content of a related provision and shall be considered to be a valid part of the provision, unless the context clearly indicates otherwise.

F. Section 101.6 Order of precedence. The provisions of this code shall be used as follows:

1. The provisions of Chapter 1 of this code supersede any ~~conflicting~~ provisions of Chapters 2 – ~~15~~ 16 of the IEBC ~~and~~ that address the same subject matter and impose differing requirements.

2. The provisions of Chapter 1 of this code supersede any ~~conflicting~~ provisions of the codes and standards referenced in the IEBC that address the same subject matter and impose differing requirements. ~~In addition, the~~

3. The state amendments to the IEBC supersede any ~~conflicting~~ provisions of Chapters 2 – ~~15~~ 16 of the IEBC ~~and~~ that address the same subject matter and impose differing requirements.

4. The state amendments to the IEBC supersede any ~~conflicting~~ provisions of the codes and standards referenced in the IEBC that address the same subject matter and impose differing requirements. ~~Further, the~~

5. The provisions of Chapters 2 - ~~15~~ 16 of the IEBC supersede any ~~conflicting~~ provisions of the codes and standards referenced in the IEBC that address the same subject matter and impose differing requirements.

G. Section 101.7 Administrative provisions. The provisions of Chapter 1 establish administrative requirements, which include but are not limited to provisions relating to the scope and enforcement of the code. Any provisions of Chapters 2 – ~~15~~ 16 of the IEBC or any provisions of the codes and standards referenced in the IEBC that address the same subject matter to a lesser or greater extent are deleted and replaced by the provisions of Chapter 1. Further, any administrative requirements contained in the state amendments to the IEBC shall be given the same precedence as the provisions of Chapter 1. Notwithstanding the above, where administrative requirements of Chapters 2 – ~~15~~ 16 of the IEBC or of the codes and standards referenced in the IEBC are specifically identified as valid administrative requirements in Chapter

1 of this code or in the state amendments to the IEBC, then such requirements are not deleted and replaced.

Note: The purpose of this provision is to eliminate overlap, conflicts and duplication by providing a single standard for administrative, procedural and enforcement requirements of this code.

H. Section 101.8 Definitions. The definitions of terms used in this code are contained in Chapter 2 along with specific provisions addressing the use of definitions. Terms may be defined in other chapters or provisions of the code and such definitions are also valid.

13VAC5-63-410. Section 102 Purpose and scope.

A. Section 102.1 Purpose. In accordance with § 36-99.01 of the Code of Virginia, the General Assembly of Virginia has declared that (i) there is an urgent need to improve the housing conditions of low and moderate income individuals and families, many of whom live in substandard housing, particularly in the older cities of the Commonwealth; (ii) there are large numbers of older residential buildings in the Commonwealth, both occupied and vacant, which are in urgent need of rehabilitation and must be rehabilitated if the state's citizens are to be housed in decent, sound, and sanitary conditions; and (iii) the application of those building code requirements currently in force to housing rehabilitation has sometimes led to the imposition of costly and time-consuming requirements that result in a significant reduction in the amount of rehabilitation activity taking place.

The General Assembly further declares that (i) there is an urgent need to improve the existing condition of many of the Commonwealth's stock of commercial properties, particularly in older cities; (ii) there are large numbers of older commercial buildings in the Commonwealth, both occupied and vacant, that are in urgent need of rehabilitation and that must be rehabilitated if the citizens of the Commonwealth are to be provided with decent, sound and sanitary work spaces; and (iii) the application of the existing building code to such rehabilitation has sometimes led to the imposition of costly and time-consuming requirements that result in a significant reduction in the amount of rehabilitation activity taking place.

B. Section 102.2 Scope. ~~In accordance with Section 103.6 of the USBC, this code shall be an acceptable alternative to compliance with the Virginia Construction Code for the rehabilitation of existing buildings and structures.~~ The provisions of this code shall control the rehabilitation, reconstruction, alteration, repair and change of occupancy of existing buildings and structures in occupancies other than Group R-5, and shall be permitted to be used as an alternative to compliance with the VCC for additions to buildings in any occupancy classification and for reconstruction, alteration or repair in Group R-5 occupancies.

Exception: The use of this code shall not be permitted for change of occupancy involving Group I-2 or I-3.

13VAC5-63-420. Section 103 Application of code.

A. Section 103.1 General. ~~The provisions of this code shall control the rehabilitation, alteration, repair, addition and change of occupancy of existing buildings and structures when this code is chosen as an alternative to compliance with the Virginia Construction Code.~~ All administrative

provisions of the ~~Virginia Construction Code~~ VCC, including but not limited to, requirements for permits, inspections and approvals by the local building department, provisions for appeals from decisions of the local building department and the issuance of modifications, are applicable to the use of this code, except where this code sets out differing requirements. Where there is a conflict between a general requirement and a specific requirement in the IEBC, the specific requirement shall govern.

~~Exception: the use of this code shall not be permitted for change of occupancy involving Group I-2 or Group I-3.~~

B. Section 103.1.1 Use of performance code. Compliance with the provisions of a nationally recognized performance code when approved as a modification shall be considered to constitute compliance with this code. All documents submitted as part of such consideration shall be retained in the permanent records of the local building department.

C. Section 103.1.2 Preliminary meeting. When requested by a prospective permit applicant or when determined necessary by the code official, the code official shall meet with the prospective permit applicant prior to the application for a permit to discuss plans for the proposed work or change of occupancy in order to establish the specific applicability of the provisions of this code.

D. Section 103.2 Change of occupancy. No change of occupancy shall be made in any structure when the current USBC requires a greater degree of accessibility, structural strength, fire protection, means of egress, ventilation or sanitation. When such a greater degree is required, the owner or the owner's agent shall make written application to the local building department for a new certificate of occupancy and shall obtain the new certificate of occupancy prior to the new use of the structure.

When impractical to achieve compliance with this code for the new occupancy classification, the building official shall consider modifications upon application and as provided for in Section 106.3 of the VCC.

E. Section 103.3 Retrofit requirements. In accordance with Section 103.7 of the VCC, the local building department shall enforce the provisions of Section 1701, that require certain existing buildings to be retrofitted with fire protection systems and other safety equipment. Retroactive fire protection system requirements contained in the IFC shall not be applicable unless required for compliance with the provisions of Section 1701.

F. Section 103.4 Nonrequired equipment. The following criteria for nonrequired equipment is in accordance with § 36-103 of the Code of Virginia. Building owners may elect to install partial or full fire alarms or other safety equipment that was not required by the edition of the VCC in effect at the time a building was constructed without meeting current requirements of the code, provided the installation does not create a hazardous condition. Permits for installation shall be obtained in accordance with the VCC. In addition, as a requirement of this code, when such nonrequired equipment is to be installed, the building official shall notify the appropriate fire official or fire chief.

G. Section 103.4.1 Reduction in function or discontinuance of nonrequired fire protection systems. When a nonrequired fire protection system is to be reduced in function or discontinued, it shall be done in such a manner so as not to create a false sense of protection. Generally, in such

cases, any features visible from interior areas shall be removed, such as sprinkler heads, smoke detectors or alarm panels or devices, but any wiring or piping hidden within the construction of the building may remain. Approval of the proposed method of reduction or discontinuance shall be obtained from the building official.

H. Section 103.5 Equipment changes. Upon the replacement or new installation of any fuel-burning appliances or equipment in existing buildings, an inspection or inspections shall be conducted to ensure that the connected vent or chimney systems comply with the following:

1. Vent or chimney systems are sized in accordance with either the IRC, the IMC or the IFGC, depending on which is applicable based on the fuel source and the occupancy classification of the structure.

2. Vent or chimney systems are clean, free of any obstruction or blockages, defects or deterioration and are in operable condition.

Where not inspected by the local building department, persons performing such changes or installations shall certify to the building official that the requirements of Items 1 and 2 of this section are met.

I. Section 103.6 Requirements relating to maintenance. Any requirements of the IEBC requiring the maintenance of existing buildings or structures are invalid.

Note: Requirements for the maintenance of existing buildings and structures and for unsafe conditions are contained in ~~Part III of~~ the ~~Virginia Uniform Statewide Building Code, also known as the "Virginia Maintenance Code~~ VMC.~~"~~

~~E.~~ J. Section ~~103.3~~ 103.7 Use of Appendix A. Appendix A of the IEBC provides guidelines for the seismic retrofit of existing buildings. The use of this appendix is not mandatory but shall be permitted to be utilized at the option of an owner, the owner's agent or the RDP involved in a rehabilitation project. However, in no case shall the use of Appendix A be construed to authorize the lowering of existing levels of health or safety in buildings or structures being rehabilitated.

~~F.~~ K. Section ~~103.4~~ 103.8 Use of Appendix B. Appendix B of the IEBC provides supplementary accessibility requirements for existing buildings and facilities. All applicable requirements of Appendix B shall be met in buildings and structures being rehabilitated.

~~G.~~ L. Section [~~103.5~~ 103.9] Use of Resource A. Resource A of the IEBC provides guidelines for the evaluation of fire resistance ratings of archaic materials and may be used in conjunction with rehabilitation projects.

13VAC5-63-430. Chapter 2 Definitions.

A. Change Section 201.3 of the IEBC to read:

201.3 Terms defined in other codes. Where terms are not defined in this code and are defined in the other International Codes, such terms shall have the meanings ascribed to them in those codes, except that terms that are not defined in this code and that are defined in the ~~Virginia Construction Code~~ VCC shall take precedence over other definitions.

B. Change the following definition in Section 202 of the IEBC to read:

Existing building. A building for which a legal certificate of occupancy has been issued under any edition of the USBC and that has been occupied for its intended use; or, a building built prior to the initial edition of the USBC.

13VAC5-63-434. Chapter ~~7~~ 8 Alterations -- Level 2.

A. Change Exception 2 of Section ~~705.2~~ 805.2 to read:

2. Means of egress conforming to the requirements of the building code under which the building was constructed shall be considered compliant means of egress.

B. Change Item 7 of Section ~~705.3.1.1~~ 805.3.1.1 of the IEBC to read:

7. In ~~Group~~ Groups R-2, H-4, H-5 and I occupancies and in rooming houses and childcare centers, a single exit is permitted in a one-story building with a maximum occupant load of 10 and the exit access travel distance does not exceed 75 feet (22 860 mm). In dwelling units within Group R-2 buildings, an occupant load of 12 shall be permitted to be substituted for the occupant load established above and, in addition, staff of such family day homes shall not be counted for the purposes of establishing occupant loads.

13VAC5-63-438. Chapter ~~11~~ 12 Historic buildings.

Change Section ~~1101.2~~ 1201.2 of the IEBC to read:

~~1101.2~~ 1201.2 Report. The code official shall be permitted to require that an historic building undergoing repair, alteration or change of occupancy be investigated and evaluated by an RDP or other qualified person or agency as a condition of determining compliance with this code.

13VAC5-63-440. Chapter ~~13~~ 14 Performance compliance methods.

A. Change Section ~~1301.2~~ 1401.2 of the IEBC to read:

~~1301.2~~ 1401.2 Applicability. Work involving rehabilitation, additions, alterations or changes of occupancy shall be made to conform to the requirements of this chapter or the provisions of Chapters ~~4~~ 5 through ~~12~~ 13. The provisions in Sections ~~1301.2.1~~ 1401.2.1 through ~~1301.2.5~~ 1401.2.5 shall apply to existing occupancies that will continue to be, or are proposed to be, in Groups A, B, E, F, M, R, S and U. These provisions shall not apply to buildings with occupancies in Group H or I.

B. Add an exception to Section ~~1301.2.1~~ 1401.2.1 of the IEBC to read:

Exception: Plumbing, mechanical and electrical systems in buildings undergoing a change of occupancy shall be subject to any applicable requirements of ~~Section 103.3 of the Virginia Construction Code~~ Chapter 10.

C. Change Section ~~1301.2.5~~ 1401.2.5 of the IEBC to read:

~~1301.2.5~~ 1401.2.5 Accessibility requirements. All portions of the buildings proposed for change of occupancy and all alterations to existing buildings shall conform to the applicable accessibility provisions of Section ~~310~~ 410.

13VAC5-63-445. Chapter 17 Retrofit requirements.

A. Add IEBC Section 1701 General.

B. Add Section 1701.1 to the IEBC to read:

1701.1 Scope. In accordance with Section 103.7 of the VCC and as set out herein, the following buildings are required to be provided with certain fire protection equipment or systems or other retrofitted components.

C. Add Section 1701.2 to the IEBC to read:

1701.2 Smoke detectors in colleges and universities. In accordance with § 36-99.3 of the Code of Virginia, college and university buildings containing dormitories for sleeping purposes shall be provided with battery-powered or AC-powered smoke detector devices installed therein in accordance with this code in effect on July 1, 1982. All public and private college and university dormitories shall have installed such detectors regardless of when the building was constructed. The chief administrative office of the college or university shall obtain a certificate of compliance with the provisions of this subsection from the building official of the locality in which the college or university is located or in the case of state-owned buildings, from the Director of the Virginia Department of General Services. The provisions of this section shall not apply to any dormitory at a state-supported military college or university that is patrolled 24 hours a day by military guards.

D. Add Section 1701.3 to the IEBC to read:

1701.3 Smoke detectors in certain juvenile care facilities. In accordance with § 36-99.4 of the Code of Virginia, battery-powered or AC-powered smoke detectors shall be installed in all local and regional detention homes, group homes, and other residential care facilities for children and juveniles that are operated by or under the auspices of the Virginia Department of Juvenile Justice, regardless of when the building was constructed, by July 1, 1986, in accordance with the provisions of this code that were in effect on July 1, 1984. Administrators of such homes and facilities shall be responsible for the installation of the smoke detector devices.

E. Add Section 1701.4 to the IEBC to read:

1701.4 Smoke detectors for the deaf and hearing-impaired. In accordance with § 36-99.5 of the Code of Virginia, smoke detectors providing an effective intensity of not less than 100 candela to warn a deaf or hearing-impaired individual shall be provided, upon request by the occupant to the landlord or proprietor, to any deaf or hearing-impaired occupant of any of the following occupancies, regardless of when constructed:

1. All dormitory buildings arranged for the shelter and sleeping accommodations of more than 20 individuals;

2. All multiple-family dwellings having more than two dwelling units, including all dormitories and boarding and lodging houses arranged for shelter and sleeping accommodations of more than 5 individuals; or

3. All buildings arranged for use as one-family or two-family dwelling units.

A tenant shall be responsible for the maintenance and operation of the smoke detector in the tenant's unit.

A hotel or motel shall have available no fewer than one such smoke detector for each 70 units or portion thereof, except that this requirement shall not apply to any hotel or motel with fewer than 35 units. The proprietor of the hotel or motel shall post in a conspicuous place at the registration desk or counter a permanent sign stating the availability of smoke detectors for the hearing impaired. Visual detectors shall be provided for all meeting rooms for which an advance request has been made.

F. Add Sections 1701.5, 1701.5.1, and 1701.5.2 to the IEBC to read:

1701.5 Assisted living facilities (formerly known as adult care residences or homes for adults). Existing assisted living facilities licensed by the Virginia Department of Social Services shall comply with this section.

1701.5.1 Fire protective signaling system and fire detection system. A fire protective signaling system and an automatic fire detection system meeting the requirements of the USBC, Volume I, 1987 Edition, Third Amendment, shall be installed in assisted living facilities by August 1, 1994.

Exception: Assisted living facilities that are equipped throughout with a fire protective signaling system and an automatic fire detection system.

1701.5.2 Single-station and multiple-station smoke detectors. Battery or AC-powered single-station and multiple-station smoke detectors meeting the requirements of the USBC, Volume I, 1987 Edition, Third Amendment, shall be installed in assisted living facilities by August 1, 1994.

Exception: Assisted living facilities that are equipped throughout with single-station and multiple-station smoke detectors.

G. Add Section 1701.6 to the IEBC to read:

1701.6 Smoke detectors in buildings containing dwelling units. AC-powered smoke detectors with battery backup or an equivalent device shall be required to be installed to replace a defective or inoperative battery-powered smoke detector located in buildings containing one or more dwelling units or rooming houses offering to rent overnight sleeping accommodations, when it is determined by the building official that the responsible party of

such building or dwelling unit fails to maintain battery-powered smoke detectors in working condition.

H. Add Section 1701.7 to the IEBC to read:

1701.7 Fire suppression, fire alarm and fire detection systems in nursing homes and facilities. Fire suppression systems as required by the edition of this code in effect on October 1, 1990, shall be installed in all nursing facilities licensed by the Virginia Department of Health by January 1, 1993, regardless of when such facilities or institutions were constructed. Units consisting of certified long-term care beds located on the ground floor of general hospitals shall be exempt from the requirements of this section.

Fire alarm or fire detector systems, or both, as required by the edition of this code in effect on October 1, 1990, shall be installed in all nursing homes and nursing facilities licensed by the Virginia Department of Health by August 1, 1994.

I. Add Section 1701.8 to the IEBC to read:

1701.8 Fire suppression systems in hospitals. Fire suppression systems shall be installed in all hospitals licensed by the Virginia Department of Health as required by the edition of this code in effect on October 1, 1995, regardless of when such facilities were constructed.

J. Add Section 1701.9 to the IEBC to read:

1701.9 Identification of disabled parking spaces by above grade signage. All parking spaces reserved for the use of persons with disabilities shall be identified by above grade signs, regardless of whether identification of such spaces by above grade signs was required when any particular space was reserved for the use of persons with disabilities. A sign or symbol painted or otherwise displayed on the pavement of a parking space shall not constitute an above grade sign. Any parking space not identified by an above grade sign shall not be a parking space reserved for the disabled within the meaning of this section. All above grade disabled parking space signs shall have the bottom edge of the sign no lower than 4 feet (1219 mm) nor higher than 7 feet (2133 mm) above the parking surface. Such signs shall be designed and constructed in accordance with the provisions of Chapter 11 of this code. All disabled parking signs shall include the following language: PENALTY, $100-500 Fine, TOW-AWAY ZONE. Such language may be placed on a separate sign and attached below existing above grade disabled parking signs, provided that the bottom edge of the attached sign is no lower than 4 feet above the parking surface.

K. Add Section 1701.10 to the IEBC to read:

1701.10 Smoke detectors in hotels and motels. Smoke detectors shall be installed in hotels and motels as required by the edition of VR 394-01-22, USBC, Volume II, in effect on March 1, 1990, by the dates indicated, regardless of when constructed.

L. Add Section 1701.11 to the IEBC to read:

1701.11 Sprinkler systems in hotel and motels. By September 1, 1997, an automatic sprinkler system shall be installed in hotels and motels as required by the edition of VR 394-01-22, USBC, Volume II, in effect on March 1, 1990, regardless of when constructed.

M. Add Section 1701.12 to the IEBC to read:

1701.12 Fire suppression systems in dormitories. An automatic fire suppression system shall be provided throughout all buildings having a Group R-2 fire area that are more than 75 feet (22,860 mm) or 6 stories above the lowest level of exit discharge and are used, in whole or in part, as a dormitory to house students by any public or private institution of higher education, regardless of when such buildings were constructed, in accordance with the edition of this code in effect on August 20, 1997, and the requirements for sprinkler systems under the edition of the NFPA 13 standard referenced by that code. The automatic fire suppression system shall be installed by September 1, 1999. The chief administrative office of the college or university shall obtain a certificate of compliance from the building official of the locality in which the college or university is located or in the case of state-owned buildings, from the Director of the Virginia Department of General Services.

Exceptions:

1. Buildings equipped with an automatic fire suppression system in accordance with Section 903.3.1.1 of the 1983 or later editions of NFPA 13.

2. Any dormitory at a state-supported military college or university that is patrolled 24 hours a day by military guards.

3. Application of the requirements of this section shall be modified in accordance with the following:

3.1. Building systems, equipment or components other than the fire suppression system shall not be required to be added or upgraded except as necessary for the installation of the fire suppression system and shall only be required to be added or upgraded where the installation of the fire suppression system creates an unsafe condition.

3.2. Residential sprinklers shall be used in all sleeping rooms. Other sprinklers shall be quick response or residential unless deemed unsuitable for a space. Standard response sprinklers shall be used in elevator hoistways and machine rooms.

3.3. Sprinklers shall not be required in wardrobes in sleeping rooms that are considered part of the building construction or in closets in sleeping rooms when such wardrobes or closets (i) do not exceed 24 square feet (2.23 m^2) in area, (ii) have the smallest dimension less than 36 inches (914 mm), and (iii) comply with all of the following:

3.3.1. A single-station smoke detector monitored by the building fire alarm system is installed in the room containing the wardrobe or closet that will activate the general alarm for the building if the single station smoke detector is not cleared within five minutes after activation.

3.3.2. The minimum number of sprinklers required for calculating the hydraulic demand of the system for the room shall be increased by two and the two additional sprinklers shall be corridor sprinklers where the wardrobe or closet is used to divide the room. Rooms divided by a wardrobe or closet shall be considered one room for the purpose of this requirement.

3.3.3. The ceiling of the wardrobe, closet or room shall have a fire resistance rating of not less than 1/2 hour.

3.4. Not more than one sprinkler shall be required in bathrooms within sleeping rooms or suites having a floor area between 55 square feet (5.12 m^2) and 120 square feet (11.16 m^2), provided the sprinkler is located to protect the lavatory area and the plumbing fixtures are of a noncombustible material.

3.5. Existing standpipe residual pressure shall be permitted to be reduced when the standpipe serves as the water supply for the fire suppression system provided the water supply requirements of NFPA 13-94 are met.

3.6. Limited service controllers shall be permitted for fire pumps when used in accordance with their listing.

3.7. Where a standby power system is required, a source of power in accordance with Section 701-11 (d) or 701-11 (e) of NFPA 70-96 shall be permitted.

N. Add Section 1701.13 to the IEBC to read:

1701.13 Fire extinguishers and smoke detectors in SRCFs. SRCFs shall be provided with at least one approved type ABC portable fire extinguisher with a minimum rating of 2A10BC installed in each kitchen. In addition, SRCFs shall provide at least one approved and properly installed battery operated smoke detector outside of each sleeping area in the vicinity of bedrooms and bedroom hallways and on each additional floor.

O. Add Section 1701.14 to the IEBC to read:

1701.14 Smoke detectors in adult day care centers. Battery-powered or AC-powered smoke detector devices shall be installed in all adult day care centers licensed by the Virginia Department of Social Services, regardless of when the building was constructed. The location and installation of the smoke detectors shall be determined by the provisions of this code in effect on October 1, 1990. The licensee shall obtain a certificate of compliance from the building official of the locality in which the center is located, or in the case of state-owned buildings, from the Director of the Virginia Department of General Services.

P. Add Section 1701.15 to the IEBC to read:

1701.15 Posting of occupant load. Every room or space that is an assembly occupancy, and where the occupant load of that room or space is 50 or more, shall have the occupant load of the room or space as determined by the building official posted in a conspicuous place, near the main exit or exit access doorway from the room or space. Posted signs shall be of an

approved legible permanent design and shall be maintained by the owner or owner's authorized agent.

Q. Add Section 1701.16 to the IEBC to read:

1701.16 ALFSTs. Existing ALFSTs, regardless of when constructed, shall by October 1, 2011, meet the applicable requirements of API 653 and TFI RMIP for suitability for service and inspections and shall provide a secondary containment system complying with Section 425.3 of the VCC.

R. Add Section 1701.17 to the IEBC to read:

1701.17 Standards for replacement glass. In accordance with § 36-99.2 of the Code of Virginia, any replacement glass installed in buildings constructed prior to the first edition of the USBC shall meet the quality and installation standards for glass installed in new buildings as are in effect at the time of installation. In addition, as a requirement of this code, the installation or replacement of glass in buildings constructed under any edition of the USBC shall be as required for new installations.

Part III
Maintenance

13VAC5-63-450. Chapter 1 Administration; Section 101 General.

A. Section 101.1 Short title. The Virginia Uniform Statewide Building Code, Part III, Maintenance, may be cited as the "Virginia Maintenance Code," or as the "VMC."

B. Section 101.2 Incorporation by reference. Chapters 2 - 8 of the ~~2009~~ 2012 International Property Maintenance Code, published by the International Code Council, Inc., are adopted and incorporated by reference to be an enforceable part of the ~~Virginia Maintenance Code~~ VMC. The term "IPMC" means the ~~2009~~ 2012 International Property Maintenance Code, published by the International Code Council, Inc. Any codes and standards referenced in the IPMC are also considered to be part of the incorporation by reference, except that such codes and standards are used only to the prescribed extent of each such reference.

C. Section 101.3 Numbering system. A dual numbering system is used in the ~~Virginia Maintenance Code~~ VMC to correlate the numbering system of the Virginia Administrative Code with the numbering system of the IPMC. IPMC numbering system designations are provided in the catch-lines of the Virginia Administrative Code sections and cross references between sections or chapters of the Virginia Maintenance Code use only the IPMC numbering system designations. The term "chapter" is used in the context of the numbering system of the IPMC and may mean a chapter in the ~~Virginia Maintenance Code~~ VMC, a chapter in the IPMC or a chapter in a referenced code or standard, depending on the context of the use of the term. The term "chapter" is not used to designate a chapter of the Virginia Administrative Code, unless clearly indicated.

D. Section 101.4 Arrangement of code provisions. The ~~Virginia Maintenance Code~~ VMC is comprised of the combination of (i) the provisions of Chapter 1, Administration, which are established herein, (ii) Chapters 2 - 8 of the IPMC, which are incorporated by reference in

Section 101.2, and (iii) the changes to the text of the incorporated chapters of the IPMC which are specifically identified. The terminology "changes to the text of the incorporated chapters of the IPMC which are specifically identified" shall also be referred to as the "state amendments to the IPMC." Such state amendments to the IPMC are set out using corresponding chapter and section numbers of the IPMC numbering system. In addition, since Chapter 1 of the IPMC is not incorporated as part of the ~~Virginia Maintenance Code~~ VMC, any reference to a provision of Chapter 1 of the IPMC in the provisions of Chapters 2 - 8 of the IPMC is generally invalid. However, where the purpose of such a reference would clearly correspond to a provision of Chapter 1 established herein, then the reference may be construed to be a valid reference to such corresponding Chapter 1 provision.

E. Section 101.5 Use of terminology and notes. The term "this code," or "the code," where used in the provisions of Chapter 1, in Chapters 2 - 8 of the IPMC, or in the state amendments to the IPMC, means the ~~Virginia Maintenance Code~~ VMC, unless the context clearly indicates otherwise. The term "this code," or "the code," where used in a code or standard referenced in the IPMC, means that code or standard, unless the context clearly indicates otherwise. The term "USBC" where used in this code means ~~Part I of~~ the ~~Virginia Uniform Statewide Building Code, also known as the "Virginia Construction Code,"~~ VCC unless the context clearly indicates otherwise. In addition, the use of notes in Chapter 1 is to provide information only and shall not be construed as changing the meaning of any code provision. Notes in the IPMC, in the codes and standards referenced in the IPMC, and in the state amendments to the IPMC, may modify the content of a related provision and shall be considered to be a valid part of the provision, unless the context clearly indicates otherwise.

F. Section 101.6 Order of precedence. The provisions of this code shall be used as follows:

1. The provisions of Chapter 1 of this code supersede any ~~conflicting~~ provisions of Chapters 2 – 8 of the IPMC ~~and~~ that address the same subject matter and impose differing requirements.

2. The provisions of Chapter 1 of this code supersede any ~~conflicting~~ provisions of the codes and standards referenced in the IPMC that address the same subject matter and impose differing requirements. ~~In addition, the~~

3. The state amendments to the IPMC supersede any ~~conflicting~~ provisions of Chapters 2 – 8 of the IPMC ~~and~~ that address the same subject matter and impose differing requirements.

4. The state amendments to the IPMC supersede any ~~conflicting~~ provisions of the codes and standards referenced in the IPMC that address the same subject matter and impose differing requirements. ~~Further, the~~

5. The provisions of Chapters 2 - 8 of the IPMC supersede any ~~conflicting~~ provisions of the codes and standards referenced in the IPMC that address the same subject matter and impose differing requirements.

G. Section 101.7 Administrative provisions. The provisions of Chapter 1 establish administrative requirements, which include but are not limited to provisions relating to the scope of the code, enforcement, fees, permits, inspections and disputes. Any provisions of Chapters 2 - 8 of the IPMC or any provisions of the codes and standards referenced in the IPMC which address the

same subject matter to a lesser or greater extent are deleted and replaced by the provisions of Chapter 1. Further, any administrative requirements contained in the state amendments to the IPMC shall be given the same precedence as the provisions of Chapter 1. Notwithstanding the above, where administrative requirements of Chapters 2 - 8 of the IPMC or of the codes and standards referenced in the IPMC are specifically identified as valid administrative requirements in Chapter 1 of this code or in the state amendments to the IPMC, then such requirements are not deleted and replaced.

Note: The purpose of this provision is to eliminate overlap, conflicts and duplication by providing a single standard for administrative, procedural and enforcement requirements of this code.

H. Section 101.8 Definitions. The definitions of terms used in this code are contained in Chapter 2 along with specific provisions addressing the use of definitions. Terms may be defined in other chapters or provisions of the code and such definitions are also valid.

Note: The order of precedence outlined in Section 101.6 may be determinative in establishing how to apply the definitions in the IPMC and in the referenced codes and standards.

13VAC5-63-460. Section 102 Purpose and scope.

A. Section 102.1 Purpose. In accordance with § 36-103 of the Code of Virginia, the Virginia Board of Housing and Community Development may adopt and promulgate as part of the Virginia Uniform Statewide Building Code, building regulations that facilitate the maintenance, rehabilitation, development and reuse of existing buildings at the least possible cost to ensure the protection of the public health, safety and welfare. Further, in accordance with § 36-99 of the Code of Virginia, the purpose of this code is to protect the health, safety and welfare of the residents of the Commonwealth of Virginia, provided that buildings and structures should be permitted to be maintained at the least possible cost consistent with recognized standards of health, safety, energy conservation and water conservation, including provisions necessary to prevent overcrowding, rodent or insect infestation, and garbage accumulation; and barrier-free provisions for the physically handicapped and aged.

B. Section 102.2 Scope. In accordance with § 36-98 of the Code of Virginia, the ~~Virginia Maintenance Code~~ VMC shall supersede the building codes and regulations of the counties, municipalities and other political subdivisions and state agencies.

C. Section 102.3 Exemptions. This code shall not regulate those buildings and structures specifically exempt from the ~~Virginia Construction Code~~ VCC, except that existing industrialized buildings and manufactured homes shall not be exempt from this code.

13VAC5-63-470. Section 103 Application of code.

A. Section 103.1 General. This code prescribes regulations for the maintenance of all existing buildings and structures and associated equipment, including regulations for unsafe buildings and structures.

B. Section 103.2 Maintenance requirements. Buildings and structures shall be maintained and kept in good repair in accordance with the requirements of this code and when applicable in

accordance with the USBC under which such building or structure was constructed. No provision of this code shall require alterations to be made to an existing building or structure or to equipment unless conditions are present which meet the definition of an unsafe structure or a structure unfit for human occupancy.

C. 103.2.1 Maintenance of nonrequired fire protection systems. Nonrequired fire protection systems shall be maintained to function as originally installed. If any such systems are to be reduced in function or discontinued, approval shall be obtained from the building official in accordance with Section 103.8.1 of the ~~Virginia Construction Code~~ VCC.

D. Section 103.3 Continued approval. Notwithstanding any provision of this code to the contrary, alterations shall not be required to be made to existing buildings or structures which are occupied in accordance with a certificate of occupancy issued under any edition of the USBC.

E. Section 103.4 Rental Inspections. In accordance with § 36-105.1:1 of the Code of Virginia, these provisions are applicable to rental inspection programs. For purposes of this section:

"Dwelling unit" means a building or structure or part thereof that is used for a home or residence by one or more persons who maintain a household.

"Owner" means the person shown on the current real estate assessment books or current real estate assessment records.

"Residential rental dwelling unit" means a dwelling unit that is leased or rented to one or more tenants. However, a dwelling unit occupied in part by the owner thereof shall not be construed to be a residential rental dwelling unit unless a tenant occupies a part of the dwelling unit that has its own cooking and sleeping areas, and a bathroom, unless otherwise provided in the zoning ordinance by the local governing body.

The local governing body may adopt an ordinance to inspect residential rental dwelling units for compliance with this code and to promote safe, decent and sanitary housing for its citizens, in accordance with the following:

1. Except as provided for in subdivision 3 of this subsection, the dwelling units shall be located in a rental inspection district established by the local governing body in accordance with this section; and

2. The rental inspection district is based upon a finding by the local governing body that (i) there is a need to protect the public health, safety and welfare of the occupants of dwelling units inside the designated rental inspection district; (ii) the residential rental dwelling units within the designated rental inspection district are either (a) blighted or in the process of deteriorating or (b) the residential rental dwelling units are in the need of inspection by the building department to prevent deterioration, taking into account the number, age and condition of residential dwelling rental units inside the proposed rental inspection district; and (iii) the inspection of residential rental dwelling units inside the proposed rental inspection district is necessary to maintain safe, decent and sanitary living conditions for tenants and other residents living in the proposed rental inspection district. Nothing in this section shall be construed to authorize ~~a~~ one or more locality-wide rental inspection ~~district~~ districts and a local governing body shall limit the boundaries of the proposed rental

inspection ~~district~~ districts to such areas of the locality that meet the criteria set out in this subsection; or

3. An individual residential rental dwelling unit outside of a designated rental inspection district is made subject to the rental inspection ordinance based upon a separate finding for each individual dwelling unit by the local governing body that (i) there is a need to protect the public health, welfare and safety of the occupants of that individual dwelling unit; (ii) the individual dwelling unit is either (a) blighted or (b) in the process of deteriorating; or (iii) there is evidence of violations of this code that affect the safe, decent and sanitary living conditions for tenants living in such individual dwelling unit.

For purposes of this section, the local governing body may designate a local government agency other than the building department to perform all or part of the duties contained in the enforcement authority granted to the building department by this section.

Before adopting a rental inspection ordinance and establishing a rental inspection district or an amendment to either, the governing body of the locality shall hold a public hearing on the proposed ordinance. Notice of the hearing shall be published once a week for two successive weeks in a newspaper published or having general circulation in the locality.

Upon adoption by the local governing body of a rental inspection ordinance, the building department shall make reasonable efforts to notify owners of residential rental dwelling units in the designated rental inspection district, or their designated managing agents, and to any individual dwelling units subject to the rental inspection ordinance, not located in a rental inspection district, of the adoption of such ordinance, and provide information and an explanation of the rental inspection ordinance and the responsibilities of the owner thereunder.

The rental inspection ordinance may include a provision that requires the owners of dwelling units in a rental inspection district to notify the building department in writing if the dwelling unit of the owner is used for residential rental purposes. The building department may develop a form for such purposes. The rental inspection ordinance shall not include a registration requirement or a fee of any kind associated with the written notification pursuant to this subdivision. A rental inspection ordinance may not require that the written notification from the owner of a dwelling unit subject to a rental inspection ordinance be provided to the building department in less than 60 days after the adoption of a rental inspection ordinance. However, there shall be no penalty for the failure of an owner of a residential rental dwelling unit to comply with the provisions of this subsection, unless and until the building department provides personal or written notice to the property owner, as provided in this section. In any event, the sole penalty for the willful failure of an owner of a dwelling unit who is using the dwelling unit for residential rental purposes to comply with the written notification requirement shall be a civil penalty of up to $50. For purposes of this subsection, notice sent by regular first-class mail to the last known address of the owner as shown on the current real estate tax assessment books or current real estate tax assessment records shall be deemed compliance with this requirement.

Upon establishment of a rental inspection district in accordance with this section, the building department may, in conjunction with the written notifications as provided for above, proceed to inspect dwelling units in the designated rental inspection district to determine if the dwelling units are being used as a residential rental property and for compliance with the provisions of this code that affect the safe, decent and sanitary living conditions for the tenants of such property.

If a multifamily development has more than 10 dwelling units, in the initial and periodic inspections, the building department shall inspect only a sampling of dwelling units, of not less than two and not more than 10% of the dwelling units, of a multifamily development, that includes all of the multifamily buildings that are part of that multifamily development. In no event, however, shall the building department charge a fee authorized by this section for inspection of more than 10 dwelling units. If the building department determines upon inspection of the sampling of dwelling units that there are violations of this code that affect the safe, decent and sanitary living conditions for the tenants of such multifamily development, the building department may inspect as many dwelling units as necessary to enforce these provisions, in which case, the fee shall be based upon a charge per dwelling unit inspected, as otherwise provided in the fee schedule established pursuant to this section.

Upon the initial or periodic inspection of a residential rental dwelling unit subject to a rental inspection ordinance, the building department has the authority under these provisions to require the owner of the dwelling unit to submit to such follow-up inspections of the dwelling unit as the building department deems necessary, until such time as the dwelling unit is brought into compliance with the provisions of this code that affect the safe, decent and sanitary living conditions for the tenants.

Except as provided for above, following the initial inspection of a residential rental dwelling unit subject to a rental inspection ordinance, the building department may inspect any residential rental dwelling unit in a rental inspection district, that is not otherwise exempted in accordance with this section, no more than once each calendar year.

Upon the initial or periodic inspection of a residential rental dwelling unit subject to a rental inspection ordinance for compliance with these provisions, provided that there are no violations of this code that affect the safe, decent and sanitary living conditions for the tenants of such residential rental dwelling unit, the building department shall provide, to the owner of such residential rental dwelling unit, an exemption from the rental inspection ordinance for a minimum of four years. Upon the sale of a residential rental dwelling unit, the building department may perform a periodic inspection as provided above, subsequent to such sale. If a residential rental dwelling unit has been issued a certificate of occupancy within the last four years, an exemption shall be granted for a minimum period of four years from the date of the issuance of the certificate of occupancy by the building department. If the residential rental dwelling unit becomes in violation of this code during the exemption period, the building department may revoke the exemption previously granted under this section.

A local governing body may establish a fee schedule for enforcement of these provisions, which includes a per dwelling unit fee for the initial inspections, follow-up inspections and periodic inspections under this section.

The provisions of this section shall not in any way alter the rights and obligations of landlords and tenants pursuant to the applicable provisions of Chapter 13 (§ 55-217 et seq.) or Chapter 13.2 (§ 55-248.2 et seq.) of Title 55 of the Code of Virginia.

The provisions of this section shall not alter the duties or responsibilities of the local building department under § 36-105 of the Code of Virginia to enforce the USBC.

Unless otherwise provided for in § 36-105.1:1 of the Code of Virginia, penalties for violation of this section shall be the same as the penalties provided for violations of other sections of the USBC.

13VAC5-63-480. Section 104 Enforcement, generally.

A. Section 104.1 Scope of enforcement. This section establishes the requirements for enforcement of this code in accordance with § 36-105 of the Code of Virginia. The local governing body may also inspect and enforce the provisions of the USBC for existing buildings and structures, whether occupied or not. Such inspection and enforcement shall be carried out by an agency or department designated by the local governing body.

If the local building department receives a complaint that a violation of this code exists that is an immediate and imminent threat to the health or safety of the owner ~~or~~, tenant, or occupants of ~~a residential dwelling unit~~ any building or structure, or ~~a~~ the owner, occupant, or tenant of any nearby ~~residential dwelling unit~~ building or structure, and the owner, occupant, or tenant of the ~~residential dwelling unit~~ building or structure that is the subject of the complaint has refused to allow the code official or his agent to have access to the subject ~~dwelling~~ building or structure, the code official or his agent may present sworn testimony to a magistrate or court of competent jurisdiction and request that the magistrate or court grant the code official or his agent an inspection warrant to enable the code official or his agent to enter the subject ~~dwelling~~ building or structure for the purpose of determining whether violations of this code exist. The code official or his agent shall make a reasonable effort to obtain consent from the owner, occupant, or tenant of the subject ~~dwelling~~ building or structure prior to seeking the issuance of an inspection warrant under this section.

Note: Generally, official action must be taken by the local government to enforce the ~~Virginia Maintenance Code~~ VMC. Consultation with the legal counsel of the jurisdiction when initiating or changing such action is advised.

B. Section 104.1.1 Transfer of ownership. In accordance with § 36-105 of the Code of Virginia, if the local building department has initiated an enforcement action against the owner of a building or structure and such owner subsequently transfers the ownership of the building or structure to an entity in which the owner holds an ownership interest greater than 50%, the pending enforcement action shall continue to be enforced against the owner.

C. Section 104.2 Fees. In accordance with § 36-105 of the Code of Virginia, fees may be levied by the local governing body in order to defray the cost of enforcement and appeals.

D. Section 104.3 State buildings. In accordance with § 36-98.1 of the Code of Virginia, this code shall be applicable to state-owned buildings and structures. Acting through the Division of Engineering and Buildings, the Department of General Services shall function as the building official for state-owned buildings.

E. Section 104.3.1 Certification of state enforcement personnel. State enforcement personnel shall comply with the applicable requirements of Sections 104.4.2 through 104.4.4 for certification, periodic maintenance training, and continuing education.

F. Section 104.4 Local enforcing agency. In jurisdictions enforcing this code, the local governing body shall designate the agency within the local government responsible for such enforcement and appoint a code official. The local governing body may also utilize technical assistants to assist the code official in the enforcement of this code. A permanently appointed code official shall not be removed from office except for cause after having been afforded a full opportunity to be heard on specific and relevant charges by and before the appointing authority. DHCD shall be notified by the appointing authority within 30 days of the appointment or release of a permanent or acting code official and within 60 days after retaining or terminating a technical assistant.

Note: Code officials and technical assistants are subject to sanctions in accordance with the VCS.

G. Section 104.4.1 Qualifications of code official and technical assistants. The code official shall have at least five years of building experience as a licensed professional engineer or architect, building, fire or trade inspector, contractor, housing inspector or superintendent of building, fire or trade construction or at ~~lease~~ least five years of building experience after obtaining a degree in architecture or engineering, with at least three years in responsible charge of work. Any combination of education and experience that would confer equivalent knowledge and ability shall be deemed to satisfy this requirement. The code official shall have general knowledge of sound engineering practice in respect to the design and construction of structures, the basic principles of fire prevention, the accepted requirements for means of egress and the installation of elevators and other service equipment necessary for the health, safety and general welfare of the occupants and the public. The local governing body may establish additional qualification requirements.

A technical assistant shall have at least three years of experience and general knowledge in at least one of the following areas: building construction, building, fire or housing inspections, plumbing, electrical or mechanical trades, fire protection, elevators or property maintenance work. Any combination of education and experience which would confer equivalent knowledge and ability shall be deemed to satisfy this requirement. The locality may establish additional certification requirements.

H. Section 104.4.2 Certification of code official and technical assistants. An acting or permanent code official shall be certified as a code official in accordance with the VCS within one year after being appointed as acting or permanent code official. A technical assistant shall be certified in the appropriate subject area within 18 months after becoming a technical assistant. When required by a locality to have two or more certifications, a technical assistant shall obtain the additional certifications within three years from the date of such requirement.

Exception: A code official or technical assistant in place prior to April 1, 1995, shall not be required to meet the certification requirements in this section while continuing to serve in the same capacity in the same locality.

I. Section 104.4.3 Noncertified code official. Except for a code official exempt from certification under the exception to Section 104.4.2, any acting or permanent code official who is not certified as a code official in accordance with the VCS shall attend the core module of the Virginia Building Code Academy or an equivalent course in an individual or regional code academy accredited by DHCD within 180 days of appointment. This requirement is in addition to meeting the certification requirement in Section 104.4.2.

J. Section 104.4.4 Requirements for periodic maintenance training and education. Code officials and technical assistants shall attend periodic maintenance training as designated by DHCD. In addition to the periodic maintenance training required above, code officials and technical assistants shall attend 16 hours of continuing education every two years as approved by DHCD. If a code official or technical assistant possesses more than one BHCD certificate, the 16 hours shall satisfy the continuing education requirement for all BHCD certificates.

K. Section 104.4.5 Conflict of interest. The standards of conduct for code officials and technical assistants shall be in accordance with the provisions of the State and Local Government Conflict of Interests Act, Chapter 31 (§ 2.2-3100 et seq.) of Title 2.2 of the Code of Virginia.

L. Section 104.4.6 Records. The local enforcing agency shall retain a record of applications received, permits, certificates, notices and orders issued, fees collected and reports of inspections in accordance with The Library of Virginia's General Schedule Number Six.

M. Section 104.5 Powers and duties, generally. The code official shall enforce this code as set out herein and as interpreted by the State Review Board and shall issue all necessary notices or orders to ensure compliance with the code.

N. Section 104.5.1 Delegation of authority. The code official may delegate powers and duties except where such authority is limited by the local government. When such delegations are made, the code official shall be responsible for assuring that they are carried out in accordance with the provisions of this code.

O. Section 104.5.2 Issuance of modifications. Upon written application by an owner or an owner's agent, the code official may approve a modification of any provision of this code provided the spirit and intent of the code are observed and public health, welfare and safety are assured. The decision of the code official concerning a modification shall be made in writing and the application for a modification and the decision of the code official concerning such modification shall be retained in the permanent records of the local enforcing agency.

P. Section 104.5.2.1 Substantiation of modification. The code official may require or may consider a statement from a professional engineer, architect or other person competent in the subject area of the application as to the equivalency of the proposed modification.

Q. Section 104.5.3 Inspections. The code official may inspect buildings or structures to determine compliance with this code and shall carry proper credentials when performing such inspections. The code official is authorized to engage such expert opinion as deemed necessary to report upon unusual, detailed or complex technical issues in accordance with local policies.

R. Section 104.5.3.1 Observations. When, during an inspection, the code official or authorized representative observes an apparent or actual violation of another law, ordinance, or code not within the official's authority to enforce, such official shall report the findings to the official having jurisdiction in order that such official may institute the necessary measures.

S. Section 104.5.3.2 Approved inspection agencies and individuals. The code official may accept reports of inspections or tests from individuals or inspection agencies approved in accordance with the code official's written policy required by Section 104.5.3.3. The individual or inspection agency shall meet the qualifications and reliability requirements established by the written

policy. Reports of inspections by approved individuals or agencies shall be in writing, shall indicate if compliance with the applicable provisions of this code have been met, and shall be certified by the individual inspector or by the responsible officer when the report is from an agency. The code official shall review and approve the report unless there is cause to reject it. Failure to approve a report shall be in writing within five working days of receiving it, stating the reasons for rejection.

T. Section 104.5.3.3 Third-party inspectors. Each code official charged with the enforcement of this code and that accepts third-party reports shall have a written policy establishing the minimum acceptable qualifications for third-party inspectors. The policy shall include the format and time frame required for submission of reports, any prequalification or preapproval requirements before conducting a third-party inspection and any other requirements and procedures established by the code official.

U. Section 104.5.3.4 Qualifications. In determining third-party qualifications, the code official may consider such items as DHCD inspector certification, other state or national certifications, state professional registrations, related experience, education, and any other factors that would demonstrate competency and reliability to conduct inspections.

V. Section 104.5.4 Notices, reports and orders. Upon findings by the code official that violations of this code exist, the code official shall issue a correction notice or notice of violation to the owner or the person responsible for the maintenance of the structure. Work done to correct violations of this code subject to the permit, inspection and approval provisions of the ~~Virginia Construction Code~~ VCC shall not be construed as authorization to extend the time limits established for compliance with this code.

~~S.~~ W. Section 104.5.4.1 Correction notice. The correction notice shall be a written notice of the defective conditions. The correction notice shall require correction of the violation or violations within a reasonable time unless an emergency condition exists as provided under the unsafe building provisions of Section 105. Upon request, the correction notice shall reference the code section that serves as the basis for the defects and shall state that such defects shall be corrected and reinspected in a reasonable time designated by the code official.

~~T.~~ X. Section 104.5.4.2 Notice of violation. If the code official determines there are violations of this code other than those for unsafe structures, unsafe equipment or structures unfit for human occupancy under Section 105, the code official may issue a notice of violation to be communicated promptly in writing to the owner or the person responsible for the maintenance or use of the building or structure in lieu of a correction notice as provided for in Section 104.5.4.1. In addition, the code official shall issue a notice of violation for any uncorrected violation remaining from a correction notice established in Section 104.5.4.1. A notice of violation shall be issued by the code official before initiating legal proceedings unless the conditions violate the unsafe building conditions of Section 105 and the provisions established therein are followed. The code official shall provide the section numbers to the owner for any code provision cited in the notice of violation. The notice shall require correction of the violation or violations within a reasonable time unless an emergency condition exists as provided under the building provisions of Section 105. The owner or person to whom the notice of violation has been issued shall be responsible for contacting the code official within the time frame established for any reinspections to assure the violations have been corrected. The code official will be responsible for making such inspection and verifying the violations have been corrected. In addition, the

notice of violation shall indicate the right of appeal by referencing the appeals section of this code.

~~U.~~ Y. Section 104.5.5 Coordination of inspections. The code official shall coordinate inspections and administrative orders with any other state or local agencies having related inspection authority and shall coordinate those inspections required by the Virginia Statewide Fire Prevention Code (13VAC5-51) for maintenance of fire protection devices, equipment and assemblies so that the owners and occupants will not be subjected to numerous inspections or conflicting orders.

Note: The Fire Prevention Code requires the fire official to coordinate such inspections with the code official.

~~V.~~ Z. Section 104.5.6 Further action when violation not corrected. If the responsible party has not complied with the notice of violation, the code official shall submit a written request to the legal counsel of the locality to institute the appropriate legal proceedings to restrain, correct or abate the violation or to require the removal or termination of the use of the building or structure involved. In cases where the locality so authorizes, the code official may issue or obtain a summons or warrant.

~~W.~~ AA. Section 104.5.7 Penalties and abatement. Penalties for violations of this code shall be as set out in § 36-106 of the Code of Virginia. The successful prosecution of a violation of the code shall not preclude the institution of appropriate legal action to require correction or abatement of a violation.

13VAC5-63-490. Section 105 Unsafe structures or structures unfit for human occupancy.

A. Section 105.1 General. This section shall apply to existing structures which are classified as unsafe or unfit for human occupancy. All conditions causing such structures to be classified as unsafe or unfit for human occupancy shall be remedied or as an alternative to correcting such conditions, the structure may be vacated and secured against public entry or razed and removed. Vacant and secured structures shall still be subject to other applicable requirements of this code. Notwithstanding the above, when the code official determines that an unsafe structure or a structure unfit for human occupancy constitutes such a hazard that it should be razed or removed, then the code official shall be permitted to order the demolition of such structures in accordance with applicable requirements of this code.

Note: Structures which become unsafe during construction are regulated under the ~~Virginia Construction Code~~ VCC.

B. Section 105.2 Inspection of unsafe or unfit structures. The code official shall inspect any structure reported or discovered as unsafe or unfit for human habitation and shall prepare a report to be filed in the records of the local enforcing agency and a copy issued to the owner. The report shall include the use of the structure and a description of the nature and extent of any conditions found.

C. Section 105.3 Unsafe conditions not related to maintenance. When the code official finds a condition that constitutes a serious and dangerous hazard to life or health in a structure constructed prior to the initial edition of the USBC and when that condition is of a cause other

than improper maintenance or failure to comply with state or local building codes that were in effect when the structure was constructed, then the code official shall be permitted to order those minimum changes to the design or construction of the structure to remedy the condition.

D. Section 105.3.1 Limitation to requirements for retrofitting. In accordance with Section 103.2, this code does not generally provide for requiring the retrofitting of any structure. However, conditions may exist in structures constructed prior to the initial edition of the USBC because of faulty design or equipment that constitute a danger to life or health or a serious hazard. Any changes to the design or construction required by the code official under this section shall be only to remedy the serious hazard or danger to life or health and such changes shall not be required to fully comply with the requirements of the ~~Virginia Construction Code~~ VCC applicable to newly constructed buildings or structures.

E. Section 105.4 Notice of unsafe structure or structure unfit for human occupancy. When a structure is determined to be unsafe or unfit for human occupancy by the code official, a written notice of unsafe structure or structure unfit for human occupancy shall be issued by personal service to the owner, the owner's agent or the person in control of such structure. The notice shall specify the corrections necessary to comply with this code, or if the structure is required to be demolished, the notice shall specify the time period within which the demolition must occur. Requirements in Section 104.5.4 for notices of violation are also applicable to notices issued under this section to the extent that any such requirements are not in conflict with the requirements of this section.

Note: Whenever possible, the notice should also be given to any tenants of the affected structure.

F. Section 105.4.1 Vacating unsafe structure. If the code official determines there is actual and immediate danger to the occupants or public, or when life is endangered by the occupancy of an unsafe structure, the code official shall be authorized to order the occupants to immediately vacate the unsafe structure. When an unsafe structure is ordered to be vacated, the code official shall post a notice with the following wording at each entrance: "THIS STRUCTURE IS UNSAFE AND ITS OCCUPANCY (OR USE) IS PROHIBITED BY THE CODE OFFICIAL." After posting, occupancy [~~of~~ or] use of the unsafe structure shall be prohibited except when authorized to enter to conduct inspections, make required repairs or as necessary to demolish the structure.

G. Section 105.5 Posting of notice. If the notice is unable to be issued by personal service as required by Section 105.4, then the notice shall be sent by registered or certified mail to the last known address of the responsible party and a copy of the notice shall be posted in a conspicuous place on the premises.

H. Section 105.6 Posting of placard. In the case of a structure unfit for human habitation, at the time the notice is issued, a placard with the following wording shall be posted at the entrance to the structure: "THIS STRUCTURE IS UNFIT FOR HABITATION AND ITS USE OR OCCUPANCY HAS BEEN PROHIBITED BY THE CODE OFFICIAL." In the case of an unsafe structure, if the notice is not complied with, a placard with the above wording shall be posted at the entrance to the structure. After a structure is placarded, entering the structure shall be prohibited except as authorized by the code official to make inspections, to perform required repairs or to demolish the structure. In addition, the placard shall not be removed until the structure is determined by the code official to be safe to occupy, nor shall the placard be defaced.

I. Section 105.7 Revocation of certificate of occupancy. If a notice of unsafe structure or structure unfit for human habitation is not complied with within the time period stipulated on the notice, the code official shall be permitted to request the local building department to revoke the certificate of occupancy issued under the ~~Virginia Construction Code~~ VCC.

J. Section 105.8 Vacant and open structures. When an unsafe structure or a structure unfit for human habitation is open for public entry at the time a placard is issued under Section 105.6, the code official shall be permitted to authorize the necessary work to make such structure secure against public entry whether or not legal action to compel compliance has been instituted.

K. Section 105.9 Emergency repairs and demolition. To the extent permitted by the locality, the code official may authorize emergency repairs to unsafe structures or structures unfit for human habitation when it is determined that there is an immediate danger of any portion of the unsafe structure or structure unfit for human habitation collapsing or falling and when life is endangered. Emergency repairs may also be authorized where there is a code violation resulting in the immediate serious and imminent threat to the life and safety of the occupants. The code official shall be permitted to authorize the necessary work to make the structure temporarily safe whether or not legal action to compel compliance has been instituted. In addition, whenever an owner of an unsafe structure or structure unfit for human habitation fails to comply with a notice to demolish issued under Section 105.4 in the time period stipulated, the code official shall be permitted to cause the structure to be demolished. In accordance with §§ 15.2-906 and 15.2-1115 of the Code of Virginia, the legal counsel of the locality may be requested to institute appropriate action against the property owner to recover the costs associated with any such emergency repairs or demolition and every such charge that remains unpaid shall constitute a lien against the property on which the emergency repairs or demolition were made and shall be enforceable in the same manner as provided in Articles 3 (§ 58.1-3490 et seq.) and 4 (§ 58.1-3965 et seq.) of Chapter 39 of Title 58.1 of the Code of Virginia.

Note: Code officials and local governing bodies should be aware that other statutes and court decisions may impact on matters relating to demolition, in particular whether newspaper publication is required if the owner cannot be located and whether the demolition order must be delayed until the owner has been given the opportunity for a hearing. In addition, historic building demolition may be prevented by authority granted to local historic review boards in accordance with § 15.2-2306 of the Code of Virginia unless determined necessary by the code official.

L. Section 105.10 Closing of streets. When necessary for public safety, the code official shall be permitted to order the temporary closing of sidewalks, streets, public ways or premises adjacent to unsafe or unfit structures and prohibit the use of such spaces.

13VAC5-63-500. Section 106 Appeals.

A. Section 106.1 Establishment of appeals board. In accordance with § 36-105 of the Code of Virginia, there shall be established within each local enforcing agency a LBBCA. Whenever a county or a municipality does not have such a LBBCA, the local governing body shall enter into an agreement with the local governing body of another county or municipality or with some other agency, or a state agency approved by DHCD for such appeals resulting therefrom. Fees may be levied by the local governing body in order to defray the cost of such appeals. The

LBBCA for hearing appeals under the ~~Virginia Construction Code~~ VCC shall be permitted to serve as the appeals board required by this section. The locality is responsible for maintaining a duly constituted LBBCA prepared to hear appeals within the time limits established in this section. The LBBCA shall meet as necessary to assure a duly constituted board, appoint officers as necessary, and receive such training on the code as may be appropriate or necessary from staff of the locality.

B. Section 106.2 Membership of board. The LBBCA shall consist of at least five members appointed by the locality for a specific term of office established by written policy. Alternate members may be appointed to serve in the absence of any regular members and as such, shall have the full power and authority of the regular members. Regular and alternate members may be reappointed. Written records of current membership, including a record of the current chairman and secretary shall be maintained in the office of the locality. In order to provide continuity, the terms of the members may be of different length so that less than half will expire in any one-year period. ~~The LBBCA shall meet at least once annually to assure a duly constituted board, appoint officers as necessary and receive such training on the code as may be appropriate or necessary from staff of the locality.~~

C. Section 106.3 Officers and qualifications of members. The LBBCA shall annually select one of its regular members to serve as chairman. When the chairman is not present at an appeal hearing, the members present shall select an acting chairman. The locality or the chief executive officer of the locality shall appoint a secretary to the LBBCA to maintain a detailed record of all proceedings. Members of the LBBCA shall be selected by the locality on the basis of their ability to render fair and competent decisions regarding application of the USBC and shall to the extent possible, represent different occupational or professional fields relating to the construction industry. At least one member should be an experienced builder; at least one member should be an RDP, and at least one member should be an experienced property manager. Employees or officials of the locality shall not serve as members of the LBBCA.

D. Section 106.4 Conduct of members. No member shall hear an appeal in which that member has a conflict of interest in accordance with the State and Local Government Conflict of Interests Act (§ 2.2-3100 et seq. of the Code of Virginia). Members shall not discuss the substance of an appeal with any other party or their representatives prior to any hearings.

E. Section 106.5 Right of appeal; filing of appeal application. Any person aggrieved by the local enforcing agency's application of this code or the refusal to grant a modification to the provisions of this code may appeal to the LBBCA. The applicant shall submit a written request for appeal to the LBBCA within 14 calendar days of the receipt of the decision being appealed. The application shall contain the name and address of the owner of the building or structure and, in addition, the name and address of the person appealing, when the applicant is not the owner. A copy of the code official's decision shall be submitted along with the application for appeal and maintained as part of the record. The application shall be marked by the LBBCA to indicate the date received. Failure to submit an application for appeal within the time limit established by this section shall constitute acceptance of a code official's decision.

F. Section 106.6 Meetings and postponements. The LBBCA shall meet within 30 calendar days after the date of receipt of the application for appeal, except that a period of up to 45 calendar days shall be permitted where the LBBCA has regularly scheduled monthly meetings. A longer time period shall be permitted if agreed to by all the parties involved in the appeal. A notice

indicating the time and place of the hearing shall be sent to the parties in writing to the addresses listed on the application at least 14 calendar days prior to the date of the hearing, except that a lesser time period shall be permitted if agreed to by all the parties involved in the appeal. When a quorum of the LBBCA is not present at a hearing to hear an appeal, any party involved in the appeal shall have the right to request a postponement of the hearing. The LBBCA shall reschedule the appeal within 30 calendar days of the postponement, except that a longer time period shall be permitted if agreed to by all the parties involved in the appeal.

G. Section 106.7 Hearings and decision. All hearings before the LBBCA shall be open meetings and the appellant, the appellant's representative, the locality's representative and any person whose interests are affected by the code official's decision in question shall be given an opportunity to be heard. The chairman shall have the power and duty to direct the hearing, rule upon the acceptance of evidence and oversee the record of all proceedings. The LBBCA shall have the power to uphold, reverse or modify the decision of the official by a concurring vote of a majority of those present. Decisions of the LBBCA shall be final if no further appeal is made. The decision of the LBBCA shall be by resolution signed by the chairman and retained as part of the record of the appeal. Copies of the resolution shall be sent to all parties by certified mail. In addition, the resolution shall contain the following wording:

"Any person who was a party to the appeal may appeal to the State Review Board by submitting an application to such Board within 21 calendar days upon receipt by certified mail of this resolution. Application forms are available from the Office of the State Review Board, 600 East Main Street, Richmond, Virginia 23219, (804) 371-7150."

H. Section 106.8 Appeals to the State Review Board. After final determination by the LBBCA in an appeal, any person who was a party to the appeal may further appeal to the State Review Board. In accordance with § 36-98.2 of the Code of Virginia for state-owned buildings and structures, appeals by an involved state agency from the decision of the code official for state-owned buildings or structures shall be made directly to the State Review Board. The application for appeal shall be made to the State Review Board within 21 calendar days of the receipt of the decision to be appealed. Failure to submit an application within that time limit shall constitute an acceptance of the code official's decision. For appeals from a LBBCA, a copy of the code official's decision and the resolution of the LBBCA shall be submitted with the application for appeal to the State Review Board. Upon request by the Office of the State Review Board, the LBBCA shall submit a copy of all pertinent information from the record of the appeal. In the case of appeals involving state-owned buildings or structures, the involved state agency shall submit a copy of the code official's decision and other relevant information with the application for appeal to the State Review Board. Procedures of the State Review Board are in accordance with Article 2 (§ 36-108 et seq.) of Chapter 6 of Title 36 of the Code of Virginia. Decisions of the State Review Board shall be final if no further appeal is made.

13VAC5-63-510. Chapter 2 Definitions.

A. Change Section 201.3 of the IPMC to read:

> 201.3 Terms defined in other codes. Where terms are not defined in this code and are defined in the ~~International Building Code~~ IBC, ~~International Fire Code~~ IFC, [IFGC,] ~~International Plumbing Code~~ IPC, ~~International Mechanical Code~~ IMC, International Existing Building Code, IRC, International Zoning Code or ~~the ICC Electrical Code~~ NFPA 70, such terms shall

have the meanings ascribed to them [as stated] in those codes, except that terms defined in the ~~Virginia Construction Code~~ VCC shall be used for this code and shall take precedence over other definitions.

B. Add the following definitions to Section 202 of the IPMC to read:

Structure unfit for human occupancy. An existing structure determined by the code official to be dangerous to the health, safety and welfare of the occupants of the structure or the public because (i) of the degree to which the structure is in disrepair or lacks maintenance, ventilation, illumination, sanitary or heating facilities or other essential equipment, or (ii) the required plumbing and sanitary facilities are inoperable.

Unsafe equipment. Unsafe equipment includes any boiler, heating equipment, elevator, moving stairway, electrical wiring or device, flammable liquid containers or other equipment that is in such disrepair or condition that such equipment is determined by the code official to be dangerous to the health, safety and welfare of the occupants of a structure or the public.

Unsafe structure. An existing structure (i) determined by the code official to be dangerous to the health, safety and welfare of the occupants of the structure or the public, (ii) that contains unsafe equipment, or (iii) that is so damaged, decayed, dilapidated, structurally unsafe or of such faulty construction or unstable foundation that partial or complete collapse is likely. A vacant existing structure unsecured or open shall be deemed to be an unsafe structure.

13VAC5-63-520. Chapter 3 General requirements.

A. Delete Section 302.1 of the IPMC.

B. Change Section 302.2 of the IPMC to read:

302.2 Grading and drainage. All premises shall be graded and maintained to protect the foundation walls or slab of the structure from the accumulation and drainage of surface or stagnant water in accordance with the ~~Virginia Construction Code~~ VCC.

C. Change Section 302.3 of the IPMC to read:

302.3 Sidewalks and driveways. All sidewalks, walkways, stairs, driveways, parking spaces and similar spaces regulated under the ~~Virginia Construction Code~~ VCC shall be kept in a proper state of repair, and maintained free from hazardous conditions. Stairs shall comply with the requirements of Sections 305 and 702.

D. Delete Section 302.4 of the IPMC.

E. Change Section 302.5 of the IPMC to read:

302.5 Rodent harborage. All structures and adjacent premises shall be kept free from rodent harborage and infestation where such harborage or infestation adversely affects the structures.

F. Delete Sections 302.8 and 302.9 of the IPMC.

G. Delete Section 304.1.1 of the IPMC.

H. Change Section 304.7 of the IPMC to read:

304.7 Roofs and drainage. The roof and flashing shall be sound, tight and not have defects that admit rain. Roof drainage shall be adequate to prevent dampness or deterioration in the walls or interior portion of the structure. Roof drains, gutters and downspouts shall be maintained in good repair and free from obstructions. Roof water shall be discharged in a manner to protect the foundation or slab of buildings and structures from the accumulation of roof drainage.

I. Change Section 304.14 of the IPMC to read:

304.14 Insect screens. During the period from April 1 to December 1, every door, window and other outside opening required for ventilation of habitable rooms, food preparation areas, food service areas or any areas where products to be included or utilized in food for human consumption are processed, manufactured, packaged or stored, shall be supplied with approved tightly fitting screens of not less than 16 mesh per inch (16 mesh per 25 mm) and every screen door used for insect control shall have a self-closing device in good working condition.

Exception: Screens shall not be required where other approved means, such as mechanical ventilation, air curtains or insect repellant fans, are used.

J. Delete Sections 304.18, 304.18.1, 304.18.2 and 304.18.3 of the IPMC.

K. Delete Section 305.1.1 of the IPMC.

L. Add Section 305.7 to the IPMC to read:

305.7 Carbon monoxide alarms. Carbon monoxide alarms shall be maintained as approved.

M. Delete Section 306 of the IPMC in its entirety.

N. Change Section 308.1 of the IPMC to read as follows and delete the remaining provisions of Section 308:

308.1 Accumulation of rubbish and garbage. The interior of every structure shall be free from excessive accumulation of rubbish or garbage.

O. Change Section 309.1 of the IPMC to read:

309.1 Infestation. This section shall apply to the extent that insect and rodent infestation adversely affects a structure. All structures shall be kept free from insect and rodent infestation. All structures in which insects or rodents are found shall be promptly exterminated by approved processes that will not be injurious to human health. After extermination, proper precautions shall be taken to prevent reinfestation.

P. Add IPMC Section 310 Lead-Based Paint.

Q. Add Section 310.1 to the IPMC to read:

310.1 General. Interior and exterior painted surfaces of dwellings and child care facilities, including fences and outbuildings, that contain lead levels equal to or greater than 1.0 milligram per square centimeter or in excess of 0.50% lead by weight shall be maintained in a condition free from peeling, chipping and flaking paint or removed or covered in an approved manner. Any surface to be covered shall first be identified by [an] approved warning as to the lead content of such surface.

R. Add IPMC Section 311 Aboveground Liquid Fertilizer Storage Tanks (ALFSTs).

S. Add Section 311.1 to the IPMC to read:

311.1 General. ALFSTs shall be maintained in accordance with the requirements of Section ~~3413.16~~ 1701.16 of the ~~Virginia Construction Code~~ VRC and the requirements of the ~~Virginia Construction Code~~ VCC applicable to such ALFSTs when newly constructed~~,~~ and the requirements of the VRC when undergoing a change of occupancy to an ALFST and when repaired, altered or reconstructed, including the requirements for inspections and for a secondary containment system.

13VAC5-63-525. ~~Chapter 4 Light, ventilation and occupancy limitations.~~ (Repealed.)

~~A. Change Section 404.4.1 of the IMPC to read:~~

~~404.4.1 Room area. Every living room shall contain at least 120 square feet (11.2 m^2) and every bedroom shall contain at least 70 square feet (6.5 m^2) and every bedroom occupied by more than one person shall contain at least 50 square feet (4.6 m^2) of floor area for each occupant thereof.~~

~~B. Change Section 404.5 of the IPMC and add new Table 404.5 to the IPMC to read:~~

~~404.5 Overcrowding. Dwelling units shall not be occupied by more occupants than permitted by the minimum area requirements of Table 404.5.~~

~~Table 404.5~~ ~~Minimum Area Requirements~~			
~~Space~~	~~Minimum Area in Square Feet~~		
	~~1-2 occupants~~	~~3-5 occupants~~	~~6 or more occupants~~
~~Living room[a,b]~~	~~120~~	~~120~~	~~150~~
~~Dining room[a,b]~~	~~No requirement~~	~~80~~	~~100~~
~~Bedrooms~~	~~Shall comply with Section 404.4.1~~		
~~For SI: 1 square foot = 0.093 m^2~~ ~~[a] See Section 404.5.2 for combined living room/dining room spaces.~~ ~~[b] See Section 404.5.1 for limitations on determining the minimum occupancy area for sleeping purposes.~~			

~~C. Add Sections 404.5.1 and 404.5.2 to the IPMC to read:~~

~~404.5.1 Sleeping area. The minimum occupancy area required by Table 404.5 shall not be included as a sleeping area in determining the minimum occupancy area for sleeping purposes. All sleeping areas shall comply with Section 404.4.~~

~~404.5.2 Combined spaces. Combined living room and dining room spaces shall comply with the requirements of Table 404.5 if the total area is equal to that required for separate rooms and if the space is located so as to function as a combination living room/dining room.~~

13VAC5-63-530. Chapter 5 Plumbing facilities and fixture requirements.

A. Add Section 505.5 to the IPMC to read:

505.5 Inspection and testing of backflow prevention assemblies. Inspection and testing shall comply with Sections 505.5.1 and 505.5.2.

B. Add Section 505.5.1 to the IPMC to read:

505.5.1 Inspections. Inspections shall be made of all backflow prevention assemblies and air gaps to determine whether they are operable.

C. Add Section 505.5.2 to the IMPC to read:

505.5.2 Testing. Reduced pressure principle backflow preventer assemblies, double check-valve assemblies, double-detector check valve assemblies and pressure vacuum breaker assemblies shall be tested at the time of installation, immediately after repairs or relocation and at least annually. The testing procedure shall be performed in accordance with one of the following standards: ASSE 5010-1013-1, Sections 1 and 2; ASSE 5010-1015-1, Sections 1 and 2; ASSE 5010-1015-2; ASSE 5010-1015-3, Sections 1 and 2; ASSE 5010-1015-4, Sections 1 and 2; ASSE 5010-1020-1, Sections 1 and 2; ASSE 5010-1047-1, Sections 1, 2, 3 and 4; ASSE 5010-1048-1, Sections 1, 2, 3 and 4; ASSE 5010-1048-2; ASSE 5010-1048-3, Sections 1, 2, 3 and 4; ASSE 5010-1048-4, Sections 1, 2, 3 and 4; or CAN/CSA B64.10.

~~D. Change Section 506.3 of the IPMC to read:~~

~~506.3 Grease interceptors. Grease interceptors, grease traps, and automatic grease removal devices shall be maintained in accordance with this code and the manufacturer's installation instructions. Grease interceptors, grease traps, and automatic grease removal devices shall be regularly serviced and cleaned to prevent the discharge of oil, grease, and other substances harmful or hazardous to the building drainage system, the public sewer, the private sewage disposal system, or the sewage treatment plant or processes. All records of maintenance, cleaning, and repairs shall be available for inspection by the code official.~~

~~E.~~ D. Change Section 507.1 of the IPMC to read:

507.1 General. Drainage of roofs and paved areas, yards and courts, and other open areas on the premises shall be discharged in a manner to protect the buildings and structures from the accumulation of overland water runoff.

13VAC5-63-540. Chapter 6 Mechanical and electrical requirements.

A. Change Section 602 of the IPMC to read:

Section 602 Heating and Cooling Facilities.

B. Change Section 602.1 of the IPMC to read:

602.1 Facilities required. Heating and cooling facilities shall be maintained and operated in structures as required by this section.

C. Change Section 602.2 of the IPMC to read:

602.2 Heat supply. Every owner and operator of ~~any~~ a Group R-2 apartment building or other residential dwelling who rents, leases or lets one or more dwelling unit, rooming unit, dormitory or guestroom on terms, either expressed or implied, to furnish heat to the occupants thereof shall supply heat during the period from October 15 to May 1 to maintain a temperature of not less than 65°F (18°C) in all habitable rooms, bathrooms, and toilet rooms. The code official may also consider modifications as provided in Section 104.5.2 when requested for unusual circumstances or may issue notice approving building owners to convert shared heating and cooling piping HVAC systems 14 calendar days before or after the established dates when extended periods of unusual temperatures merit modifying these dates.

Exception: When the outdoor temperature is below the winter outdoor design temperature for the locality, maintenance of the minimum room temperature shall not be required provided that the heating system is operating at its full design capacity. The winter outdoor design temperature for the locality shall be as indicated in Appendix D of the ~~International Plumbing Code~~ IPC.

D. Add Section 602.2.1 to the IPMC to read:

602.2.1 Prohibited use. In dwelling units subject to Section 602.2, one or more unvented room heaters shall not be used as the sole source of comfort heat in a dwelling unit.

E. Change Section 602.3 of the IPMC to read:

602.3 Occupiable work spaces. Indoor occupiable work spaces shall be supplied with heat during the period from October 1 to May 15 to maintain a temperature of not less than 65°F (18°C) during the period the spaces are occupied.

Exceptions:

1. Processing, storage and operation areas that require cooling or special temperature conditions.

2. Areas in which persons are primarily engaged in vigorous physical activities.

F. Change Section 602.4 of the IPMC to read:

602.4 Cooling supply. Every owner and operator of a Group R-2 apartment building who rents, leases or lets one or more dwelling units, rooming units or guestrooms on terms, either expressed or implied, to furnish cooling to the occupants thereof shall supply cooling during the period from May 15 to October 1 to maintain a temperature of not more than 80°F (27°C) in all habitable rooms. The code official may also consider modifications as provided in Section 104.5.2 when requested for unusual circumstances or may issue notice approving building owners to convert shared heating and cooling piping HVAC systems 14 calendar days before or after the established dates when extended periods of unusual temperatures merit modifying these dates.

Exception: When the outdoor temperature is higher than the summer design temperature for the locality, maintenance of the room temperature shall not be required provided that the cooling system is operating at its full design capacity. The summer outdoor design temperature for the locality shall be as indicated in the ~~International Energy Conservation Code~~ IECC.

G. Change the exception to Section 604.3.1.1 of the IPMC to read:

Exception: The following equipment shall be allowed to be repaired or reused where an inspection report from the equipment manufacturer, an approved representative of the equipment manufacturer, a third party licensed or certified electrician, or an electrical engineer indicates that the exposed equipment has not sustained damage that requires replacement:

1. Enclosed switches, rated 600 volts or less;

2. Busway, rated 600 volts or less;

3. Panelboards, rated 600 volts or less;

4. Switchboards, rated 600 volts or less;

5. Fire pump controllers, rated 600 volts or less;

6. Manual and magnetic motor controllers;

7. Motor control centers;

8. Alternating current high-voltage circuit breakers;

9. Low-voltage power circuit breakers;

10. Protective relays, meters and current transformers;

11. Low- and medium-voltage switchgear;

12. Liquid-filled transformers;

13. Cast-resin transformers;

14. Wire or cable that is suitable for wet locations and whose ends have not been exposed to water;

15. Wire or cable, not containing fillers, that is suitable for wet locations and whose ends have not been exposed to water;

16. Luminaires that are listed as submersible;

17. Motors;

18. Electronic control, signaling and communication equipment.

H. Change Section 606.1 to the IPMC to read:

606.1 General. Elevators, dumbwaiters and escalators shall be maintained in compliance with ASME A17.1. The most current certificate of inspection shall be on display at all times within the elevator or attached to the escalator or dumbwaiter, be available for public inspection in the office of the building operator or be posted in a publicly conspicuous location approved by the code official. An annual periodic inspection and test is required of elevators and escalators. A locality shall be permitted to require a six-month periodic inspection and test. All periodic inspections shall be performed in accordance with Section 8.11 of ASME A17.1. The code official may also provide for such inspection by an approved agency or through agreement with other local certified elevator inspectors. An approved agency includes any individual, partnership or corporation who has met the certification requirements established by the VCS.

Virginia Amusement Device Regulations (VADR)

2012 Final Regulations

Part I
General Provisions

13VAC5-31-10. Purpose.

A. The purpose of this chapter is to establish standards for the regulation, design, construction, maintenance, operation, and inspection of amusement devices.

B. The provisions of the USBC, including but not limited to all administrative procedures shall apply in the administration and enforcement of this chapter and to amusement devices to the extent such provisions are not superseded by the provisions of this chapter.

13VAC5-31-20. Definitions.

A. The following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise:

"Amusement device" means (i) a device or structure open to the public by which persons are conveyed or moved in an unusual manner for diversion, but excluding snow tubing parks and rides, ski terrain parks, ski slopes, and ski trails, and (ii) passenger tramways. For the purpose of this definition, the phrase "open to the public" means that the public has full access to a device or structure at an event, irrespective of whether a fee is charged. The use of devices or structures at private events are not considered to be open to the public.

"Bungee cord" means the elastic rope to which the jumper is attached which lengthens and shortens to produce a bouncing action.

"Carabineer" means a shaped metal device with a gate used to connect sections of a bungee cord, jump rigging, equipment, or safety gear.

"Certificate of inspection" means the certificate or sticker for amusement devices distributed by DHCD.

"DHCD" means the Virginia Department of Housing and Community Development.

"Gravity ride" means a ride that is installed on an inclined surface, which depends on gravity for its operation to convey a passenger from the top of the incline to the bottom, and which conveys a passenger in or on a carrier tube, bag, bathing suit, or clothes.

"Ground operator" means a person who assists the jump master to prepare a jumper for jumping.

"Harness" means an assembly to be worn by a bungee jumper to be attached to a bungee cord. It is designed to prevent the wearer from becoming detached from the bungee system.

"Jump master" means a person who has responsibility for the bungee jumper and who takes the jumper through the final stages to the actual jump.

"Jump zone" means the space bounded by the maximum designed movements of the bungee jumper.

"Jumper" means the person who departs from a height attached to a bungee system.

~~"Kiddie ride" means an amusement device where the passenger or patron height is limited to 54 inches or less, the design capacity of passengers or patrons is 12 or less, and the assembly time for the device is two hours or less.~~

"Landing area" means the surface area of ground or water directly under the jump zone, the area where the lowering device moves the bungee jumper to be landed away from the jump space and the area covered by the movement of the lowering device.

"Local building department" means the agency or agencies of the governing body of any city, county or town in this Commonwealth charged with the enforcement of the USBC.

"Operating manual" means the document that contains the procedures and forms for the operation of bungee jumping equipment and activity at a site.

"Passenger tramway" means a device used to transport passengers uphill, and suspended in the air by the use of steel cables, chains or belts, or ropes, and usually supported by trestles or towers with one or more spans.

"Platform" means the equipment attached to the structure from which the bungee jumper departs.

"Private inspector" means a person performing inspections who is independent of the company, individual or organization owning, operating or having any vested interest in an amusement device being inspected.

"Small mechanical ride" means an amusement device, other than an inflatable amusement device, where (i) the assembly time for the device is two hours or less, (ii) the revolutions per minute of any rotation of the components of the device is not greater than seven, (iii) the device has a footprint of less than 500 square feet, and (iv) the device does not invert a patron or lift a patron more than three feet in the air, measured from the ground to the bottom of the patron's feet when the device is operating.

"Ultimate tensile strength" means the greatest amount of load applied to a bungee cord prior to failure.

"USBC" means the Virginia Uniform Statewide Building Code (13VAC5-63).

B. Words and terms used in this chapter which are defined in the USBC shall have the meaning ascribed to them in that regulation unless the context clearly indicates otherwise.

C. Words and terms used in this chapter which are defined in the standards incorporated by reference in this chapter shall have the meaning ascribed to them in those standards unless the context clearly indicates otherwise.

13VAC5-31-30. ~~Exemptions~~ Devices covered and exempt.

A. The following devices, identified by name or description, when open to the public shall be considered amusement devices subject to this chapter. The list is intended only to clarify questionable devices, while the definition of an "amusement device" in 13VAC5-31-20 is generally used to determine the applicability of this chapter.

1. Inflatable amusement devices; and

2. Zip lines.

B. The following equipment or devices shall not be considered amusement devices subject to this chapter:

1. Nonmechanized playground or recreational equipment such as swing sets, sliding boards, climbing bars, jungle gyms, skateboard ramps and similar equipment where no admission fee is charged for its use or for admittance to areas where the equipment is located;

2. Coin-operated rides designed to accommodate three or less passengers; ~~and~~

3. Water slides or similar equipment used in community association, community club or community organization swimming pools~~.~~;

4. Mechanical bulls or similar devices;

5. Devices known as mall trains, shopping mall trains, or electric trackless trains for malls; and

6. Devices known as water walking balls, euro bubbles, or similar devices.

13VAC5-31-40. Incorporated standards.

A. The following standards are hereby incorporated by reference for use as part of this chapter:

1. American National Standards Institute (ANSI) Standard No. ~~B77.1-2006~~ B77.1-2011 for the regulation of passenger tramways; and

2. American Society for Testing and Materials (ASTM) Standard Nos. F698-94 ~~(Reapproved 2000)~~, F747-06, ~~F770-06a~~ F770-11, F846-92 ~~(Reapproved 2003)~~ (2009), F853-05, ~~F893-05a, F1159-03a~~ F893-10, F1159-11, F1193-06, ~~F1305-94 (Reapproved 2002), F1950-99,~~ F1957-99 ~~(Reapproved 2004)~~ (2011), ~~F2007-06, F2137-09, F2291-09b, F2374-07a, F2376-06~~ F2007-11, F2137-11, F2374-10, F2375-09, F2376-08 [~~and~~, F2959-12, and] ~~F2460-06~~ F2460-11 for the regulation of amusement devices.

The standards referenced above may be procured from:

ANSI	ASTM
25 W 43rd Street	100 Barr Harbor Dr.
New York, NY	West Conshohocken, PA
10036	19428-2959

B. The provisions of this chapter govern where they are in conflict with any provisions of the standards incorporated by reference in this chapter.

C. The following requirements supplement the provisions of the ASTM standards incorporated by reference in this chapter:

1. The operator of an amusement device shall be at least 16 years of age, except when the person is under the supervision of a parent or guardian and engaged in activities determined not to be hazardous by the Commissioner of the Virginia Department of Labor and Industry;

2. The amusement device shall be attended by an operator at all times during operation except that (i) one operator is permitted to operate two or more amusement devices provided they are within the sight of the operator and operated by a common control panel or station and (ii) one operator is permitted to operate two ~~kiddie~~ small mechanical rides with separate controls provided the distance between controls is no more than 35 feet and the controls are equipped with a positive pressure switch; and

3. The operator of an amusement device shall not be (i) under the influence of any drugs which may affect the operator's judgment or ability to assure the safety of the public or (ii) under the influence of alcohol.

D. Where an amusement device was manufactured under previous editions of the standards incorporated by reference in this chapter, the previous editions shall apply to the extent that they are different from the current standards.

13VAC5-31-50. Certification of amusement device inspectors.

A. Any person, including local building department personnel, inspecting an amusement device relative to a certificate of inspection shall possess certification as an amusement device inspector in accordance with the Virginia Certification Standards (13VAC5-21).

B. Local building department personnel enforcing this chapter and private inspectors shall attend periodic maintenance training as designated by DHCD. In addition to the periodic maintenance training required above, local building department personnel and private inspectors shall attend 16 hours of continuing education every two years as approved by DHCD. If local building department personnel or private inspectors possess more than one BHCD certificate, the 16 hours shall satisfy the continuing education requirement for all BHCD certificates.

13VAC5-31-60. Appeals.

Appeals from the local building department concerning the application of this chapter shall be made to the local board of building code appeals established by the USBC. Application for appeal shall be filed with the local building department within 14 calendar days after receipt of

the decision of the local building department. The board of appeals shall hear the appeal within seven calendar days after the application for appeal is filed. After final determination by the board, any person who was a party to the appeal may appeal to the State Building Code Technical Review Board, established under § 36-108 of the Code of Virginia, within 14 calendar days of receipt of the decision to be appealed. Such appeal shall be in accordance with the procedures established in the USBC, under the authority granted by § 36-98.3 of the Code of Virginia where the provisions of Chapter 6 (§ 36-97 et seq.) of Title 36 of the Code of Virginia and the USBC apply to amusement devices.

NOTE: Because of the short time frames normally associated with amusement device operations, DHCD staff will be available to assist in finding a timely resolution to disagreements between owners or operators and the local building department upon request by either party.

Part II
Enforcement, Permits and Certificates of Inspection

13VAC5-31-75. Local building department.

A. In accordance with §§ 36-98.3 and 36-105 of the Code of Virginia, the local building department shall be responsible for the enforcement of this chapter and may charge fees for such enforcement activity. The total amount charged for any one permit to operate an amusement device or devices or the renewal of such permit shall not exceed the following, except that when a private inspector is used, the fees shall be reduced by ~~50%~~ 75%:

1. ~~$25~~ $35 for each ~~kiddie~~ small mechanical ride or inflatable amusement device covered by the permit;

2. ~~$35~~ $55 for each circular ride or flat-ride less than 20 feet in height covered by the permit;

3. ~~$55~~ $75 for each spectacular ride covered by the permit that cannot be inspected as a circular ride or flat-ride in subdivision 2 of this subsection due to complexity or height; and

4. ~~$150~~ $200 for each coaster covered by the permit that exceeds 30 feet in height.

[5. The local building department may charge an additional fee for permits and inspections of generators and associated wiring for amusement device events. Generators subject to these fees are those used exclusively with amusement devices and that are inspected by the local building department. The fee per event shall not exceed $165 and shall not exceed the actual cost to perform the inspection or inspections.

Exception: Small portable generators serving only cord and plug connected equipment loads are not subject to the fee.]

Notwithstanding the above, the local building department shall be permitted to increase the fees up to 50% when requested to perform weekend or after-hour inspections.

B. Notwithstanding the provisions of subsection A of this section, when an amusement device is constructed in whole or in part at a site for permanent operation at that site and is not intended to be disassembled and moved to another site, then the local building department may utilize permit

and inspection fees established pursuant to the USBC to defray the cost of enforcement. This authorization does not apply to an amusement device that is only being reassembled, undergoing a major modification at a site or being moved to a site for operation.

C. A permit application shall be made to the local building department at least five days before the date in which the applicant intends to operate an amusement device. The application shall include the name of the owner, operator or other person assuming responsibility for the device or devices, a general description of the device or devices including any serial or identification numbers available, the location of the property on which the device or devices will be operated and the length of time of operation. The permit application shall indicate whether a private inspector will be utilized. If a private inspector is not utilized, the applicant shall give reasonable notice when an inspection is sought and may stipulate the day such inspection is requested provided it is during the normal operating hours of the local building department. In addition to the information required on the permit application, the applicant shall provide proof of liability insurance of an amount not less than $1,000,000 per occurrence or proof of equivalent financial responsibility. The local building department shall be notified of any change in the liability insurance or financial responsibility during the period covered by the permit.

D. Notwithstanding the provisions of subsection C of this section, a permit application is not required for a ~~kiddie~~ small mechanical ride or an inflatable amusement device that has ~~an unexpired~~ a certificate of inspection issued by any local building department in this Commonwealth within a one-year period prior to the dates the small mechanical ride or inflatable amusement device is to be used, regardless of whether the device has been disassembled and moved to a new site. In such cases, the local building department shall be notified at least three days prior to the operation of the ~~kiddie~~ small mechanical ride or the inflatable amusement device and the information required on a permit application as listed in subsection C of this section shall be provided to the local building department. In addition, and notwithstanding the provisions of subsection A of this section, the local building department shall be permitted to charge a $50 inspection fee per event to the person notifying the local building department of an event where an inflatable amusement device is operating, if the local building department chooses to inspect any or all of the inflatable amusement devices operating at that event. An inspection report shall be provided to the person notifying the local building department of the event if such an inspection is conducted.

E. Local building department personnel shall examine the permit application within five days and issue the permit if all requirements are met. A certificate of inspection for each amusement device shall be issued when the device has been found to comply with this chapter by a private inspector or by an inspector from the local building department. It shall be the responsibility of the local building department to verify that the private inspector possesses a valid certificate of competence as an amusement device inspector from the Virginia Board of Housing and Community Development. In addition, local building department personnel shall be responsible for assuring that the certificate of inspection is posted or affixed on or in the vicinity of the device in a location visible to the public. Local building department personnel shall post or affix such certificates or permit the certificates to be posted or affixed by the private inspector. Permits shall indicate the length of time the device or devices will be operated at the site, clearly identify the device or devices to which it applies and the date of expiration of the permit. Permits shall not be valid for longer than one year, except that permits for small mechanical rides shall not be valid for longer than six months.

F. In addition to obtaining a certificate of inspection in conjunction with a permit application for amusement devices permanently fixed to a site, a new certificate of inspection shall also be obtained prior to the operation of an amusement device following a major modification, prior to each seasonal operation of a device, at least once during the operating season and prior to resuming the operation of a device following an order from a local building department to cease operation. This requirement shall not apply to ~~kiddie~~ small mechanical rides meeting the conditions outlined in subsection D of this section.

G. For amusement devices manufactured prior to 1978, the owner or operator shall have the information required by §§ 2.1 through 2.6 of ASTM F698 available at the time of inspection. In addition, the operator of any amusement device shall be responsible for obtaining all manufacturer's notifications, service bulletins and safety alerts issued pursuant to ASTM F853 and the operator shall comply with all recommendations and requirements set out in those documents. A copy of all such documents shall be made available during an inspection.

H. In the enforcement of this chapter, local building department personnel shall have authority to conduct inspections at any time an amusement device would normally be open for operation or at any other time if permission is granted by the owner or operator, to issue an order to temporarily cease operation of an amusement device upon the determination that the device may be unsafe or may otherwise endanger the public and to accept and approve or deny requests for modifications of the rules of this chapter in accordance with the modification provisions of the USBC.

I. In accordance with subdivision 7 of § 36-137 of the Code of Virginia, the local building department shall collect a 2.0% levy of fees charged for permits under this chapter and transmit it quarterly to DHCD to support training programs of the Virginia Building Code Academy. Localities that maintain individual or regional training academies accredited by DHCD shall retain such levy.

J. In accordance with § 36-98.3 of the Code of Virginia and 13VAC5-31-10 B, the procedures for violations of this chapter shall be [as] prescribed in the USBC.

K. In accordance with § 36-98.1 of the Code of Virginia, the Virginia Department of General Services (DGS) shall function as the local building department for the application of this chapter to amusement devices located on state-owned property. In accordance with §§ 36-98.2 and 36-114 of the Code of Virginia, appeals of the application of this chapter by the DGS shall be made directly to the State Building Code Technical Review Board. Further, as a condition of this chapter, such appeals shall be filed within 14 calendar days after receipt of the decision of DGS.

13VAC5-31-85. Accidents involving serious injury or death.

A. If an accident involving the serious injury or death of a patron occurs, the operation of an amusement device shall cease and the local building department and DHCD shall be notified as soon as practicable, but in no case later than during the next working day. The operation of the device shall not resume until inspected by a private inspector or an inspector from the local building department, except where the owner or operator determines the cause was not related to malfunction or improper operation of the amusement device.

B. The owner or operator shall conduct an investigation of the accident including, at a minimum, an examination of the accident scene and interviews of any witnesses or persons involved in the

accident. An accident investigation report shall be compiled which, at a minimum, shall contain a summary of the investigation and a description of the device involved, including its serial number and date of manufacture, if available. The report shall be submitted to the local building department within 24 hours of the accident except that if the local building department is closed during that period, then the report shall be submitted with four hours of the reopening of the department.

C. Local building department personnel are authorized to investigate the accident and to issue an order to cease operation when warranted and to specify the conditions under which the device may resume operation. The amusement device shall be inspected prior to resuming operation either by an inspector from the local building department or by a private inspector and found to comply with this chapter.

Part III
Gravity Rides

13VAC5-31-180. General requirements.

A. The provisions of this part are specific to gravity rides and are in addition to other applicable provisions of this chapter.

B. A ride using carriers shall be designed and constructed to retain the passengers in or on a carrier during the operation of the ride and retain the carrier on or within the track, slide, or chute system during the operation of the ride.

C. A ride that conveys passengers not in or on a carrier shall be designed and constructed to retain the passengers within the chute or slide during the ride.

D. At each loading or unloading area, a hard surface which is other than earth and which is reasonably level shall be provided. The surface shall be large enough to accommodate the intended quantity of passengers.

E. Where loading or unloading platforms are elevated more than 30 inches from the adjacent areas, guard rails conforming to the USBC shall be provided.

F. Passengers shall not have to step up or down more than 12 inches from the loading or unloading surface to enter or exit the ride.

G. The frequency of departure of carriers or riders from the loading areas shall be controlled by a ride operator. The minimum distance between departures shall be determined by the designer of the specific ride.

H. When a passenger has control of the speed or course of the carrier, the passenger shall have a clear sight distance along the course of the ride long enough to allow the passenger to avoid a collision with another person or carrier.

I. The unloading area of the ride shall be designed and constructed to bring riders and carriers to a safe stop without any action by the rider.

J. There shall be attendants at the loading and unloading area when the ride is in use. However, where the physical structure of the ride is such that it is not capable of accommodating an attendant at both the loading and unloading area and the entire ride is visible and under the supervision of a single attendant, attendants at both the loading and unloading areas shall not be required.

K. If the entire course of the ride is not visible to the operator, additional persons with communications equipment shall be provided or approved visual surveillance equipment shall be installed along the course of the ride which is not visible to the operator.

L. Any moving or hot parts that may be injurious to the ride operator or the public shall be effectively guarded to prevent contact.

M. Fencing or adequate clearance shall be provided that will prevent the riders from contact with persons or nearby objects.

Part IV
Concession Go-Karts

13VAC5-31-190. General requirements.

In addition to other applicable requirements of this chapter, concession go-karts shall be operated, maintained and inspected in accordance with ASTM F2007.

Part V
Inflatable Amusement Devices

13VAC5-31-200. General requirements.

In addition to other applicable requirements of this chapter, inflatable amusement devices shall be operated, maintained and inspected in accordance with ASTM F2374.

~~Notwithstanding any requirements of this chapter to the contrary, a permit to operate an inflatable amusement device that is less than 150 square feet and in which the height of the patron containment area is less than 10 feet need not be obtained if the device has an unexpired certificate of inspection issued by a local building department in this Commonwealth, regardless of whether the device has been disassembled or moved to a new site.~~

Part VI
Artificial Climbing Walls

13VAC5-31-210. General requirements.

In addition to other applicable requirements of this chapter, artificial climbing walls shall be operated, maintained and inspected in accordance with ASTM F1159.

Notwithstanding any requirements of this chapter to the contrary, an artificial climbing wall may be moved, setup and operated without obtaining a permit provided the wall has a ~~valid~~ certificate of inspection issued by a local building department in this Commonwealth within the prior 90

days and the expiration date of the wire ropes used with the device does not expire within that 90-day period.

Part VII
Bumper Boats

13VAC5-31-215. General requirements.

In addition to other applicable requirements of this chapter, bumper boats shall be operated, maintained and inspected in accordance with ASTM F2460.

[Part VIII
Zip Lines

13VAC5-31-217. General requirements.

In addition to other applicable requirements of this chapter, zip lines shall be operated, maintained and inspected in accordance with ASTM F2959.

~~Part VIII~~ Part IX]
Bungee Jumping

13VAC5-31-220. General requirements.

A. The provisions of this part are specific to bungee jumping and are in addition to other applicable provisions of this chapter.

B. Bungee jumping operations that are open to the public shall be permitted from structures designed for use as part of the bungee jumping operation. Bungee jumping from other types of structures, cranes or derricks is not permitted for public participation.

C. Bungee jumping activities that involve double jumping, sandbagging, catapulting or stunt jumping shall not be permitted to be open for public participation.

13VAC5-31-230. Bungee cords.

A. Bungee cords shall be tested by an approved testing agency or by an engineer licensed in Virginia. The following criteria shall be met:

1. Each lot of bungee cords shall have a minimum of 10%, but not less than one of the cords tested to determine the lowest ultimate tensile strength of the cords tested. A load versus elongation curve based on the test result shall be provided with each lot of bungee cords; and

2. The manufacturer shall specify the maximum number of jumps for which each cord or cord type is designed and the criteria for use of the cord.

B. Bungee cords shall be retired when the cords (i) exhibit deterioration or damage; (ii) do not react according to specifications; or (iii) have reached the maximum usage expressed in number

of jumps as specified by the manufacturer. Bungee cords retired from use shall be destroyed immediately by cutting the cord into five-foot lengths.

13VAC5-31-240. Jump hardware.

Jump harnesses shall be either full body-designed, which includes a waist harness worn in conjunction with a chest harness, or ankle-designed with a link to a waist harness. All jump harnesses, carabineers, cables and other hardware shall be designed and manufactured for the purpose or designed or analyzed by an engineer licensed in Virginia and shall be used and maintained in accordance with the manufacturer's or engineer's instructions.

13VAC5-31-250. Structure requirements.

Structures constructed on site for bungee jumping activities shall be designed by an engineer licensed in Virginia. Structures manufactured for bungee jumping activities shall be analyzed by an engineer licensed in Virginia and assembled and supported in accordance with the manufacturer's instructions.

13VAC5-31-260. Operational and site requirements.

A. Operators shall follow the criteria provided by the manufacturer for the use of bungee cords. A record of the number of jumps with each cord shall be maintained. All cords shall be inspected daily for wear, slippage, or other abnormalities unless the manufacturer specifies more frequent inspections.

B. The jump master or site manager shall be responsible for determining the appropriate use of all bungee cords in relation to the weight of the jumper and height of the platform. Bungee cords shall be attached to the structure at all times when in the connection area.

C. All harnesses shall be inspected prior to harnessing a jumper and shall be removed from service when they exhibit signs of excessive wear or damage. All carabineers shall be inspected daily and shall be removed from service when they exhibit signs of excessive wear or damage or fail to function as designed. The anchors shall be inspected daily and shall be replaced if showing signs of excessive wear.

D. A secondary retrieval system shall be provided in all operations. A locking mechanism on the line shall be used to stop and hold the jumper in place after being pulled back to the jump platform in a retrieval system. A dead man's switch or locking mechanism that will stop the lowering action shall be used in a friction lowering system.

E. The jump zone, preparation area and landing/recovery area shall be identified and maintained during bungee jumping activities. The landing/recovery area shall be accessible to emergency vehicles. Communication shall be maintained between all personnel involved with the jump.

F. An air bag, a minimum of 10 feet by 10 feet, shall be used. The air bag shall be rated for the maximum free fall height possible from the platform during operation. The air bag shall be located immediately below the jump space. The landing area shall be free of spectators and debris at all times and shall be free of any equipment or personnel when a jumper is being prepared on the jump platform and until the bungee cord is at its static extended state. A place to

sit and recover shall be provided adjacent to, but outside, the landing area where the jumper shall be allowed to recover.

G. Where the jump space or landing area, or both, is over sea, lake, river, or harbor waters, the following shall apply:

1. The landing water area shall be at least nine feet deep and a minimum of 10 feet by 10 feet or have a minimum of 15 feet in diameter if circular;

2. The jump space and landing area shall be free of other vessels, floating and submerged objects and buoys. A sign of approved size that reads “Bungee Jumping! Keep Clear” shall be fixed to buoys on four sides of the landing area;

3. The landing vessel shall be readily available for the duration of the landing procedures;

4. The landing vessel shall have a landing pad size of at least five feet by five feet within and lower than the sides of the vessel;

5. A landing vessel shall be available that can be maneuvered in the range of water conditions expected and will enable staff to pick up a jumper; and

6. One person may operate the landing vessel where the vessel is positioned without the use of power. A separate person shall operate the vessel where power is required to maneuver into or hold the landing position.

H. Where the landing area is part of a swimming pool or the landing area is specifically constructed for bungee jumping, the following shall apply:

1. Rescue equipment shall be available, such as a life ring or safety pole;

2. The jump space and landing area shall be fenced to exclude the public; and

3. Only the operators of the bungee jump and jumper shall be within the jump zone and landing areas.

I. Storage shall be provided to protect equipment from physical, chemical and ultra-violet radiation damage. The storage shall be provided for any current, replacement and emergency equipment and organized for ready access and shall be secure against unauthorized entry.

13VAC5-31-270. Management and personnel responsibilities.

A. All bungee jumping activities shall have a minimum of one site manager, one jump master and one ground operator to be present at all times during operation of the bungee jump.

B. The site manager is responsible for the following:

1. Controlling the entire operation;

2. Site equipment and procedures;

3. Determining whether it is safe to jump;

4. Selection of, and any training of personnel;

5. Emergency procedures; and

6. Maintaining records.

C. A jump master shall be located at each jump platform and shall have thorough knowledge of, and is responsible for, the following:

1. Overseeing the processing of jumpers, selection of the bungee cord, adjustment of the rigging, final check of jumper's preparation, and countdown for and observation of the jump;

2. Verifying that the cord is attached to the structure at all times when the jumper is in the jump area;

3. Rescue and emergency procedures; and

4. Ensuring that the number of jumps undertaken in a given period of time will allow all personnel to safely carry out their responsibilities.

D. The ground operator shall have knowledge of all equipment used and of jump procedures and shall have the following responsibilities:

1. Ensuring that the jumper is qualified to jump;

2. Assisting the jump master to prepare the jumper and attach the jumper to the harness and rigging;

3. Assisting the jumper to the recovery area; and

4. Maintaining a clear view of the landing area.

E. Each site shall have an operating manual that shall include the following:

1. Site plan, job descriptions (including procedures), inspections and maintenance requirements of equipment including rigging, hardware, bungee cords, harnesses, and lifelines; and

2. An emergency rescue plan.

F. The daily operating procedures shall be conducted in accordance with ASTM F770.

G. The qualification and preparation of jumpers shall include obtaining any pertinent medical information, jumper weight and a briefing of jumping procedures and safety instructions.

[~~Part IX~~ Part X]

Accessibility Requirements for Amusement Devices

13VAC5-31-280. Scope.

This part shall apply to newly designed and constructed amusement devices for permanent installation and does not apply to amusement devices regularly assembled or disassembled. This part also does not apply to mobile, portable, or temporary amusement devices set up for short periods of time such as at traveling carnivals, state and county fairs, and festivals. For the purposes of this part, newly designed and constructed amusement devices are those that are new upon first use by patrons and the first permanent installation of the ride and would not include a ride that was moved within a park or to another park after several seasons of use.

13VAC5-31-290. Requirements.

Amusement devices subject to this part shall comply with applicable requirements of 36 CFR Part 1191 – Americans With Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities ~~and~~; Architectural Barriers Act (ABA) Accessibility Guidelines~~,~~ (69 FR 44151-44455 (July 23, 2004)).

Virginia Manufactured Home Safety Regulations

2012 Final Regulations

13VAC5-95-10. Definitions.

A. The following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise:

~~"Act" or "the Act" means the National Manufactured Housing Construction and Safety Standards Act of 1974, Title VI of the Housing and Community Development Act of 1974 (42 USC § 5401 et seq.).~~

"Administrator" means the Director of DHCD or his designee.

"DHCD" means the Virginia Department of Housing and Community Development.

"Dealer" means any person engaged in the sale, lease, or distribution of manufactured homes primarily to persons who in good faith purchase or lease a manufactured home for purposes other than resale.

"Defect" means a failure to comply with an applicable federal manufactured home construction and safety standard that renders the manufactured home or any part of the home unfit for the ordinary use of which it was intended, but does not result in an imminent risk of death or severe personal injury to occupants of the affected home.

"Distributor" means any person engaged in the sale and distribution of manufactured homes for resale.

"Federal Act" means the National Manufactured Housing Construction and Safety Standards Act of 1974, as amended (42 USC § 5401 et seq.)

"Federal installation standards" means the federal Model Manufactured Home Installation Standards (24 CFR Part 3285).

"Federal ~~regulation~~ regulations" means the federal Manufactured Home Procedural and Enforcement Regulations~~, enacted May 13, 1976, under authority granted by § 625 of the Act, and designated as Part 3282, Chapter XX, Title 24 of HUD's regulations~~ (24 CFR Part 3282). ~~(Part 3282 consists of subparts A through L, with sections numbered 3282.1 through 3282.554, and has an effective date of June 15, 1976.)~~

"HUD" means the United States Department of Housing and Urban Development.

"Imminent safety hazard" means a hazard that presents an imminent and unreasonable risk of death or severe personal injury that may or may not be related to failure to comply with an applicable federal manufactured home construction or safety standard.

"Installation" means completion of work to include, but not be limited to, stabilizing, supporting, anchoring, and closing-up a manufactured home and joining sections of a multi-section manufactured home, when any such work is governed by the federal installation standards.

"Installer" means the person or entity who is retained to engage in or who engages in the business of directing, supervising, controlling, or correcting the initial installation of a manufactured home.

"Label," ~~or~~ "certification label" or "HUD label" means the ~~approved form of~~ certification label prescribed by the ~~manufacturer that, under 24 CFR 3282.362(c)(2)(i) of the Manufactured Home Procedural and Enforcement Regulations, is permanently affixed to each transportable section of each manufactured home manufactured for sale to a purchaser in the United States~~ federal standards.

"Local ~~code~~ building official" means the officer or other designated authority charged with the administration and enforcement of USBC, or duly authorized representative.

"Manufactured home" means a structure subject to federal regulation, which is transportable in one or more sections; is eight body feet or more in width and 40 body feet or more in length in the traveling mode, or is 320 or more square feet when erected on site; is built on a permanent chassis; is designed to be used as a single-family dwelling, with or without a permanent foundation, when connected to the required utilities; and includes the plumbing, heating, air conditioning, and electrical systems contained in the structure.

"Manufacturer" means any person engaged in manufacturing or assembling manufactured homes, including any person engaged in importing manufactured homes.

"Noncompliance" means a failure of a manufactured home to comply with a federal manufactured home construction or safety standard that does not constitute a defect, serious defect, or imminent safety hazard.

"Purchaser" means the first person purchasing a manufactured home in good faith for purposes other than resale.

"Secretary" means the Secretary of HUD.

"Serious defect" means any failure to comply with an applicable federal manufactured home construction and safety standard that renders the manufactured home or any part thereof not fit for the ordinary use for which it was intended and which results in an unreasonable risk of injury or death to occupants of the affected manufactured home.

"Standards" or "federal standards" means the federal Manufactured Home Construction and Safety Standards (24 CFR Part 3280) adopted by HUD, in accordance with authority in the Federal Act. The standards were enacted December 18, 1975, and amended May 11, 1976, to become effective June 15, 1976.

"State administrative agency" or "SAA" means DHCD which is responsible for the administration and enforcement of Chapter 4.1 (§ 36-85.2 et seq.) of Title 36 of the Code of Virginia throughout Virginia and of the plan authorized by § 36-85.5 of the Code of Virginia.

"USBC" means the Virginia Uniform Statewide Building Code (13VAC5-63).

B. Terms defined within the federal regulations and federal standards shall have the same meanings in this chapter.

13VAC5-95-20. Application and enforcement.

A. This chapter shall apply to manufactured homes as defined in 13VAC5-95-10 and ~~13VAC5-95-20~~ as set out in this section.

B. Enforcement of this chapter shall be in accordance with the federal ~~regulation~~ regulations.

C. Manufactured homes produced on or after June 15, 1976, shall conform to all the requirements of the federal standards, as amended.

D. DHCD is delegated all lawful authority for the enforcement of the federal standards pertaining to manufactured homes by the administrator according to § 36-85.5 of the Code of Virginia. The Division of Building and Fire Regulation of DHCD is designated as a state administrative agency in the HUD enforcement program, and shall act as an agent of HUD. The administrator is authorized to perform the activities required of an SAA by the HUD enforcement plan including, but not limited to, investigation, citation of violations, handling of complaints, conducting hearings, supervising remedial actions, monitoring, ~~and~~ making such reports as may be required, and seeking enforcement of the civil and criminal penalties established by §36-85.12 of the Code of Virginia.

E. ~~All~~ In accordance with § 36-85.11 of the Code of Virginia, all local ~~code~~ building officials are authorized ~~by § 36-85.11 of the Code of Virginia~~ to and shall enforce the provisions of this chapter within the limits of their jurisdiction~~. Such local code officials shall enforce this chapter, subject to the general oversight of the Division of Building and Fire Regulation and shall not permit the use of any manufactured home containing a serious defect or imminent safety hazard within their jurisdiction.~~ and shall be responsible for the following:

1. Verify through inspection that a manufactured home displays the required HUD label and data plate;

2. Determine whether the manufactured home has been damaged during transit. If the manufactured home has been damaged, then the local building official is authorized to require tests, in accordance with the federal standards, for tightness of plumbing systems and gas piping and an operational test to ensure that all luminaries and receptacles are operable. If a manufactured home has sustained damage to the structural components, the local building

official shall require the appropriate design approval primary inspection agency approval on any repairs or designs;

3. Prevent the use of a manufactured home that in the opinion of the local building official contains a serious defect or imminent safety hazard, and notify the administrator immediately;

4. Notify the administrator of any apparent violations of this chapter, to include defects and noncompliance that occurred during the manufacturing process and any alterations that occurred during installation; and

5. Verify through inspection that the installation is in accordance with the federal installation standards. Where the local building official finds that the installation of the manufactured home is not in accordance with the federal installation standards, the local building official shall order the home to be brought into compliance within a reasonable time. If the order is not complied with then the local building official shall notify the administrator.

F. ~~Mounting and anchoring of~~ In accordance with § 36-85.11 of the Code of Virginia, site preparation, utility connection, and skirting installation for manufactured homes shall [~~be in accordance with~~ meet] the [~~applicable~~] requirements of the USBC. [In addition, as a requirements of this chapter and the USBC, administrative provisions of the USBC, such as requirements for permits, inspections, and certificates of occupancy, and the specific requirements of Section 425 of Part I of the USBC (13VAC5-63-220L et seq.), shall also be applicable.]

13VAC5-95-30. Effect of label.

~~A.~~ In accordance with § 36-85.11 of the Code of Virginia, manufactured homes displaying the certification label as prescribed in the federal standards shall be accepted in all localities as meeting the requirements of the Manufactured Housing Construction and Safety Standards Law (Chapter 4.1 (§ 36-85.2 et seq.) of Title 36 of the Code of Virginia), which shall supersede the building codes of the counties, municipalities and state agencies. ~~In addition, as a requirement of this chapter, local code officials shall carry out the following functions with respect to manufactured homes displaying the HUD label, provided such functions do not involve disassembly of the homes or parts of the homes, change of design, or result in the imposition of more stringent conditions than those required by the federal regulations.~~

~~1. Verify through inspection that the manufactured home has not been damaged in transit to a degree that would render it unsafe. If the manufactured home has been damaged, then the local code official is authorized to require tests for tightness of plumbing systems and gas piping, and electrical short circuits at meter connections.~~

~~2. Verify through inspection that (i) supplemental components required by the manufacturer's installation instructions or this chapter are properly provided, (ii) manufacturer's installation or erection instructions are followed, and (iii) any special~~

~~conditions or limitations of use stipulated by the manufacturer's installation instructions or the label in accordance with the standards or this chapter are followed.~~

~~B. Local code officials are required by the USBC to enforce applicable requirements of the USBC for utility connections, site preparation, foundations, stoops, decks, porches, alterations and additions to existing manufactured homes, building permits, skirting, certificates of use and occupancy, and all other applicable requirements, except those governing the design and construction of the labeled units. In addition, local code officials shall verify that a manufactured home displays the required HUD label.~~

13VAC5-95-40. ~~Report to DHCD.~~ (Repealed.)

~~Whenever any manufactured home is moved from a local jurisdiction before a noted violation has been corrected, the local code official shall make a prompt report of the circumstances to the administrator. The report shall include a list of uncorrected violations, all information pertinent to identification and manufacture of the home contained on the label and the data plate, the destination of the home if known, and the name of the party responsible for moving it.~~

13VAC5-95-50. Alterations.

A. No distributor, installer or dealer shall perform or cause to be performed any alteration affecting one or more requirements set forth in the federal standards, ~~except those alterations approved by the administrator~~ unless the alteration is included in the manufacturer's design approval primary inspection agency's approved design and installation instructions.

B. ~~In handling and approving dealer requests for alterations, the administrator may be assisted by local code officials. The local code official shall report violations of subsection A of this section and failures to conform to the terms of their approval to the administrator.~~ In accordance with § 36-99 of the Code of Virginia and the USBC, alterations, additions and repairs associated with existing manufactured homes are subject to applicable provisions of the USBC and not this chapter.

13VAC5-95-60. Installations.

Distributors, installers, or dealers ~~installing or~~ setting up a manufactured home shall perform such installation in accordance with the manufacturer's installation instructions ~~or other support and anchoring system approved by the local code official in accordance with the USBC~~.

13VAC5-95-70. ~~Prohibited resale.~~ (Repealed.)

~~No distributor or dealer shall offer for resale any manufactured home possessing a serious defect or imminent safety hazard.~~

13VAC5-95-80. Lot inspections.

At any time during regular business hours when a manufactured home is located on a dealer's or distributor's lot and offered for sale, the administrator shall have authority to inspect such home for transit damages, seal tampering, violations of the federal regulations and federal standards, and the dealer's or distributor's compliance with applicable state and federal ~~laws~~ law and ~~regulations~~ regulation. The administrator shall give written notice to the dealer or distributor when any home inspected does not comply with the federal regulations and federal standards or this chapter.

13VAC5-95-90. Consumer complaints~~; on-site inspections~~.

A. The administrator shall receive all consumer complaints on manufactured homes reported to DHCD by owners, dealers, distributors, ~~code~~ local building officials, and other state or federal agencies. The administrator may request ~~such reports~~ all consumer complaints to be submitted by letter or on a ~~report~~ form supplied by DHCD or in another format acceptable by the administrator.

B. The administrator may conduct, or cause to be conducted, an on-site inspection of a manufactured home at the request of the owner reporting a complaint with the home or under the following conditions with the permission of the owner of the home:

1. The dealer, distributor or manufacturer requests an on-site inspection;

2. The reported complaint indicates extensive and serious noncompliances;

3. Consumer complaints lead the administrator to suspect that a class of homes may be similarly affected; or

4. Review of manufacturer's records, corrective action, and consumer complaint records leads the administrator to suspect secondary or associated noncompliances may also exist in a class of homes.

C. When conducting an on-site inspection of a home involving a consumer complaint, the administrator may request the dealer, distributor, installer and manufacturer of the home to have a representative present to coordinate the inspection and investigation of the consumer complaint.

D. After reviewing the complaint report or the on-site inspection of the home involved, the administrator shall, where possible, indicate the cause of any nonconformance and, where possible, indicate the responsibility of the manufacturer, dealer, distributor, or owner for the noncompliance and any corrective action necessary.

E. The administrator shall ~~refer to~~ notify the manufacturer of the home, in writing, of any consumer complaint concerning that home reported to the administrator. The administrator ~~may~~ shall refer any such reported complaint to HUD, to the SAA in the state where the manufacturer is located, and, as necessary, to the inspection agency involved with certifying the home.

F. The administrator shall assist the owner, dealer, distributor, installer, and manufacturer in resolving consumer complaints. ~~The administrator shall monitor the manufacturer's performance to assure compliance with Subpart I of the federal regulations for consumer complaint handling and shall take such actions as are necessary to assure compliance of all involved parties with applicable state and federal regulations.~~

G. The administrator shall monitor the manufacturer's performance to assure compliance with Subpart I (24 CFR 3282.401 et seq.) of the federal regulations for consumer complaint handling and shall take such actions as are necessary to ensure compliance of all involved parties with applicable state and federal regulation.

13VAC5-95-100. Violation; ~~appeal;~~ penalty.

~~A. Where the administrator finds any violation of the provisions of this chapter, a notice of violation shall be issued. This notice of violation shall order the party responsible to bring the unit into compliance, within a reasonable time.~~

~~B. Parties aggrieved by the findings of the notice of violation may appeal to the State Building Code Technical Review Board, which shall act on the appeal in accordance with the provisions of the USBC. The aggrieved party shall file the appeal within 10 days of the receipt of the notice of violation. Unless the notice of violation is revoked by the review board, the aggrieved party must comply with the stipulations of the notice of violation.~~

~~C. Any person, firm or corporation violating any provisions of this chapter shall, upon conviction, be considered guilty of a misdemeanor in accordance with § 36-85.12 of the Code of Virginia.~~ In accordance with § 36-85.12 of the Code of Virginia, it shall be unlawful for any person, firm, or corporation to violate any provisions of Chapter 4.1 (§ 36-85.2 et seq.) of Title 36 of the Code of Virginia, this chapter, or the Federal Act and regulations. Any person, firm, or corporation violating any provision of said laws, rules, and regulations, or any final order issued thereunder, shall be liable for a civil penalty not to exceed $1,000 for each violation. Each violation shall constitute a separate violation with respect to each manufactured home or with respect to each failure or refusal to allow or to perform an act required by the legislation or regulations. The maximum civil penalty may not exceed $1 million for any related series of violations occurring within one year from the date of the first violation.

An individual or a director, officer, or agent of a corporation who knowingly and willfully violates Section 610 (42 USC § 5409) of the Federal Act in a manner that threatens the health or safety of any purchaser shall be deemed guilty of a Class 1 misdemeanor and upon conviction fined not more than $1,000 or imprisoned not more than one year, or both.

13VAC5-91-10. Definitions.

The following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise.

"Administrator" means the Director of DHCD or his designee.

"Approved" as applied to a material, device, method of construction, registered building, or as otherwise used in this chapter means approved by the administrator.

"Building official" means the officer or other designated authority charged with the administration and enforcement of the USBC, or duly authorized representative.

"Compliance assurance agency" means an architect or professional engineer registered in Virginia, or an organization, determined by DHCD to be specially qualified by reason of facilities, personnel, experience, and demonstrated reliability, to investigate, test and evaluate industrialized buildings; to list such buildings complying with standards at least equal to this chapter; to provide adequate follow-up services at the point of manufacture to ensure that production units are in full compliance; and to provide a label as evidence of compliance ~~on each manufactured section or module~~.

"DHCD" means the Virginia Department of Housing and Community Development.

"ICC" means the International Code Council, Inc.

"Industrialized building" means a combination of one or more sections or modules, subject to state regulations and including the necessary electrical, plumbing, heating, ventilating, and other service systems, manufactured off-site and transported to the point of use for installation or erection, with or without other specified components, to comprise a finished building. Manufactured homes defined in § 36-85.3 of the Code of Virginia and certified under the provisions of the National Manufactured Housing Construction and Safety Standards Act (42 USC § 5401 et seq.) shall not be considered industrialized buildings for the purpose of this law.

"Label," "certification label," or "compliance assurance agency certification label" means the label required by 13VAC5-91-210.

"Model" means a specific design of an industrialized building designated by the producer of the building including production buildings with variations and options that do not affect compliance with the standards governing structural, plumbing, mechanical, or electrical systems or any other items governed by this chapter.

"Registered" means an industrialized building which displays a registration seal issued by DHCD in accordance with this chapter.

"Seal," "registration seal," or "Virginia registration seal" means the seal required by 13VAC5-91-260.

~~"SBCAO"~~ "SBCO" means the State Building ~~Code Administrative~~ Codes Office within DHCD.

"State Review Board" means the Virginia State Building Code Technical Review Board as established by § 36-108 of the Code of Virginia.

"This law" means the Virginia Industrialized Building Safety Law as embraced in Chapter 4 (§ 36-70 et seq.) of Title 36 of the Code of Virginia.

"USBC" means the Virginia Uniform Statewide Building Code (13VAC5-63).

13VAC5-91-20. Application and compliance.

A. In accordance with § 36-81 of the Code of Virginia, registered industrialized buildings shall be acceptable in all localities as meeting the requirements of the Industrialized Building Safety Law (Chapter 4 (§ 36-70 et seq.) of Title 36 of the Code of Virginia), which shall supersede the building codes and regulations of the counties, municipalities and state agencies. Local requirements affecting industrialized buildings, including zoning, utility connections, preparation of the site and maintenance of the unit shall remain in full force and effect. All building officials are authorized to and shall enforce the provisions of the Industrialized Building Safety Law (Chapter 4 (§ 36-70 et seq.) of Title 36 of the Code of Virginia) and this chapter.

B. In accordance with § 36-78 of the Code of Virginia, no person, firm or corporation shall offer for sale or rental, or sell or rent, any industrialized building subject to any provisions of this chapter unless it conforms with the applicable provisions of this chapter.

Further, any industrialized building constructed before January 1, 1972, shall remain subject to the ordinances, laws or regulations in effect at the time such industrialized building was constructed. Additionally, as a requirement of this chapter, any industrialized building bearing the label of a compliance assurance agency shall remain subject to the provisions of this chapter that were effective when such building was constructed, regardless of whether the building has been relocated.

C. In accordance with § 36-99 of the Code of Virginia and in accordance with the USBC, the installation or erection of industrialized buildings and alterations, additions, or repairs to industrialized buildings are regulated by the USBC and not this chapter. The USBC provides for administrative requirements for permits, inspections, and certificates [~~or~~ of] occupancy for such work.

D. ~~Shipping~~ Off-site manufactured intermodal freight containers ~~and portable on demand storage (PODS)~~, moving containers and storage containers placed on site temporarily or permanently for use as a storage container are not subject to this chapter.

13VAC5-91-30. Purpose.

The purpose of this chapter is to ensure safety to life, health, and property through compliance with uniform statewide construction standards for industrialized buildings.

13VAC5-91-40. Inspection and enforcement by administrator.

A. The ~~SBCAO~~ SBCO is designated as the administrator's representative for the enforcement of this chapter and shall act as the building official for registered industrialized buildings. It shall have

authority to make inspections during reasonable hours at the manufacturing facilities and at building sites where industrialized buildings are being installed. The ~~SBCAO~~ SBCO shall have authority to issue inspection reports for correction of violations caused by the manufacturer and to take such other actions as are required to enforce this chapter.

B. The ~~SBCAO~~ SBCO will maintain a list of approved compliance assurance agencies. Each manufacturer producing registered industrialized buildings will contract with one or more compliance assurance agencies for required evaluation, monitoring and inspection services. The contract will delineate the services to be provided by the compliance assurance agency. The compliance assurance agency will notify the ~~SBCAO~~ SBCO within 30 days of signing a new contract or terminating an existing contract with any manufacturer.

13VAC5-91-50. Right of entry and examination by administrator.

In accordance with § 36-82 of the Code of Virginia, the administrator shall have the right, at all reasonable hours, to enter into any industrialized building upon permission of any person who has authority or shares the use, access, or control over the building, or upon request from local officials having jurisdiction, for examination as to compliance with this chapter.

13VAC5-91-60. Notice of violation from administrator.

In accordance with § 36-82 of the Code of Virginia, whenever the administrator shall find any violation of this chapter, he shall order the person responsible therefor to bring the building into compliance within a reasonable time, to be fixed in the order. In addition, as a requirement of this chapter, the administrator may request assistance from the building official for enforcement of this section. Any order issued by the administrator pursuant to this section shall contain a statement explaining the right of appeal of the order.

13VAC5-91-70. Appeals.

Any person aggrieved by DHCD's application of this chapter shall be heard by the State Review Board established by § 36-108 of the Code of Virginia. Such appeal shall be submitted within 21 calendar days of receipt of DHCD's decision. A copy of the decision of DHCD to be appealed shall be submitted with the application for appeal. Failure to submit an application for appeal within the time limit established by this section shall constitute acceptance of DHCD's decision.

13VAC5-91-80. Limitation of manufacturer's liability.

The manufacturer of a registered industrialized building shall not be required to remedy violations caused by on-site work by others not under his control or violations involving components and materials furnished by others and not included with the registered industrialized building.

13VAC5-91-90. Penalty for violation.

In accordance with § 36-83 of the Code of Virginia, any person, firm or corporation violating any provisions of this chapter shall be considered guilty of a Class 1 misdemeanor and, upon conviction, shall be fined not more than $1,000.

13VAC5-91-100. Duties and responsibilities of building officials in the installation or erection of a registered industrialized building.

A. All building officials are authorized by § 36-81 of the Code of Virginia to enforce the provisions of this chapter and shall be responsible for and authorized to do the following:

1. Verify through inspection that the registered industrialized building displays the required state registration seal and the proper label of the compliance assurance agency.

2. Verify through inspection that the registered industrialized building has not been damaged in transit to a degree that would render it unsafe. If the building has been damaged, then the building official is authorized to require tests for tightness of plumbing systems and gas piping and an operational test to ensure that all luminaries and receptacles are operable.

3. ~~Prevent the use or occupancy of a registered industrialized building that in the opinion of the building official contains a serious defect or imminent safety hazard and notify the SBCAO immediately.~~ If warranted due to the nature of any violations discovered, the building official shall be permitted to require the correction of any violations of this chapter before occupancy of the registered industrialized building is permitted.

4. Notify the ~~SBCAO~~ SBCO of any apparent violations of this chapter ~~to include defects and noncompliance~~.

B. In accordance with § 36-99 of the Code of Virginia and the USBC, all site work associated with the installation or erection of an industrialized building is subject to the USBC. In addition, under the USBC, all administrative requirements for permits, inspections, and certificates of occupancy are also applicable.

13VAC5-91-115. Change of occupancy classification.

When the occupancy classification of a registered industrialized building is proposed to be changed, a compliance assurance agency shall inspect the building, including any disassembly necessary, to determine whether compliance may be achieved for a change of occupancy classification in accordance with ~~the USBC~~ this chapter. If factory plans are available, then disassembly is not required to the extent that the factory plans can be reasonably verified to reflect the actual construction. Once any necessary work is completed, the compliance assurance agency shall prepare a report documenting the method utilized for the change of occupancy and any alterations to the building to achieve compliance. When the report is complete, the compliance assurance agency shall (i) mark the building with a new compliance assurance agency label in accordance with 13VAC5-91-210, which replaces the existing label; (ii) place a new manufacturer's data plate on the building in accordance with 13VAC5-91-245, which replaces the existing manufacturer's data plate and reflects the new occupancy classification; and (iii) forward a copy of the report and new data plate to the ~~SBCAO~~ SBCO.

13VAC5-91-120. Unregistered industrialized buildings.

A. The building official shall determine whether any unregistered industrialized building complies with this chapter and shall require any noncomplying unregistered building to be brought into compliance with this chapter. The building official shall enforce all applicable requirements of this chapter including those relating to the sale, rental and disposition of noncomplying buildings. The

building official may require submission of full plans and specifications for each building. Concealed parts of the building may be exposed to the extent necessary to permit inspection to determine compliance with the applicable requirements. The building official may also accept reports of inspections and tests from individuals or agencies deemed acceptable to the building official.

B. ~~Unregistered industrialized buildings offered for sale in this Commonwealth shall be marked by a warning sign to prospective purchasers that the building is not registered in accordance with this chapter and must be inspected and approved by the building official. The sign shall be of a size and form approved by the administrator and shall be conspicuously posted on the exterior of the unit near the main entrance door. This requirement shall not apply to residential accessory buildings.~~

~~C.~~ An existing unregistered industrialized building may be registered in accordance with one of the following:

1. Where an unregistered building was constructed under an industrialized building program of another state and approved under such program, a compliance assurance agency shall prepare a report based on review of the plans and specifications and inspection of the building to determine whether there is compliance with the construction requirements of this chapter that were in effect on the date of manufacture of the building. If compliance is determined, the compliance assurance agency shall (i) mark the building with a compliance assurance agency label in accordance with 13VAC5-91-210, (ii) place a new manufacturer's data plate on the building in accordance with 13VAC5-91-245, (iii) mark the building with a registration seal in accordance with 13VAC5-91-260, and (iv) forward a copy of the report and new data plate to the ~~SBCAO~~ SBCO.

2. Where an unregistered building was not approved under an industrialized building program of another state and the date of manufacture can be verified, the compliance assurance agency shall inspect the building, including any disassembly necessary, to determine whether there is compliance with the construction requirements of this chapter that were in effect on the date of manufacture of the building. When factory plans are available, then disassembly is not required to the extent that the factory plans can be verified to reflect the actual construction of the building. When compliance with the construction requirements of this chapter that were in effect on the date of manufacture of the building is achieved, the compliance assurance agency shall prepare a report documenting compliance, outlining any changes made to the building, and certifying the building in accordance with clauses (i) through (iv) of subdivision 1 of this subsection.

3. When the date of manufacture of the existing unregistered building cannot be verified, the building shall be evaluated for compliance with the codes and standards specified in 13VAC5-91-160. The compliance assurance agency shall inspect the building, including any disassembly necessary, to determine whether there is compliance with these construction requirements. If compliance is achieved, the compliance assurance agency shall prepare a report documenting compliance, outlining any changes made to the building, and certifying the building in accordance with clauses (i) through (iv) of subdivision 1 of this subsection.

13VAC5-91-130. ~~Disposition of noncomplying building.~~ (Repealed.)

~~When a building is found to be in violation of this chapter, the building official may require the violations to be corrected before occupancy of the building is permitted.~~

13VAC5-91-140. Report to the ~~SBCAO~~ SBCO.

If the building is moved from the jurisdiction before the violations have been corrected, the building official shall make a prompt report of the circumstances to the ~~SBCAO~~ SBCO. The report shall include all of the following:

1. A list of the uncorrected violations.

2. All information contained on the label pertinent to the identification of the building, the manufacturer and the compliance assurance agency.

3. The number of the Virginia registration seal.

4. The new destination of the building, if known.

5. The party responsible for moving the building.

13VAC5-91-150. When modification may be granted.

~~A.~~ The administrator shall have the power upon request in specific cases to authorize modification of this chapter so as to permit certain specified alternatives where the objectives of this law can still be fulfilled. Such request shall be in writing and shall be accompanied by the plans, specifications and other information necessary for an adequate evaluation of the modification requested.

~~B. Before a modification is authorized, the building official may be afforded an opportunity to present his views and recommendations.~~

13VAC5-91-160. Use of model codes and standards.

A. Industrialized buildings produced after the effective date of the ~~2009~~ 2012 edition of this chapter shall comply with all applicable requirements of the codes and standards listed in subsection B of this section except that the following codes and standards may be used for ~~90 days~~ one year after the effective date of the ~~2009~~ 2012 edition of this chapter:

1. ICC International Building Code – ~~2006~~ 2009 Edition

2. ICC International Plumbing Code – ~~2006~~ 2009 Edition

3. ICC International Mechanical Code – ~~2006~~ 2009 Edition

4. National Fire Protection Association Standard Number 70 (National Electrical Code) – ~~2005~~ 2008 Edition

5. ICC International Fuel Gas Code – 2009 Edition

6. ICC International Energy Conservation Code – 2009 Edition

7. ICC International Residential Code – ~~2006~~ 2009 Edition

B. The following documents are adopted and incorporated by reference to be an enforceable part of this chapter:

1. ICC International Building Code – ~~2009~~ 2012 Edition

2. ICC International Plumbing Code – ~~2009~~ 2012 Edition

3. ICC International Mechanical Code – ~~2009~~ 2012 Edition

4. National Electrical Code – ~~2008~~ 2011 Edition

5. ICC International Fuel Gas Code – 2012 Edition

6. ICC International Energy Conservation Code – 2012 Edition

7. ICC International Residential Code – ~~2009~~ 2012 Edition

Note: As the ~~2009~~ 2012 editions of the International Codes are incorporated by reference as the construction standards for use with these regulations, this chapter is also referred to as the ~~2009~~ 2012 edition of the Virginia Industrialized Building Safety Regulations or the ~~2009~~ 2012 edition of this chapter.

The codes and standards referenced above may be procured from:

International Code Council, Inc.
500 New Jersey Avenue, NW, 6th Floor
Washington, DC 20001-2070

13VAC5-91-170. Amendments to codes and standards.

A. All requirements of the referenced model codes and standards that relate to fees, permits, certificates of use and occupancy, approval of plans and specifications, and other procedural, administrative and enforcement matters are deleted and replaced by the procedural, administrative and enforcement provisions of this chapter ~~and the applicable provisions of Chapter 1 of the USBC~~.

B. The referenced codes and standards are amended as set forth in the USBC.

13VAC5-91-180. Compliance assurance agencies.

A. Application ~~may~~ shall be made to the ~~SBCAO~~ SBCO for acceptance as a compliance assurance agency. Application shall be made under oath and shall be accompanied by information and evidence that is adequate for the ~~SBCAO~~ SBCO to determine whether the applicant is specially qualified by reason of facilities, personnel, experience and demonstrated reliability to investigate, test and evaluate industrialized buildings for compliance with this chapter, and to provide adequate follow-up and compliance assurance services at the point of manufacture.

B. Following a determination by the SBCO that an application is complete, the information contained in the application and any other information deemed necessary by the SBCO will be reviewed for approval or disapproval. If the application is approved, the applicant will be notified with an approval

letter for a two-year period from the date of the approval letter. If the application is disapproved, the applicant will be notified in writing of the reasons for the disapproval. The applicant may then resubmit the application within 30 days of the receipt of the notification of disapproval for reconsideration of approval.

C. Compliance assurance agencies that are already approved by the SBCO at the time of the effective date of this provision shall have 90 days from the effective date of this provision to apply for reapproval in accordance with subsections A and B of this section. Such agencies shall continue to be approved while the SBCO evaluates the reapplication. Compliance assurance agencies receiving an approval letter from the SBCO after the effective date of this provision shall apply for reapproval within 90 days prior to the expiration of the two-year approval period if continued approval as a compliance assurance agency is desired.

D. The SBCO may suspend or revoke the approval of a compliance assurance agency upon a determination that (i) approval or reapproval was based upon fraudulent or inaccurate information, (ii) a change in facts or circumstances renders the agency incapable of meeting its duties and responsibilities as a compliance assurance agency in a satisfactory manner, or (iii) the agency failed to discharge its duties and responsibilities as a compliance assurance agency in a satisfactory manner. In such cases, the SBCO will issue a suspension or revocation notice to the agency outlining the reasons for the actions and the terms, if any, for reinstatement.

13VAC5-91-190. Freedom from conflict of interest.

A compliance assurance agency shall not be affiliated with, nor influenced or controlled by, producers, suppliers or vendors of products in any manner which might affect its capacity to render reports of findings objectively and without bias. A compliance assurance agency is judged to be free of such affiliation, influence and control if it complies with all of the following conditions:

1. The agency has no managerial affiliation with producers, suppliers or vendors and is not engaged in the sale or promotion of any product or material.

2. The results of the agency's work accrue no financial benefits to the agency through stock ownership of, or other similar affiliation to, any producer, supplier or vendor of the product involved.

3. The agency's directors and other management personnel in their job capacities receive no stock option or other financial benefit from any producer, supplier or vendor of the product involved.

4. The agency has sufficient interest or activity that the loss or award of a specific contract to determine compliance of a producer's, supplier's or vendor's product with this chapter would not be a determining factor in its financial well-being.

5. The employment security status of the agency's personnel is free of influence or control by producers, suppliers or vendors.

13VAC5-91-200. Information required by the administrator.

All of the following information and criteria will be considered by the administrator in designating compliance assurance agencies:

1. Names of officers and location of offices.

2. Specification and description of services proposed to be furnished under this chapter.

3. Description of qualifications of personnel and their responsibilities, including an assurance that personnel involved in system analysis, design and plans review, compliance assurance inspections, and their supervisors comply with the requirements of the American Society for Testing and Material (ASTM) Standard Number E541-08 - Standard Specification for Agencies Engaged in System Analysis and Compliance Assurance for Manufactured Building or shall obtain ICC or DHCD certifications in the appropriate subject area within 18 months of employment and maintain such certifications in an active status.

4. Summary of experience within the organization.

5. General description of procedures and facilities to be used in proposed services, including evaluation of the model, factory follow-up, quality assurance, labeling of production buildings, and specific information to be furnished on or with labels.

6. Procedures to deal with any defective buildings resulting from oversight.

7. Acceptance of these services by independent accrediting organizations and by other jurisdictions.

8. Proof of independence and absence of conflict of interest.

The ASTM Standard Number E541-08 may be procured from:

American Society for Testing and Materials
100 Barr Harbor Drive
West Conshohocken, PA 19428-2959

13VAC5-91-210. Compliance assurance agency certification label.

~~Every manufactured section or module of a registered~~ A. Registered industrialized ~~building~~ buildings shall be marked with ~~a label~~ certification labels supplied by the compliance assurance agency that includes the name and address of the compliance assurance agency and the numbers of the certification ~~label number~~ labels. The labels shall be applied to registered industrialized buildings intended for sale or use in Virginia and shall be applied prior to the shipment of the building from the place of manufacture. The labels shall be applied by the compliance assurance agency or by the manufacturer when so authorized by the compliance assurance agency.

B. Registered industrialized buildings shall bear one certification label on each manufactured section or module, or as an alternative, the certification label for each manufactured section or module may be placed in one location in the completed building.

13VAC5-91-220. Mounting of compliance assurance agency certification label.

To the extent practicable, the certification label shall be installed so that it cannot be removed without destroying it. The label shall be applied in the vicinity of the electrical distribution panel or in another location that is readily accessible for inspection and shall be installed near the registration seal. ~~When a building is comprised of more than one section or module, the required label may be furnished as a single label for the entire building provided each section or module is marked by the compliance assurance agency in a clearly identifiable manner provided with or on the label.~~

13VAC5-91-240. ~~Label control~~ Control of compliance assurance agency certification label.

The labels shall be under direct control of the compliance assurance agency until applied by the manufacturer to buildings that comply fully with this chapter. The manufacturer shall place its order for labels with the compliance assurance agency. The manufacturer is not permitted to acquire labels from any other source. Each compliance assurance agency shall keep a list of the serial numbers of labels issued to each manufacturer's plant in such manner that a copy of the record can be submitted to the administrator upon request.

13VAC5-91-245. Manufacturer's data plate.

A. All of the following information shall be placed on a permanent manufacturer's data plate in the vicinity of the electrical distribution panel or in some other location that is readily accessible for inspection. The compliance assurance agency shall approve the form and location of the data plate and shall ensure that the data plate is complete:

1. Manufacturer's name and address.

2. Compliance assurance agency certification number.

3. Serial number of each module of the building.

4. Serial number of the Virginia registration seal.

5. Date of manufacture of the building.

6. List of codes and standards under which the building was evaluated and constructed and the type of construction and occupancy classification under those codes and standards.

7. Design live roof load, design floor live load, design wind speed, and design ground snow load.

8. Thermal resistance ("R") values.

9. Special conditions or limitations concerning the use of the building under the codes and standards applicable to the building; however, a list of such conditions or limitations that are furnished separately with the building shall satisfy this requirement.

10. Special instructions for handling, installation and erection of the building,; however, a list of such instructions that are furnished separately with the building shall satisfy this requirement.

11. Designation of electrical service ratings, directions for water and drain connections and, where applicable, identification of permissible type of gas for appliances.

12. Name of manufacturer and model designation of major factory installed appliances.

B. The manufacturer shall maintain copies of the data plate and reports of inspection, tests and any corrective action taken for a minimum period of 10 years from the date of manufacture of the building.

13VAC5-91-250. Industrialized buildings eligible for registration.

Any industrialized building must meet all of the following requirements to be registered and eligible for a Virginia registration seal:

1. The design of the building has been found by a compliance assurance agency to be in full compliance with this chapter. Approved designs shall be evidenced by the stamp and date of approval on each design sheet by the compliance assurance agency.

2. The compliance assurance agency has conducted any necessary testing and evaluation of the building and its component parts.

3. The compliance assurance agency has provided the required inspections and other quality assurance follow-up services at the point of manufacture to assure the building complies with this chapter.

4. The building contains the appropriate evidence of such compliance through a label permanently affixed by the compliance assurance agency.

13VAC5-91-260. Registration seal for industrialized buildings.

A. Registered industrialized buildings shall be marked with approved registration seals issued by the ~~SBCAO~~ SBCO. The seals shall be applied ~~by the manufacturer~~ to a registered industrialized building intended for sale or use in Virginia prior to the shipment of the building from the place of manufacture. The seals shall be applied by the compliance assurance agency or by the manufacturer when authorized to do so by the compliance assurance agency.

B. Registered industrialized buildings shall bear one registration seal on each manufactured section or module, or, as an alternative, the registration seal for each manufactured section or module may be placed in one location in the completed building.

C. Approved registration seals ~~may~~ shall be purchased [by the compliance assurance agency] from the ~~SBCAO~~ SBCO in advance of use. The fee for each registration seal shall be $75, except that the fee for each registration seal for buildings constructed as Group R-5 under Part I of the USBC shall be $50. Fees shall be submitted by checks made payable to “Treasurer of Virginia” or shall be submitted by electronic means. Payment for the seals must be received by the ~~SBCAO~~ SBCO before the seals can be sent to the user. [The compliance assurance agency shall maintain permanent records of seals purchased, including a record of any manufacturers receiving such seals.]

D. To the extent practicable, the registration seal shall be installed so that it cannot be removed without destroying it. ~~It~~ The seal shall be applied in the vicinity of the electrical distribution panel or in another

location that is readily accessible for inspection and shall be installed near the certification label ~~applied by the compliance assurance agency~~.

[~~E. The compliance assurance agency or the manufacturer under the supervision of the compliance assurance agency shall maintain permanent records of the disposition of all Virginia registration seals obtained by the compliance assurance agency or manufacturer.~~

~~F.~~ E.] Refunds of seals shall be in accordance with § 36-85.1 of the Code of Virginia. An administrative and processing fee of 25% of the amount of the refund due shall be deducted from the refund; however, such deduction shall not exceed $250.

13VAC5-91-270. Manufacturer's installation instructions and responsibilities of installers.

A. The manufacturer of each industrialized building shall provide specifications or instructions, or both, with each building for handling, installing or erecting the building. Such instructions may be included as part of the label from the compliance assurance agency or may be furnished separately by the manufacturer of the building. The manufacturer shall not be required to provide the foundation and anchoring equipment for the industrialized building.

B. Persons or firms installing or erecting registered industrialized buildings shall install or erect the building in accordance with the manufacturer's instructions.

C. Where the installation or erection of an industrialized building utilizes components that are to be concealed, the installer shall notify and obtain approval from the building official prior to concealment of such components unless the building official has agreed to an alternative method of verification.

Note: The Virginia Department of Professional and Occupational Regulation's Board for Contractors requires licenses for certain activities related to the industrialized building industry. For more information, contact the Board for Contractors.

Virginia Certification Standards

2012 Final Regulations
(No changes from proposed regulations)

13VAC5-21-10. Definitions.

A. The following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise:

"Applicant" means a person seeking a certificate.

"BCAAC" means the Building Code Academy Advisory Committee appointed pursuant to subdivision 7 of § 36-137 of the Code of Virginia.

"BHCD" means the Virginia Board of Housing and Community Development.

"Certificate" means a certificate of competence issued pursuant to subdivision 6 of § 36-137 of the Code of Virginia concerning the content, application, and intent of specified subject areas of the building and fire prevention regulations promulgated by the BHCD and issued to present or prospective personnel of local governments and to any other persons seeking to become qualified to perform inspections pursuant to Chapter 6 (§ 36-97 et seq.) of Title 36 of the Code of Virginia, Chapter 9 (§ 27-94 et seq.) of Title 27 of the Code of Virginia, and any regulations adopted thereunder, who have completed training programs or in other ways demonstrated adequate knowledge.

"Certificate holder" means a person to whom a certificate has been issued.

"Code academy" means the Virginia Building Code Academy established under subdivision 14 of § 36-139 of the Code of Virginia or individual or regional training academies accredited by the department pursuant to subdivision 7 of § 36-137 of the Code of Virginia.

~~"DFP" means the Virginia Department of Fire Programs.~~

"Department" means the Virginia Department of Housing and Community Development.

<u>"Nongovernmental employee" means any person not employed by a locality collecting and transmitting the fee levy to the department in accordance with subdivision 7 of § 36-137 of the Code of Virginia.</u>

"SFPC" means the Virginia Statewide Fire Prevention Code (13VAC5-51).

"State Review Board" means the Virginia State Building Code Technical Review Board established under § 36-108 of the Code of Virginia.

"USBC" means the Virginia Uniform Statewide Building Code (13VAC5-63).

“VADR” means the Virginia Amusement Device Regulations (13VAC5-31).

B. Words and terms used in this chapter that are defined in the USBC, VADR, or SFPC and that are not defined in this chapter shall have the meaning ascribed to them in those regulations unless the context clearly indicates otherwise.

13VAC5-21-20. Purpose.

The purpose of this chapter is to establish standards for applicants for a certificate and standards to be used by the department in the evaluation and determination of a person’s eligibility for the issuance of certificates.

13VAC5-21-31. Qualification and examination requirements.

A. An applicant for a certificate in categories associated with the USBC or the SFPC shall provide a written or electronic endorsement from the code official or the code official’s supervisor in the locality in which they are employed certifying that the applicant complies with the qualification section in the USBC or the SFPC for each type of certificate sought. When the applicant for a certificate in categories associated with the USBC or the SFPC is a ~~nongovernment~~ nongovernmental employee, the applicant shall provide written or electronic documentation that the applicant complies with the qualification section in the USBC or the SFPC as it would relate to the applicant's job responsibilities for each type of certificate sought.

B. An applicant for a certificate in categories associated with the VADR shall provide a written endorsement from the applicant's supervisor or a person having a similar relationship to the applicant certifying that the applicant is generally qualified to conduct activities related to the VADR.

C. Applicants for all certificates shall provide proof of successful completion of approved examinations for each certificate sought~~, except as provided for in 13VAC5-21-45~~ based on current certification examination requirements. Applications submitted with passing grades on approved examinations older than six years from the date of passing will be denied except where the applicant can demonstrate the maintenance of a current certification issued by the approved testing agency. The department may consider related certifications maintained by the certifying entity. The department shall maintain a list of approved testing agencies and examinations that meet nationally accepted standards for each certificate offered. For information on approved testing agencies and examinations contact the department’s ~~Technical Assistance Services Office, 501 N. 2nd St.~~ Training and Certification Office, 600 East Main Street, Suite 300, Richmond, VA 23219, telephone (804) 371-7180.

13VAC5-21-41. Certification categories and training requirements.

A. The department maintains a list of all certificates offered and the list sets out the required training necessary to attend and complete to obtain a certificate. ~~This section also contains specific training requirements for some certificates offered that may be duplicated on the list or~~

~~that may be in addition to those on the list.~~ Alternatives to the training requirements set out in 13VAC5-21-45 shall be ~~permitted~~ considered for all certificates offered except that no alternative shall be accepted for the code academy core module.

B. Applicants for certificates shall attend and complete the code academy core module. ~~In addition to~~ After the completion of the core module, applicants ~~for the following certificates~~ are required to attend and complete the ~~following~~ code academy training as set out in a list maintained by the department, except as provided for in 13VAC5-21-45~~:~~. All required training must be completed within no more than six years prior to the date the application is submitted and the requirements for training are based on those in effect at the time of application.

~~Certificate~~	~~Code Academy Training~~
~~Building official~~	~~Advanced official module~~
~~Fire official~~	~~Advanced official module and the 1031 school as administered by DFP~~
~~Building maintenance official~~	~~Advanced official module and the property maintenance module~~
~~Fire prevention inspector~~	~~The 1031 school as administered by DFP~~
~~Amusement device inspector~~	~~Amusement device inspection module~~

13VAC5-21-45. Alternatives to ~~examination and~~ training requirements.

~~A. An applicant for a certificate with the written endorsement or documentation required by 13VAC5-21-31 may submit a written request to the department to approve an equivalent examination by a testing agency not on the list of approved testing agencies to satisfy the examination requirements of 13VAC5-21-31. BCAAC may be consulted with in any such consideration.~~

~~B.~~ Upon written request, alternative training or a combination of training, education or experience to satisfy the training requirements of 13VAC5-21-41 may be approved, provided that such alternatives or combinations are determined to be equivalent to that required. However, as provided in 13VAC5-21-41, no substitutions shall be approved for the code academy core module. The types of combinations of education and experience may include military training, college classes, technical schools or long-term work experiences, except that long-term work experiences shall not be approved as the sole substitute to satisfy the training requirements. BCAAC may be consulted with in any such consideration.

13VAC5-21-51. Issuance and maintenance of certificates.

A. Certificates will be issued when an applicant has complied with the current applicable requirements of this chapter. Certificate holders will be classified as active ~~or~~, inactive or lapsed. An active certificate holder is a person who is certified and who has attended all periodic training courses designated by the department and complied with all continuing education requirements subsequent to becoming certified. An inactive certificate holder is a person who is certified ~~but~~ and has ~~not~~ either attended ~~all such~~ the periodic training courses designated by the department or met the continuing education requirements, but not both. An inactive certificate holder may

request reinstatement as an active certificate holder after completing ~~make-up~~ makeup training courses authorized by the department. A lapsed certificate holder is a person who is certified but has not attended all periodic training courses designated by the department and who has not complied with all continuing education requirements. A lapsed certificate holder may request reinstatement as an active certificate holder after completing makeup training courses or examinations, or both, as authorized by the department. Provisional certificates may also be issued in accordance with subsection C of this section. Requirements for periodic training courses and continuing education requirements are set out in subsection D of this section.

B. All certificates issued since June 1978 are considered to be valid unless revoked or suspended, except that provisional certificates shall remain valid as set out under subsection C of this section.

C. A provisional certificate may be issued to (i) a person who has been directed by the department to obtain a certificate; (ii) an applicant requesting a certificate under the alternative ~~examination or~~ training provisions of 13VAC5-21-45; ~~or~~ (iii) an applicant when the training required ~~training~~ by the department has not been provided or offered; (iv) an inactive or lapsed certificate holder when the issuance of a provisional certificate is determined to be warranted by the department; or (v) a person who due to extenuating and warranting circumstances either on behalf of the code academy or beyond the person's control, has not fully complied with the eligibility requirements of training and competency established herein.

Such a provisional certificate may be issued when the applicant or person has (i) provided the written endorsement or documentation required by 13VAC5-21-31, (ii) satisfactorily completed the code academy core module, and (iii) completed any training through the code academy or through other providers determined to warrant the issuance of the provisional certificate.

The provisional certificate is valid for a period of one year after the date of issuance and shall only be issued once to any individual, except that a provisional certificate shall remain valid when the required training has not been provided or offered.

D. All certificate holders shall attend periodic maintenance training as designated by the department and shall attend 16 hours of continuing education every two years as approved by the department. If a certificate holder possesses more than one certificate, the 16 hours shall satisfy the continuing education requirement for all certificates.

13VAC5-21-61. Sanctions.

When the BHCD determines a certificate holder has failed to (i) comply with an order issued by the State Review Board ~~or failed to~~, (ii) meet the required training or testing requirements, or (iii) attend periodic maintenance training or continuing education, or both, a warning letter may be issued to the certificate holder or a certificate may be revoked or suspended by the BHCD. In such cases, a noncompliance notice shall be issued to the certificate holder and notification shall be provided to the locality or company employing the certificate holder. Exceptions to the issuance of a noncompliance notice for failing to comply with the continuing education requirements may be considered where there is a separation from employment by medical or

military leave for 12 consecutive months or more during the continuing education period. A record of any action taken pursuant to this section shall be permanently retained in the training record of the certificate holder.

13VAC5-21-70. Appeal.

Decisions of the BHCD regarding an applicant for a certificate or a certificate holder shall be final unless appealed.

Actions under this regulation are governed by the Virginia Administrative Process Act (§ 2.2-4000 et seq. of the Code of Virginia) and are subject to judicial review in accordance with that law.

Virginia Standards for Individual and Regional Code Academies

2012 Final Regulations
(No changes from proposed regulations)

13VAC5-80-10. Definitions.

The following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise:

"BHCD" means the Virginia Board of Housing and Community Development.

"Certificate of Accreditation" means the certificate issued to an individual or regional code academy that accredits that code academy to conduct educational programs for persons seeking to become BHCD-certified for enforcement of Virginia's building-related and fire-related regulations.

"Code Academy" means an educational institution established in accordance with § 36-137 of the Code of Virginia that is accredited by DHCD to conduct classes to prepare an individual to pursue an occupation in the inspection profession relating to enforcement of the USBC, VADR, and SFPC, or to upgrade an individual in technical phases of the USBC, VADR, and SFPC.

"DHCD" means the Virginia Department of Housing and Community Development.

"Operator" means the person designated as the executive official in charge of the ~~code academy~~ Code Academy.

"SFPC" means the Virginia Statewide Fire Prevention Code (13VAC5-51).

"Train the Trainer" means the DHCD training provided for ~~code academy~~ Code Academy instructors.

~~"TRB" means the Virginia State Building Code Technical Review Board established under § 36-108 of the Code of Virginia.~~

"USBC" means the Virginia Uniform Statewide Building Code ~~(13VAC5-62)~~ (13VAC5-63).

"VADR" means the Virginia Amusement Device Regulations (13VAC5-31).

13VAC5-80-40. Appeals.

Decisions of DHCD under this regulation are case decisions under the Virginia Administrative Process Act (§ 2.2-4000 et seq. of the Code of Virginia) and are subject to judicial review in accordance with that law.

13VAC5-80-50. Listing of certified academies.

DHCD shall maintain a list of code academies that hold valid Certificates of Accreditation, which shall be available for public review.

13VAC5-80-60. Application for accreditation.

A. Any Code Academy seeking a Certificate of Accreditation shall submit the information required by these standards, on forms provided by DHCD, 120 calendar days prior to the date for which approval is requested.

B. The operator shall reimburse DHCD for the cost of processing and monitoring the accreditation.

C. The following information shall be submitted as part of the application:

1. A budget documenting the financial resources available to equip, maintain, and operate the ~~code academy~~ Code Academy and proposed expenditures;

2. The educational and teaching qualifications of the operator and instructors;

3. The individual courses of instruction ~~which~~ that will be offered, and the purpose of such instructions, and an instruction schedule including proposed dates, times, and instructors. The course listing shall include state academy courses required for certification and continuing education programs;

4. A listing of any equipment available to aid instruction in each field;

5. The maximum anticipated enrollment to be accommodated with the equipment available in each specified field, and the ratio of students to instructors, which shall not exceed 50 to 1 for lecture format courses, and 20 to 1 for interactive courses;

6. The locations where such instruction will take place; and

7. Any additional information that DHCD may deem necessary to carry out the provisions of this chapter.

D. Each application for a Certificate of Accreditation shall also include the following commitments:

1. Conduct the Code Academy in accordance with all standards and regulations promulgated by DHCD and BHCD;

2. Permit DHCD to inspect the Code Academy at any time, and to provide all information pertaining to the activities of the Code Academy or its financial condition as requested by DHCD;

3. ~~The~~ Use the levy retained under § 36-137 of the Code of Virginia ~~shall not be used~~ only for purposes ~~other than~~ directly relating to the operation of the Code Academy;

4. Conduct all state certification courses in accordance with DHCD content and delivery requirements;

5. In the event that the Code Academy should close, a list of enrolled students who have not completed their program of study, and the amount of the course ~~which~~ that they have completed, shall be submitted to DHCD;

~~5.~~ 6. Maintain current, complete and accurate student records, including a record of all hours of work completed by each student~~.~~;

7. Submit quarterly activity reports on forms provided by DHCD. The reports shall include:

a. Training activities conducted during a quarter;

b. Expenditures for conducted training activities;

c. Expenditures for related activities; and

d. Anticipated adjustments to approved activities at the time of accreditation; and

8. Submit final activity and budget reports on forms provided by DHCD within 90 days prior to the end of the accreditation period. The reports shall include:

a. A training and activity report including courses, programs, instructors and student statistics;

b. A report detailing related activities;

c. A report on expenditures on all activities and purchases including revenue collected and any carryover balance; and

d. Summary of the accreditation year.

13VAC5-80-70. Certificate display.

The Certificate of Accreditation shall be displayed on the premises of the Code Academy in an area which is readily accessible to the public.

13VAC5-80-80. Renewal of certificate.

A. Every Code Academy shall apply for renewal of its Certificate of Accreditation no later than April 15 of each year, on forms provided by DHCD. The ~~application for renewal~~ following

information shall ~~include a current training schedule.~~ be submitted as part of the renewal application:

1. Proposed state certification course and continuing education training schedule for accreditation for the renewal period, including a delivery schedule, instructors, target participants, site logistics, and proposed budget;

2. Proposed related activities such as, but not limited to, equipment and related training purchases, conferences, and outside training events;

3. Anticipated revenue for the operation of the academy; budget for all training activities, academy staffing, and related purchases; and anticipated carryover funds;

4. Any changes to the initially approved instructor list; and

5. The following commitments:

a. Conduct the Code Academy in accordance with all standards and regulations promulgated by DHCD and BHCD;

b. Permit DHCD to inspect the Code Academy at any time and provide all information pertaining to the activities of the Code Academy or its financial condition as requested by DHCD;

c. Use the levy retained under § 36-137 of the Code of Virginia only for purposes directly relating to the operation of the Code Academy;

d. Conduct all state certification courses in accordance with DHCD content and delivery requirements;

e. In the event that the Code Academy should close, submit to DHCD a list of enrolled students who have not completed their program of study and the amount of the course that they have completed; and

f. Maintain current, complete, and accurate student records, including a record of all hours of work completed by each student.

B. Every Certificate of Accreditation shall expire upon failure to obtain renewal by June 30 of each year.

13VAC5-80-90. Personnel qualifications.

A. Any director of the Code Academy shall demonstrate a working knowledge of USBC, VADR and SFPC training-related technology and shall possess a minimum of two years of supervisory experience. Managerial experience and a college degree from an accredited college or university are preferred.

B. All instructors shall have knowledge and experience in the trade or profession in which the instructor teaches. Instructors teaching the state-required certification courses shall have DHCD-approved experience as an instructor or shall have successfully completed a "Train the Trainer" or DHCD-approved equivalent course and hold active DHCD instructor certification and active certifications in the discipline in which they are teaching.

C. DHCD shall be notified of any staff or instructor changes within the ~~code academy~~ Code Academy subsequent to receiving accreditation. Staff changes forwarded to DHCD shall include qualifications of the instructors.

13VAC5-80-100. Instructional program.

The instructional program shall consist of those courses and subjects, related to the technical provisions of the national model codes and referenced standards, which the Code Academy has been accredited to offer, and be consistent with the instructional programs offered by DHCD. DHCD reserves the sole right to provide programs based on Chapter 1 of the USBC, VADR and SFPC. Attendance at any local or regional Code Academy shall not satisfy mandatory attendance at programs administered by DHCD on any changes to the USBC, VADR or SFPC.

13VAC5-80-110. Application for additional courses.

The operator shall present a supplementary application to DHCD for approval of additional courses of instruction.

13VAC5-80-120. ~~Withdrawal~~ Approval of initial application, withdrawal of course approval, and revocation, suspension, or refusal to renew a certificate of accreditation.

A. DHCD may deny an initial application; withdraw course approval~~,~~; or revoke, suspend, or refuse to renew~~,~~ any ~~code academy's~~ Code Academy's Certificate of Accreditation for any of the following:

1. ~~Violation of~~ Violating any provision of this chapter;

2. Furnishing false, misleading, or incomplete information to DHCD, or failure to furnish information requested by DHCD within a reasonable time;

3. Presenting to a student any information that is false, misleading, or fraudulent;

4. ~~Failure~~ Failing to maintain the premises in a safe and sanitary condition as required by law, state regulation, or local ordinance;

5. Failing to maintain adequate financial resources to satisfactorily conduct the courses of instruction offered, or to retain an adequate, qualified staff.

B. DHCD shall notify the operator by certified mail 30 calendar days prior to the effective date of any withdrawal of course approval, or revocation of, suspension of, or refusal to renew~~,~~ a Certificate of Accreditation.

13VAC5-80-130. Return of certificate.

Any Certificate of Accreditation issued to a Code Academy shall be returned to DHCD immediately, by registered mail, for the following:

1. Revocation; or

2. Voluntary closure of institution; or

3. Any other cause deemed sufficient by DHCD.

13VAC5-80-140. Records.

DHCD shall maintain records on all actions, findings and recommendations concerning the initial application approval or denial, or approval of, revocation of, suspension of, or refusal to renew any Certificate of Accreditation. All records shall be available to the public, upon request.