

**Virginia Board of Housing and Community Development  
STATEWIDE FIRE PREVENTION CODE  
DEVELOPMENT COMMITTEE  
2021 CODE CHANGE CYCLE – BOOK 1, PART 2  
October 3, 2022**



Virginia Board of Housing and Community Development

STATEWIDE FIRE PREVENTION CODE DEVELOPMENT COMMITTEE  
2021 CODE CHANGE CYCLE – BOOK 1, PART 2

October 3, 2022

Tab 5 – General Stakeholder Workgroup Meeting Summaries (SFPC Only)

- March 4, 2022
- April 15, 2022
- June 10, 2022

Tab 6 – Statewide Fire Prevention Code Sub-Workgroup Meeting Summaries

- February 16, 2022
- March 7, 2022
- April 18, 2022
- May 11, 2022

Tab 7 - Active Shooter and Hostile Threats in Public Buildings Study Group  
Report

Tab 8 – Public Comments

- Public Hearing Transcript
- Public Comments (received by email)

Tab 9 – Misc



## Tab 5

### General Stakeholder Workgroup Meeting Summaries

<b>Meeting</b>	<b>Page Number</b>
General Stakeholder Workgroup Meeting March 4, 2022	Tab 5 – Page 1
General Stakeholder Workgroup Meeting April 15, 2022	Tab 5 – Page 3
General Stakeholder Workgroup Meeting June 10, 2022	Tab 5 – Page 7



## General Stakeholder Workgroup Meeting

March 4, 2022 9:00 a.m. – 9:24 a.m.

Virtual Meeting: <https://vadhcd.adobeconnect.com/va2021cdc/>

### VMC & SFPC Proposals

#### ATTENDEES:

#### **VA Department of Housing and Community Development (DHCD) Staff:**

**Jeff Brown:** *State Building Codes Director, State Building Codes Office (SBCO)*

**Richard Potts:** *Code Development and Technical Support Administrator, SBCO*

**Paul Messplay:** *Code and Regulation Specialist, SBCO*

**Florin Moldovan:** *Code and Regulation Specialist, SBCO*

**Travis Luter:** *Code and Regulation Specialist, SBCO*

**Jeanette Campbell:** *Administrative Assistant, Building and Fire Regulations (BFR)*

**Kyle Flanders:** *Senior Policy Analyst, Policy and Legislative Office*

#### **Group Participants:**

**Andrew Milliken:** *Stafford County Fire and Rescue, Representing himself*

**Bryan Holland:** *National Electrical Manufacturer's Association (NEMA)*

**Robby Dawson:** *National Fire Protection Association (NFPA)*

**Ron Clements:** *Chesterfield Building Official*

**Steve Shapiro:** *Apartment and Office Building Association (AOBA), Virginia Apartment Management Association (VAMA)*

## **Welcome:**

Jeff Brown: Briefly reviewed the 2021 Code Development Cycle workflow. He shared the presentation on screen and in the file pod available to download. Highlights:

- tentative dates
- cdpVA web site
- base documents
- meeting types and topics

Participants introduced themselves, and who they represent.

Jeff: Asked participants to stay muted when not speaking, to let the group know if they are speaking for themselves or the group they represent, and to be clear on voting in favor of or in opposition to the proposal.

## **Proposals:**

### **FP901.6.3.2-21**

Andrew Milliken: Most of the annual on-site inspection records are kept electronically. This proposal would require a physical tag or sticker to be placed on the equipment, when the inspection is completed in accordance with section 901.6.1. This proposal was brought to the SFPC Sub-Workgroup, and had some revision based on recommendations from that meeting. Primarily, there was a sentence added to also require a physical tag for “all other” inspections in accordance with the applicable reference standards.

Jeff: Seeing no other discussion, this will be marked consensus for approval as modified. CAM

### **FP901.4.8-21**

Andrew: This proposal was brought to the SFPC Sub-workgroup and had some modification of the wording for clarity. The proposal says that building components such as walls, ceilings and ceiling tiles, which are expected to be there during construction of the fire protection system, and are critical to the operation of the system, are maintained. This section can be cited when there are holes, missing walls, ceiling tiles, etc.

Robbie Dawson: (for himself) For the language used, “Where building components...are required by the installation standard”, where are ceiling tiles required?

Andrew: NFPA 13 and NFPA 72 both require smooth continuous ceiling.

Jeff: Seeing no other discussion, this will be marked consensus for approval as modified. CAM

### **FP1201.3-21**

Jeff: This proposal was agreed to by the SFPC Sub-Workgroup, and the group became a co-proponent.

Andrew: This section was deleted from the 2018 SFPC, assuming that it was related to construction. It’s being added back in to ensure that the overall capacity of the energy storage systems do not exceed the maximum allowable quantity specified in the building code. This is similar to the way hazardous materials are handled. The applicable building code would have a threshold for when additional requirements would be necessary for energy storage systems.

Bryan Holland: He (NEMA) fully supports this. He asked why the first sentence was modified from the base model code, where the language about approval was put at the end, instead of at the beginning. He asked if the language could perhaps read “and as approved by the building official”

Andrew: The language has been used to ensure that the sections are not construction-related, so it was done for that purpose.

Jeff: Seeing no other discussion, this will be marked consensus for approval. CA

## **Next Steps:**

Jeff: Thanked everyone for their participation and let them know that residential and trade workgroup meetings are the remaining ones scheduled in March. The next cycle of workgroup meetings will start in April.



## General Stakeholder Workgroup Meeting

April 15, 2022 9:00 a.m. – 10:38 a.m.

Virtual Meeting: <https://vadhcd.adobeconnect.com/va2021cdc/>

### VMC & SFPC Proposals

#### ATTENDEES:

#### VA Department of Housing and Community Development (DHCD) Staff:

**Jeff Brown:** *State Building Codes Office Director, State Building Codes Office (SBCO)*

**Richard Potts:** *Code Development and Technical Support Administrator, SBCO*

**Paul Messplay:** *Code and Regulation Specialist, SBCO*

**Florin Moldovan:** *Code and Regulation Specialist, SBCO*

**Jeanette Campbell:** *Administrative Assistant, Building and Fire Regulations (BFR)*

#### Group Participants:

**Andrew Clark:** *Homebuilders Association of Virginia (HBAV)*

**Andrew Milliken:** *Virginia Fire Services Board (VFSB) - Fire Codes and Standards Committee*

**Dale Powers:** *Virginia Elevator Safety Association (VAESA)*

**David Settle:** *VAESA*

**Joshua Davis:** *Virginia State Fire Marshal's Office*

**Lee Stoermer:** *Loudoun County Fire Marshal's Office*

**Linda Hale:** *Virginia Fire Prevention Association (VFPA)*

**Matthew Mertz:** *Fairfax County*

**Michael Henley:** *VAESA, Virginia Department of General Services (DGS)*

**Michael Redifer:** *VAESA*

**Paula Johnson:** *VAESA*

**Ron Clements:** *Chesterfield Building Official, representing himself*

**Sarah Thomas:** *Virginia Association for Commercial Real Estate*

**Steve Shapiro:** *Apartment and Office Building Association (AOBA), Virginia Apartment Management Association (VAMA)*

## **Welcome:**

Paul Messplay: Gave an Adobe Connect tutorial of the features available.

Jeff Brown: Briefly reviewed the 2021 Code Development Cycle workflow. He shared the presentation on screen and in the file pod available to download. Highlights included:

- DHCD staff were identified by name
- tentative dates in the 2021 Code Development Cycle
- final phase change – no new proposals accepted after May 1<sup>st</sup> deadline
- cdpVA and DHCD web sites
- base documents
- meeting types and topics

Participants introduced themselves, and who they represent.

Jeff: Noted that the meeting agendas are prepared and sent out well in advance of the meetings. He encouraged group members to review proposals and contact proponents if needed before the General Workgroup meetings, so that potential issues could be discussed and consensus reached when practicable. He asked participants to stay muted when not speaking, to let the group know if they are speaking for themselves or for the group they represent, and to be clear on voting in favor of or in opposition to the proposals.

## **Proposals:**

### **FP103.1-21 – SFPC SWG Proposal**

Jeff: This proposal is from the SFPC Sub-Workgroup, where all the items on the spreadsheet were discussed at length and the proposal as a whole was voted as Consensus for Approval.

Steve Shapiro: Supports the proposal.

Andrew Milliken: Supports the proposal.

Jeff: With no additional discussion or comments heard, this was marked as Consensus for Approval.

### **FP107.11-21**

Jeff: This proposal from Joshua Davis was submitted after the last SFPC Sub-Workgroup meeting, so it was not discussed in that group.

Joshua Davis: He will bring the proposal to the next SFPC Sub-Workgroup meeting for comments, but he would be happy to answer any questions today in this meeting. This proposal is about fees levied by the State Fire Marshal's Office for recovery of costs. The State Fire Marshal's Office is funded 60% through the general fund and 40% through revenue recovery for permit and inspection services. The current 2018 fee schedule still reflects the fees set in 2003. The purpose of the proposal is to update the fees according to the increase in costs since 2003. Permits required for food trucks were set in the 2018 code, but there were no associated fees set for the Fire Marshal to recover costs. This proposal sets the fee for that type of permit. Further in the document, there are also new fees listed, which were never levied in the past. These fees are set in the fire code for the whole state. Many localities were appraised to see what a good average price would be for the whole state.

Steve: Asked Joshua if he could clarify when the State Fire Marshal would be involved vs. the local Fire Marshal, and when these type of fees would be collected for the state.

Joshua: The State Fire Marshal is the fire code official for any locality that hasn't adopted the fire code and appointed an official to enforce the code. Currently, the State Fire Marshal is in charge of 62 of 95 districts in Virginia. The State Fire Marshal is also the fire code official for all state facilities, such as state universities, correctional facilities, Capitol buildings, etc. Fees for mobile food trucks are charged and collected by either the State or local Fire Marshal, based on the locality where they are registered. Any food truck coming into Virginia from another state would need to get a permit from the State Fire Marshal.

Steve: Asked Joshua to clarify if item #7 about fireworks was under the purview of the State Fire Marshal.

Joshua: Only if the locality is not involved. If the locality is already involved, the State Fire Marshal would not charge a separate fee.

Jeff: Asked if there were any other comments or questions. As none were given, this proposal was marked as Carried Over to be presented at the SFPC Sub-workgroup before coming back to the general Workgroup in June. Anyone is invited to attend the Sub-workgroup, but only group members will vote on proposals.

**FP107.12-21**

Jeff: This is a DHCD staff proposal. It is a companion proposal to one made in the USBC. There was a change in oversight of Family Day Homes put into effect on July 1, 2021. Previously, oversight and licensing was done by the Department of Social Services. Family Day Homes are now licensed by the Department Of Education. There was no change to the fee structure in this proposal. Hearing no further discussion, this was marked Consensus for Approval.

**PM505.3-21**

Ron Clements: This proposal is to being made to clean up the wording in the provisions. It may have been cut and pasted from the construction or plumbing code provisions, so he's making the language clearer that it's part of the maintenance code.

Jeff: Asked for comments or questions, and hearing none, this was marked as Consensus for Approval.

**PM606.1-21**

Jeff: This proposal is from Michael Redifer, on behalf of VAESA. Earlier in the day, Jeff spoke with Michael, who agreed to some edits which the DHCD staff suggested. The revised language was shown on the screen. There was a reference to an appendix with specific periodic testing required, and at some point, the reference was removed from the code. Because of this, it wasn't clear when these periodic tests were to be performed. The document shared on the Adobe Connect screen showed changes to the 2021 International Property Maintenance Code. Since there is an existing Virginia amendment to this section, the proposal would have to modify the Virginia Maintenance Code. If the stakeholders agree with the changes shown, the proposal will be edited in cdpVA to show the changes to the appropriate code book – 2018 Virginia Maintenance Code.

Michael Redifer: This doesn't really change anything that's being done, it just provides the authority to do so. The referenced appendix wasn't in the Virginia Property Maintenance Code. The reference to section 8.11 of ASME was put into the Virginia amendment to make sure that the proper people were conducting the tests.

Steve: Supports this proposal.

Jeff: With no other discussion offered, this was marked as Consensus for Approval as Modified.

**PM703.2-21**

Ron: In this proposal, the provisions that were eliminated are already not valid based on the hierarchy in the code. In section 703.3, the wording was updated using maintenance language, and the sentence about openings belongs in the Existing Building Code, not in the Maintenance Code. Vertical shafts are a retrofit provision from chapter 11 of the International Fire Code. The fusible link retrofit provision in 703.8 is a construction provision, not maintenance. These were all administrative edits to clean up the code.

Jeff: Hearing no further comments or questions, this was marked Consensus for Approval.

{BREAK 10:05 – 10:10}

**PM704.1.1-21**

Ron: This proposal is for administrative edits to clean up the code. In section 704.1.1, alterations or repairs belongs in the existing building code, so it was deleted. Section 704.1.3 does talk about maintenance, so it was moved to section 704.1.1. In section 704.1.2, design option belongs in the construction code, so it was deleted.

Jeff: Hearing no further discussion, this was marked as Consensus for Approval.

**PM704.2-21**

Ron: This proposal removes specific standards and a table laid out in the maintenance code, and simply points the user to perform maintenance according to the standards already laid out in the SFPC.

Jeff: Hearing no further discussion, this was marked as Consensus for Approval.

### **PM704.3-21**

Ron: If a fire protection system is out of service, after the maintenance inspector reports it to the fire official, their job is done and any further responsibility belongs to fire official, as defined in the SFPC. For this reason, section 704.3 was cleaned up and section 704.3.1 was deleted.

Steve: It seems like something is missing in the first line and it doesn't read properly.

Joshua: He would recommend, "Where a required fire protection system is found or discovered to be out of service, it shall be maintained."

Ron: Agrees. He is open to changing the wording.

Steve: How about "When found to be out of service, it shall be maintained in accordance with the SFPC." Is that what you are trying to capture here?

Ron: Not quite. They want to maintain the system not only when it's out of service.

Andrew M: How about replacing "done" to read "placed out of service or taken out of service"?

Ron: Agrees to taken out of service. He typed in the chat box

*"Where a required fire protection system is taken out of service, it shall be taken out of service in accordance with the SFPC..."*

Lee Stoermer: Asked if it's about a system that is either found to be out of service, or is purposely taken out of service, and for what reason? He typed this in the chat box:

*"Where a required fire protection system is taken out of service for service or maintenance, it shall be taken out of service in accordance with the SFPC....."*

Andrew M: It doesn't matter why it's out of service. The owner could have turned it off because there was a leak. The violation would be that a system was somehow taken out of service in a way that's not in accordance with the SFPC. Ron's version is more apt to cover all scenarios.

Jeff: Hearing no further discussion, this was marked as Consensus for Approval as Modified as per Ron's new wording.

### **PM704.4-21**

Ron: The maintenance and building codes address the building. Addressing a hole in the wall is different than citing the person who made the hole. In this case, tampering with or removing something that was put in place by the fire official doesn't belong in the maintenance code.

Jeff: Hearing no further discussion, this proposal was marked as Consensus for Approval.

### **PM704.5-21**

Ron: If a maintenance inspector sees a bush in front of a fire connection, it should be reported, but gates and fences are the responsibility of the fire inspector. These sentences were deleted for that reason. Additionally, the word "provided" was removed, and the word "maintained" was left as appropriate to this code.

Jeff: Hearing no further discussion, this proposal was marked as Consensus for Approval.

### **PM705.1-21**

Ron: The proposal is to delete 705.1 about retrofitting carbon monoxide alarms per Chapter 11 of the IFC. This doesn't belong in the maintenance code. The proposal was going to delete the reference to NFPA 720, however it will be part of the ICC code change for 2024 throughout all codes, so it can stay until next cycle to be coordinated with the changes to other references of NFPA 720. The proposed modification to the original proposal was shared on the screen.

Jeff: Hearing no further discussion, this proposal was marked as Consensus for Approval as Modified.

### **Next Steps:**

Jeff: Thanked everyone for their participation and let them know that residential and trade Workgroup meetings will be held next week, and are the only two remaining for April. The next cycle of Workgroup meetings will be held June 7-15. He reminded everyone to submit any new proposals to cdpVA by May 1. DHCD staff will update all proposals in cdpVA with decisions made in the Workgroups as soon as a system glitch is fixed.

**General Stakeholder Workgroup Meeting – SFPC & VMC Proposals**

**June 10, 2022 - 9:00 a.m. – 11:45 a.m.**

**Virtual Meeting: <https://vadhcd.adobeconnect.com/va2021cdc/>**

**ATTENDEES:**

**VA Department of Housing and Community Development (DHCD) Staff:**

**Jeff Brown:** *State Building Codes Office Director, State Building Codes Office (SBCO)*

**Richard Potts:** *Code Development and Technical Support Administrator, SBCO*

**Florin Moldovan:** *Code and Regulation Specialist, SBCO*

**Jeanette Campbell:** *Administrative Assistant, Building and Fire Regulations (BFR)*

**Kyle Flanders:** *Senior Policy Analyst, Policy and Legislative Office*

**Group Participants:**

**Andrew Milliken:** *Stafford County Fire and Rescue, Virginia Fire Services Board (VFSB) Codes and Standards Committee*

**Christina Jackson**

**Daniel Willham:** *Fairfax County and Virginia Building and Code Officials Association (VBCOA)*

**David Beahm:** *Warren County*

**Dwayne Garriss:** *Retired code official and Georgia state fire marshal*

**Glenn Dean**

**Jacob R. Newton:** *The Virginia, Maryland and Delaware Association of Electric Cooperatives (VMDAEC)*

**Jason Laws:** *Virginia Building and Code Officials Association (VBCOA)*

**Jimmy Moss:** *Virginia Building and Code Officials Association (VBCOA)*

**John Armstrong:** *Dominion Energy*

**Joshua Davis:** *Virginia State Fire Marshal's Office*

**Lee Stoermer:** *Loudoun County Fire Marshal's Office*

**Linda Hale:** *Virginia Fire Prevention Association (VFPA)*

**Matthew Mertz**

**Paula Eubank:** *FEMA*

**Perry Weller:** *City of Staunton, VA*

**Ron Clements:** *Chesterfield County Building Official*

**Sean Farrell:** *Prince William County, member of VBCOA*

**Steve Shapiro:** *Apartment and Office Building Association (AOBA), Virginia Apartment Management Association (VAMA)*

**Zach LeMaster**

## **Welcome and Introductions**

Jeff Brown: Welcomed participants to the meeting, gave an overview of the agenda, and let the group know there would be breaks every hour. He asked them to let the group know who they represent as they speak to proposals.

Richard Potts: Gave an Adobe Connect tutorial.

Jeff: Gave a presentation about the Code Development Cycle. Highlights included:

- DHCD staff were identified.
- The 2021 Code Development Cycle and Study Group, Sub-Workgroup and General Workgroup meeting types and dates.
- Overview of the cdpVA and DHCD websites, including links to documents used during the cycle.
- Review of General Workgroup meeting agendas, meeting dates and voting processes.
- The main purpose of the General Workgroup meetings is to vote on the proposals in the agenda. The following voting options were reviewed: consensus for approval, approved as modified, consensus for disapproval, non-consensus, and withdrawn.
- May 1<sup>st</sup> was the final cutoff date for all proposals to be submitted.
- Meeting summaries, proposals and voting results will be prepared and submitted to the Board of Housing and Community Development for final review and decision.

## **FP107.11-21**

Joshua Davis: This proposal makes changes to the State Fire Marshal's Office fees. 40% of the department's funding comes from fees, and the fees have not been adjusted for several years. Fee increases are based on cost of operations. There are also some new fees which are in line with the average fees levied in Virginia localities.

Steve Shapiro: Asked if there's an exception for when localities have their own Fire Official.

Joshua: There is language in the code that prohibits State Fire Marshals from leveraging fees when localities have their own Fire Marshal. It is not specifically in this section.

Jeff: Chapter 1 in the SFPC would lay that out.

Andrew Milliken: VFSB supports this proposal.

Linda Hale: VFPA supports this proposal. Chapter 1 does lay out the authority for local vs. state.

Sean Farrell: It is discussed in Chapter 1.

Glenn Dean: State and local fees have been clearly separated historically, and state and local authorities have worked in cooperation.

Jeff: Hearing no further discussion, this proposal will be marked as Consensus for Approval.

## **PM103.2-21**

Ron Clements: This proposal removes a duplicated definition, wherein a structure that is unfit for human occupancy is also considered an unsafe structure. The unsafe structure definition will remain, as it is used more often in the code, while the definition of unfit for human occupancy will be removed. This proposal also requires the rules for unsafe structures to be enforced in all localities.

David Beahm: Is opposed to this proposal. He would prefer that the language say that the structure is an "imminent" danger to safety.

Joshua: Asked how the Section might point back to the Building Official.

Ron: This is the maintenance code, so the Property Maintenance Official would be responsible.

Joshua: Asked how the Building Official would be notified if there was an unsafe condition.

Ron: Chapter 1 says that the Property Maintenance Official is responsible to notify the Official having jurisdiction.

Joshua: He understands. He neither supports nor opposes this proposal.

Christina Jackson: Is not in favor of removing the phrase "unfit for human occupancy". It may raise questions in different jurisdictions. For example, if a placard is posted and residents are allowed to go in and remove their personal items. She doesn't support or oppose the proposal.

Ron: He hasn't removed any requirement to post a notice or placard, so unsafe should also convey unfit for occupancy.

Steve: On behalf of himself, he supports this proposal. He also thinks that both terms are not needed.

David: He understands Ron's reasons and doesn't disagree, but he is concerned about some of the language. For example, item #5 discusses inoperable plumbing, which might make it unfit for human occupancy, yet not make the entire building unsafe.

Sean: Not speaking in support or opposition of this proposal. If something is deemed unfit, it has to be posted and the building vacated. If it is unsafe, the Building Official can issue a corrective order first.

Christina: On behalf of herself, she asked why Section 106.2 would be removed.

Ron: It seems to imply that someone other than the code Official can decide if the structure is unfit or unsafe, then require the Official to inspect the structure. He thinks the Official should be the one to decide if the structure is unsafe.

Christina: Asked if it would also prohibit a Fire Official from reporting an unsafe structure to a Code Official.

Ron: That's spelled out in another section. But, he is ok with keeping the section if the group decides on it.

David: Is still opposed to the change, but will consider potential changes that would move him towards approval.

Jeff: Hearing no further discussion, this proposal will be marked as Non Consensus.

{BREAK: 10:04 – 10:10}

#### **FP111.2-21**

Jeff: This proposal was supported by the SFPC Sub-workgroup. It allows the Fire Official to send electronic notices. The proponent was not on the call, so the floor was opened for discussion.

Andrew: Supports this proposal.

Lee Stoermer: Typed in the chat box:

**Lee Stoermer Loudoun FMO**: Support as presented based on discussion during work group.

Jeff: Hearing no further discussion, this proposal will be marked as Consensus for Approval.

David: Asked if the electronic communication was the only option (after the Consensus for Approval determination). He wanted to say that he was concerned that it might be, so he wanted it noted. He doesn't oppose the proposal.

Jeff: Since the proponent was not available, the question could not be answered.

Linda: It sounds like the email was an additional option, without removing any other options.

Sean: Agrees with Linda

Jeff: Concerns can be noted in public comments.

#### **FP906.1-21**

Jeff: This proposal includes a floor modification to change the VCC with the same language. The amendment was presented on the screen.

Dwayne Garriss: This proposes to remove the exemption for having portable fire extinguishers in certain use groups with quick response sprinklers. People do use extinguishers and this would provide an additional opportunity for safety. It would bring the Virginia code back in line with the national code.

Steve: AOBA and VAMA are opposed to this proposal, which has been submitted over several code cycles. The exemption has encouraged sprinkler installation and it discourages vandalism to extinguishers. Installing the sprinklers was a tradeoff to not require extinguishers. There is cost to purchase, inspect, maintain and replace extinguishers and there is also the threat of vandalism. It is more likely that the extinguishers would be vandalized than used in a fire and they could also cause personal harm to people using them improperly. Constituents would rather deal with expense due to water damage from sprinklers in the event of a fire, than to deal with injury of patrons trying to use fire extinguishers. He would personally look for escape from a fire than to look for an extinguisher, hope it works and use it to try and fight a fire.

Andrew: Supports this proposal with the floor amendment.

Dwayne: Extinguishers would not replace sprinklers. If fires are extinguished before sprinklers are engaged, it would reduce carbon footprint. Studies show that most people would try to put out a fire with an extinguisher

if it was available.

Dan Willham: Not speaking in favor or opposition, he has used a fire extinguisher.

Glenn: Asked Steve to clarify if his organizations would rather deal with property damage from vandalism of extinguishers and improper use than damage from sprinklers.

Steve: They would rather deal with fire loss since they have insurance for that. They do not want people to be harmed if try to fight fire with an extinguisher. The comments on vandalism were just to say that the extinguishers would more likely be vandalized than used to fight a fire.

Jeff: Hearing no further discussion, this proposal will be marked as Non Consensus.

### **FP912.2-21**

Jeff: This proposal was presented to the SFPC Sub-workgroup, and it was not supported by that group. The proponent was not on the call, so the floor was opened for discussion.

Andrew: VFSB Codes and Standards Committee. Is not in support due to the construction language.

David: Is not in support due to construction language and also language about fire chief. Some localities don't have a fire chief.

Jeff: Hearing no further discussion, this proposal will be marked as Consensus for Disapproval.

### **FP1207-21**

Jeff: This proposal was drafted by the DHCD staff on behalf of the SFPC Sub-workgroup. The intent is to clarify that electrical energy storage systems are regulated by the USBC, even though the VCC references the IFC for systems design and installation. It adds Section 433.1 to the VCC to include compliance with the IFC. It also cleans up language in the SFPC to remove construction requirements and/or change them to be written in maintenance language. Shahriar Amiri has a similar proposal, so DHCD will recommend that only one gets approved by the BHCD.

Steve: Asked how this proposal works with Shahriar's proposal and why there are different section numbers used in the proposals.

Jeff: After proposed regulations are all put together, the correct sections will be determined. It seems like this proposal is cleaner and would be easier to match up with the 2024 provisions in the IFC. Shahriar's proposal does include exceptions for utility equipment regulation. This proposal does not spell that out, but Chapter 1 does say that utility equipment is not covered.

John Armstrong: Supports this proposal.

David: Asked if the BHCD would still look at both proposals if this one goes through.

Jeff: There are multiple ESS proposals, so they may all have to be reviewed separately and packaged together for the BHCD. Similarly, there are multiple sprinkler proposals and DHCD would send them together so the Board could select the one they like best.

David: Is in support of this proposal.

Jacob: Typed in the chat box:

**Jacob R. Newton (VMDAEC)**: Virginia, Maryland, and Delaware Association of Electric Cooperatives supports FP1207-21 over the competing section proposed Tuesday.

Jeff: There was also a floor modification with some cleaned up language. It was shown on the screen.

Florin: The floor modification shows the SFPC Sub-workgroup approved language.

Jeff: Hearing no further discussion, this proposal will be marked as Consensus for Approval as Modified.

### **FP3303.3.1-21**

Andrew: This proposal from the VFSB Codes and Standards Committee is about fire safety during construction. It clarifies that the Building Official has the authority during construction and the Fire Official can request a stop work order from the Building Official if there are any violations. It also cleans up and clarifies language in the sections related to separation between construction areas and stairways.

Jeff: This proposal is supported by SFPC Sub-workgroup.

Steve: Supports this proposal.

Jeff: Hearing no further discussion, this proposal will be marked as Consensus for Approval.



### **FP5601.2.2.1-21**

Jeff: This was supported by the SFPC Sub-workgroup. The proponent made a Floor Amendment (shared on the Adobe Connect meeting screen) to change the NFPA 1124 reference from the 2013 edition to the 2006 edition. The proponent was not on the call, so the floor was opened for discussion.

Lee Stoermer: Typed in the chat box:

**Lee Stoermer Loudoun FMO**: support this item. 5601.2.2.1-21

Steve: Is in support of this proposal. The NFPA change also brings the section in line with the 2021 IFC.

Glenn: Wonders if the proponent was trying to go back to chapters 6 and 7 in the NFPA 1124. They are in the 2013 edition. There may be a change to the building code because Chapters 6 and 7 don't kick in until the MAQ is met.

Jeff: DHCD staff will go back to the proponent's email to see his reasons for changing NFPA editions.

Florin Moldovan: Typed in the chat box:

**Florin Moldovan - DHCD**: From Mr. Steven Sites' email: I was contacted by Charles Walker representing TNT Fireworks as the Director of Compliance. Charles noted that he had read my code change proposal and supported the concept but not the reference of NFPA 1124, 2013 edition. During the normal cycle of the 2013 edition the NFPA Standards Council issued Decision #14-1 that effectively made the language in this edition referencing retail sales withdrawn. This was an oversight in my research and effectively eliminates the language that my proposal's purpose. Charles suggested that I go back one edition to 2006.

Glenn: NFPA 1124 Chapters 6 and 7 don't kick in until the MAQ is met. A change to the building code would be appropriate. The NFPA Standards Council removed language, which they put in place with a promise of receiving information and supporting criteria from the fireworks industry, but it didn't happen.

Jeff: Asked for support or opposition from the group.

Linda: Supports this proposal. It seems that the proponent was trying to reference the retail sales, which the 2013 edition doesn't have.

Glenn: Was commenting earlier, and not speaking in support or opposition to the proposal.

David: Supports this proposal.

Jeff: Hearing no further discussion, this proposal will be marked as Consensus for Approval as Modified.

### **FP5705.5-21**

Perry Weller: City of Staunton. This is a proposal to update the language around both wall mounted and standing hand sanitizer dispensers, to clarify that the Fire Marshal has the authority to approve both. Prior to the pandemic, the code only spoke to wall mounted dispensers.

Jeff: This proposal was also supported by the SFPC Sub-workgroup.

Andrew: Is in support of this proposal.

David: Not speaking in support or opposition. Asked if this causes any conflict with construction in the IFC.

Perry: Building Officials do not have the authority to approve the installation of wall mounted dispensers, only the Fire Officials do. The only change is that a standing dispenser was added, while a wall mounted dispenser was already there.

Jeff: Having wall mounted dispensers approved by Fire Officials is already in the SFPC, this just added free standing dispensers to it.

David: Supports this proposal.

Jeff: Hearing no further discussion, this proposal will be marked as Consensus for Approval.

{BREAK: 11:01-11:10}

### **PM101.1-21**

Paula Eubank: This proposal is for an editorial change to add the word "Property" back to the title of the Virginia Maintenance Code, which is consistent with the national codes.

Christina: Is in support of this proposal.

Sean: Asked why "cited" was changed to "referred to"

Paula: It could have been done for consistency. She is ok with reverting back to "cited".

Sean: Has no objection to the wording. He's not in favor or opposition, just asking a question.

Paula: Asked if the DHCD staff could look into this wording for consistency.

Jeff: The DHCD staff can do that. As long as there is no opposition to the wording either way, DHCD will review and use language that is consistent with other code sections.

Christina: Other codes do use the word "cited".

David: VCC 101.4 has "referred to", but most other codes say "cited". He supports this proposal overall.

Jeff: Asked DHCD staff to type the floor modification in the chat box. Floor amendment.

**Florin Moldovan - DHCD**: As per discussions, replace the proposed word "referred" with the word "cited".

Paula: Please also check "may" vs. "should" for consistency.

David: The VCC administrative Section 101.1 has "may", so change "should" back to "may".

Paula: Supports that change.

Steve: When "referred" is deleted, the word "to" should also be deleted and instead use "may be cited as"

Christina: Also, change the short title from "VMC" to "VPMC".

Paula: Agrees with Christina.

David: This is also consistent with VCC 101.4.

**Chat Box**: Participants typed in the chat box to indicate floor modification and approval of such:

**Jeff Brown - DHCD**: The Virginia Uniform Statewide Building Code, Part III, the Virginia Maintenance Code, may be cited as the "Virginia Property Maintenance Code," or the short title of "VPMC".

**Paula Eubank**: correct.

**Christina Jackson**: Agree

**David Beahm**: yes

Jeff: Hearing no further discussion, this proposal will be marked as Consensus for Approval as Modified.

### **PM103.2.3-21**

Christina: This proposal clarifies a change that was submitted in the 2018 Code Change Cycle. It limits the scope of changes that renters are responsible to make to match the Virginia Resident Landlord Tenant Act (VRLTA).

Dan: Asked if this should be placed in as a note or in the main code section. What is in the note section isn't enforceable.

Christina: She will defer placement to the DHCD staff.

Dan: It would be stronger in the code section.

Sean: Notes aren't mandates, they are just suggestions. This is the right place to give guidance to the Code Official. He's not speaking for or against the proposal.

Jeff: The notes are for the Code Officials' benefit. He suggested putting a period after Virginia. Then, adding a second note that says that it doesn't exceed the responsibility in the VRLTA.

Christina: Is ok with that suggestion.

David: Suggested "and not to exceed" instead of "but" not to exceed. He is in support of the proposal.

Jeff: Suggested a second sentence for clarity.

David: It does make sense that way.

Steve: Suggested that the second sentence says something like "In any case, it shall not exceed the...VRLTA"

Christina: Typed in the chat box:

**Christina Jackson**: This code section shall not exceed the provisions of an owner(s) responsibility as protected under the Virginia Residential Landlord and Tenant Act.

Sean: Speaking for himself. The note should be cautionary and not specify compliance. If the VRLTA has a definition of owner which conflicts with the VPMC definition of owner, that may also be problematic.

Steve: It should say shall not exceed the provisions of a "tenant(s)" responsibility.

Christina: That is correct. She typed in the chat box:

**Christina Jackson**: This code shall not exceed the tenant(s) responsibility as protected under the Virginia Residential Landlord and Tenant Act.

Paula: Asked if the word "provisions" was necessary.

Christina: She thinks "provisions" can be removed from the sentence. The definition of both owner and tenant in

the VRLTA is almost identical.

Jeff: Typed in the chat box:

**Jeff Brown - DHCD**: Assignment of responsibility must be in compliance with all other applicable laws and regulations, such as the Virginia Residential Landlord and Tenant Act. Where an owner states that a tenant is responsible for performing any of the owner's duties under this code, the code official may request information needed to verify the owner's statement, as allowed by § 55-11209 A 5 of the Code of Virginia. A tenant's responsibility is limited and protected under the Virginia Residential Landlord and Tenant Act

Dan: Typed in the chat box:

**Daniel Willham**: ..... Virginia. A tenant's responsibility is limited and protected under the Virginia Residential Landlord and Tenant Act.

Christina: Likes both Jeff's and Dan's modifications. She will defer to whatever the group likes best.

Paula: If Jeff's modification is used, she suggests changing the word "needed" to "required".

Sean: likes Dan's modification.

Christina: Would like to use Dan's sentence.

David: Supports Dan's modification as well.

Jeff: Hearing no further discussion, this proposal will be marked as Consensus for Approval as Modified using Dan's sentence as typed in the chat box.

#### **Next Steps:**

Jeff: Thanked everyone for their participation. There will be a few more General Workgroup meetings held next week. The BHCD will meet in September to decide on changes. Soon after, code change training will take place.



**Tab 6**  
**Sub-Workgroup Meeting Summaries**

<b>Meeting</b>	<b>Page Number</b>
Statewide Fire Prevention Code (SFPC) Sub Workgroup Meeting Summary February 16, 2022	Tab 6 – Page 1
Statewide Fire Prevention Code (SFPC) Sub Workgroup Meeting Summary March 7, 2022	Tab 6 – Page 15
Statewide Fire Prevention Code (SFPC) Sub Workgroup Meeting Summary April 18, 2022	Tab 6 – Page 19
Statewide Fire Prevention Code (SFPC) Sub-workgroup Meeting Summary May 11, 2022	Tab 6 – Page 33



## Statewide Fire Prevention Code (SFPC) Sub Workgroup Meeting Summary

February 16<sup>th</sup>, 2022 9:00 a.m. – 12:15 p.m.

Virtual Meeting: <https://vadhcd.adobeconnect.com/va2021cdc/>

### **ATTENDEES:**

#### **VA Department of Housing and Community Development (DHCD) Staff:**

Florin Moldovan: Code and Regulation Specialist, SBCO

Jeff Brown: State Building Codes Director, State Building Codes Office

Richard Potts: Code Development and Technical Support Administrator, SBCO

Paul Messplay: Code and Regulation Specialist, SBCO

#### **Sub Workgroup Members:**

Andrew Milliken: VFSB Chairman of Fire Codes and Standards Committee

Dustin Wakefield: Virginia Department of General Services, Division of Engineering and Buildings

Jimmy Moss: Virginia Building and Code Officials Association

Lou Wolf: American Institute of Architects, Virginia Chapter

Matthew Lannon: Virginia Restaurant, Lodging & Travel Association

#### **Other Interested Parties:**

Nolie Diakoulas

Russell Furr

Alan Larsen

Ron Clements

Timothy Loscomb

Gerry Maiatico

#### **Sub Workgroup Members Not in Attendance:**

Mike O'Connor: Virginia Petrol and Convenience Marketers Association

Steve Shapiro: Apartment and Office Building Association

Joshua Davis: State Fire Marshal's Office

Linda Hale: Virginia Fire Prevention Association

Jodi Roth: Virginia Retail Federation

### **AGENDA AND DISCUSSION ITEMS:**

#### **Welcome and Introductions**

Florin Moldovan: Called the meeting to order at 9:00 am and began introductions of DHCD staff and members of the sub workgroup.

#### **Discussion**

Florin: Provided the SFPC sub workgroup members with an overview of Virginia's code development process and the 2021 SFPC base document with a power point presentation.

## Proposals

### FP901.4.8-21

Florin: Opened the floor to the proponent, Andrew Milliken, to provide an overview of this proposal and its intent.

Andrew: This proposal is a reference to a common violation and there is not a provision in the SFPC to cite for a violation. The intent of this proposal is to ensure that we have a direct pointer to maintaining construction features that allow the fire protection features to operate as intended when they were installed.

Dustin Wakefield: The first thing that jumps out is the word "Maintenance." Asks if Andrew has considered any overlap with the Maintenance Code. Looking at the specifics of the statement, "Where required by the installation standard," asks if this is where walls, ceilings, and tiles are required, or where maintenance of such items are required? It is unclear what the proposals is saying. Suggests possible room for re-wording to clarify what this proposal is saying.

Andrew: The SFPC is a maintenance and operations code, so there is a lot of maintenance language. The intent of this proposal is to make sure that it is required by the installation standard to provide those features – walls, ceiling, etc. Andrew states that he is open to any clarifying language.

Dustin: It would be helpful to clarify something along the lines of, "Where maintenance of specific elements, such as walls, ceilings, tiles, etc., is required by the standard..." Something definitively to state what is required and what is being maintained.

Andrew: The installation standard is not a maintenance standard, so this is just saying that when the installation requires those features, those features need to be maintained. We want to make sure the SFPC is maintaining the features as they are installed.

Dustin: "Where components such as walls, ceiling tiles, etc. are required by the installation standard, such features shall be maintained in accordance with the applicable building code."

Andrew: No objection there.

Jimmy Moss: The proposed change would make this fall along with what has been done throughout the Maintenance Code. Then the language would be consistent with all the previous language.

Florin: Asks for Andrew to coordinate with DHCD staff, Dustin, and Jimmy to correlate the language.

Jeff: Points out that we are pretty close to everyone being in agreement. This proposal will be on the March workgroup agenda for discussion, so there is time to work out this language. There could be a friendly floor amendment made at that general workgroup meeting.



### **FP901.6.3.2-21**

Andrew: This section is intended for all fire protection systems that have annual inspections to provide either a tag or a sticker indicating the completion of the inspection and is intended to help make sure we have that information readily available to the property owner and authority having jurisdiction for these systems. This proposal language is taken from a number of other states that have similar requirements in the code.

Dustin: Asks about the referenced standards that govern these fire protection systems and whether there is any conflict between the language in the proposal and the requirements in the referenced standards.

Andrew: Great question. There are a number of different referenced standards that provide guidelines for tags and stickers, such as NFPA 25 for sprinklers and water-based fire protection systems. In the fire alarm world this is less prevalent, which is one of the areas where this could make sure we are uniform across the board. Andrew does not know of any referenced standard where this would create conflict since the proposal is based around the NFPA 25 guidelines.

Dustin: Asks if it would make any sense to preface this proposal with, “unless specifically addressed otherwise in a referenced standard,” or, “unless not otherwise noted in governing standards for fire protection systems”?

Andrew: That is something we can look at. The goal here is to have more of an umbrella approach. We can provide more language if we need to, but sometimes that is not well embraced by code writing. Unless we know of a specific conflict that exists. Is open to a prefacing statement if it helps reach consensus.

Florin: Perhaps the two of you can collaborate on this proposal afterward.

Andrew: Asks Dustin to email him some proposed language or suggestions that we could get incorporated.

### **FP1201.3-21**

Andrew: This proposal deals with Electrical Storage Systems (ESS). This was an item deleted in the 2018 edition. This is not related to those significant changes in the base document. This was a statement that was deleted that speaks to the mixing of ESS and making sure that we handle these in the same way that we handle hazardous materials. The code identifies quantity limits within Ch. 12, which have been deleted since they are construction, but this seeks to reinstate the hazardous material quantity limits by speaking to the quantities allowed in the applicable building code. Not setting a threshold or an amount, but referencing back to the thresholds in the applicable building code. The last statement speaks to the fire official having a hazard mitigation plan for quantities in excess of those thresholds.

Florin: Is there anyone not in agreement with this proposal or whom opposes this proposal?

Florin: Since there is no opposition, it seems we could add the SFPC sub workgroup as a co-proponent on this proposal unless anyone has any opposition to that.

Alan Larsen: I don't oppose it, so much as I don't understand it.

Florin: Thank you for your feedback, Alan, and perhaps Andrew can answer your questions. If no one in the sub workgroup is opposed to it, then we will move it forward as consensus. If it comes down to a vote, it will be a vote among those in the official SFPC sub workgroup. No one from the SFPC sub workgroup is speaking against it or providing any negative comments, so, with that said, if no one in the sub workgroup members list opposes the proposal, we will move it forward as consensus and we will add the group to the list of co-proponents.

Jimmy: This is a good proposal. Jimmy has been in agreement with it from the first time he heard it in the fire services work group. He does not see how there is any conflict in any way. States that this is a very good proposal.

Florin: We will add the SFPC sub workgroup as a co-proponent in cdp VA.

## **2021 SFPC Base Document – Proposed Changes by the Virginia Fire Services Board**

Florin: Provides brief overview of the structure of the spreadsheet being shared and how these decisions will be submitted in cdp VA. It will be up to Andrew as to how he wishes to handle the non-consensus items. The purpose here is to try and gain consensus on whichever items we can today to make it easier for the proponents' sake. DHCD will assist with compiling everything in the proposal much like we have done in the past with the SFPC edits. Thanks Andrew and VFSB for going through these items. It is a very time-consuming process but very much worth it in the end.

*\* A copy of the spreadsheet cataloging these proposed changes is attached to this summary for reference. \**

### **Proposed Changes Approved as Written Without Discussion**

The following proposed changes received Consensus for Approval and contained no discussion.

Table 405.3	603.1 General	Section 806
1001.1 General	1207.1.2.1 Communication utilities	1207.1.2 Permits
107.2 Permits required	1207.2.1 Commissioning	1207.1.4.3 Additional protection measures
1207.1.6 Fire remediation	1207.3.6 Repairs or alterations	1207.2.1.2 Commissioning report
1207.2.2 Operations and maintenance	1207.4.2 Working clearances	1207.4 Signage
1207.4.1 Electrical disconnects	1207.4.6 Combustible storage	1207.4.3 Fire-resistance-rated separations
1207.4.5 Vehicle impact protection	1207.4.9 Security installations	1207.4.7 Toxic and highly toxic gasses
1207.4.8 Signage	1207.10.3 Permits	1207.4.10 Occupied work centers
1207.10 Mobile ESS equipment and operations	2203.1 Critical Depth Layer	1207.10.4 Documents
1207.10.4.1 Deployment Documents	2203.4.6 Smoking prohibited	2203.3.3 Cleanouts
2203.4.1 Classified electrical	2203.5 Housekeeping	2203.4.7 Spark-producing devices

2203.4.9.4 Inspection and preventative maintenance	3107.13.2 Location of Containers	2203.7 Emergency response plan
2205.1.1.1 Dust hazard analysis	5704.2.13.1.1 Temporarily out of service	3904.2.1 Listings
3904.2.2 Approvals	610.1 Installation	5704.2.13.1.2 Out of service for 90 days
107.2 Industrial additive manufacturing operational permit	4003.1 Spill control	808.5 Play structures
901.4 Maintenance and alterations	4004.3 Basement storage	4003.2 Ventilation
4003.4 Lightning	1207.1 General	4005.1 Automatic sprinklers
603.1.1 Equipment and wiring	1029 Assembly	1207.1.5 Large-scale fire test

### **Proposed Changes Approved as Written with Discussion**

The following proposed changes received Consensus for Approval as written and contained discussion.

#### 806.1.4 Fire-retardant treatment for naturally cut trees

Andrew: This section is currently deleted in the base document. This is in italics because the intent is to go back to the model codes. In this particular situation this references the fire retardant treatment on trees. We feel it is important to have that reference maintained.

Florin: Asks for any comments from the group. Hearing no comments, Florin moves this forward as consensus for approval.

Andrew: Is not sure how this should be documented. The intent is to just delete the charging statement to bring in the model languages.

Florin: In the regulations we would just strike off that charging statement. Jeff is documenting on the screen what we will include in this proposal: "Delete state amendment and incorporate the 2021 IFC section 806.1.4."

#### 908.3 Fire alarm system interface

Andrew: This is something that is similar to some of our duct detection concerns and issues. We would want to include the supervisory signal as an option for buildings with these systems.

Ron Clements: Supports this change and thinks there should probably be a companion to this for the building code.

Andrew: Believes that this will already be in the 2021 building code.

Florin: Any other comments? Seeing none, we can mark this as consensus for approval.

Florin: Asks Ron if he is willing to take a look at this and make sure it's addressed in the I-codes and if it's not, to make the appropriate companion proposal. Ron agrees to take this on.

#### 1201.2 Electrical wiring and equipment

Andrew: This proposal makes sure we encompass all of the references like the model code does.

Florin: Just a point of clarification on this one, DHCD Staff did not make any changes to the base document, we just maintained what was already in the 2018 SFPC.

Andrew: Yes, this was just something that was missed in the last cycle.

Florin: Any concerns with 1201.2? Hearing no concerns, we will mark this down as consensus for approval.

### 1207.2.3 Decommissioning

Andrew: Just as commissioning is important on these systems, so is decommissioning. This is scoped for decommissioning of mobile ESS.

Florin: Any comments? Seeing none, we will mark this down as consensus for approval.

Florin: Asks if Andrew is okay with Staff correcting the grammatical issue of “ESS Systems” being redundant.

Andrew: Yes.

### 1207.10 Table

Andrew: This proposes to change the reference to simply reference the IFC section for this table. We feel that the column that says “Section” and gives a number, needs to be an IFC section as opposed to just “Section.”

Florin: Asks Andrew to clarify if the intent is just to add the word “IFC” to ensure the section we reference is actually the IFC section and not an SFPC section, correct?

Andrew: Correct

Florin: Any concerns? Hearing none, we will mark this as consensus for approval.

### 1207.10.6 Charging and storage

Andrew: This just indicates the IFC for these compliance items.

Florin: This is similar to the previous one where we deleted some sections so that we can reference the IFC, correct?

Andrew: Correct.

Florin: Any concerns? Seeing none, we will mark this down as consensus for approval.

### 2203.1 Table

Andrew: Since we are keeping the critical depth layer from the previous section, it's important to keep this table.

Florin: So, the idea is we want to maintain Table 2203.1 from the IFC, correct?

Andrew: Yes

Florin: Any questions? Seeing none, we will mark this down as consensus for approval

#### 2203.4.5 Powered industrial trucks

Andrew: The base document says any powered equipment needs to maintain its listing, but it's not just that it needs to maintain the listing. The idea is that where those vehicles are used, they should be listed.

Florin: Any questions?

Florin: Is there a possibility that the codes in the past did not require these to be listed? Do you know of any of these requirements from several cycles ago?

Andrew: When we are talking about powered equipment that is portable and mobile, it is not necessarily under the purview of the building code.

Florin: Any other questions? Seeing none, we will mark this down as consensus for approval.

#### 2203.4.9.2 Space heaters

Andrew: We feel the use and operation of a portable space heater is something that should be regulated by the SFPC. The modified language here identifies that we are talking about portable space heaters, not stationary devices.

Florin: Any questions?

Florin: Could the second sentence incorporate all appliances, even those that are stationary? Or is it implied in the first sentence that the second sentence only covers portable?

Andrew: You could put "portable" in front of the title, but we felt the model code language captures the intent.

Florin: It sounds like there are no other comments from the group so we will mark this as approved.

#### 3303.5 Fire safety requirements of Types IV-A, IV-B and IV-C buildings

Andrew: Item #3 refers to construction features that are required by the building official in accordance with the applicable building code. Item #1 correlates the language by pointing to the appropriate standpipes section.

Florin: Any questions?

Florin: One quick question, is Item #3 the same as Item #3 in the 2018? That item was deemed unenforceable by the attorney general.

Andrew: It is not the same Item #3.

This proposal was moved forward as Consensus for Approval

### **Proposed Changes Approved as Modified by the Sub Workgroup**

#### 603.2.1 Modified or damaged

Andrew: This change is with regard to the reference to the term “This code and NFPA 70”. The model code talks about making sure equipment and devices are not modified or damaged to constitute a fire hazard in accordance with this code or NFPA 70.

Florin: Have we considered adding “The applicable” in front of NFPA 70?

Andrew: We would not have any opposition to that.

Ron: Should this reference the existing building code?

Andrew: Asks if Ron is suggesting “Applicable building code, instead of ‘this code’”?

Ron: Yes, that probably does it.

Andrew: We would not have any issue with that.

Dustin: This is just another wording nuance, but where it says “The applicable NFPA 70 standard” are we saying the enforced edition of or the applicable portion of?

Florin: What we have done in the previous SFPC edits is used “The applicable” in front of the standards, which would be applicable at the time of construction. If it just read “in accordance with NFPA 70”, it would cause enforcement issues with those who think it references the current edition. Does that answer your question?

Dustin: It does if it is clear that it is applicable at the time of construction.

Florin: There is a definition of applicable building code in Ch. 2.

Ron: Not that it is a deal breaker, but if you get “applicable building code” you get to that NFPA standard at the time.

Florin: Any comments regarding that?

Andrew: We are in the realm of trying to obtain consensus, so if that gets us to consensus, we can do that. The idea was that these references to NFPA 70 come from the model code, so we are trying to stay consistent with that. But we would not be opposed if that is the pleasure of the group.

Florin: Do I hear from the group that it should read, “...in accordance with the applicable building code.” And delete the reference to NFPA 70?

*603.2.1 Modified or damaged. Electrical wiring, devices, equipment and appliances that are modified or damaged, and constitute an electrical shock or fire hazard, shall not be used until repaired or replaced in accordance with the applicable building code.*

Andrew: Yes, that gets us consensus.

#### 603.5 Relocatable power taps and current taps

Andrew: This is very similar to the others and, as Ron has pointed out, we can do what we have done before with the language. Taps and relocatable taps are defined terms so we want to incorporate language that references this code and the applicable building code.

Florin: Any comments? Hearing none, we can do what we have done with the other ones to read "in accordance with the applicable building code."

Andrew: We want to leave "In accordance with this code and the applicable building code."

*603.5 Relocatable power taps and current taps. The construction and use of current taps and relocatable taps shall be in accordance with this code and the applicable building code.*

Ron: If we just left it as "applicable building code" we would be leaving out the maintenance enforcement from this code.

#### 1004.7 Outdoor areas

Andrew: This basically specifies what these outdoor areas are, which mirrors model code language.

Dustin: Just to make sure we account for anyone that could be using these outdoor areas in 1004.7. Maybe instead of saying, "useable by the building occupants," we say "useable outdoor areas," so this would take some of the guess work out for whose using it.

Andrew: This was just using model code language but I would be fine with that change.

Florin: So, we're just deleting "and useable by the building occupants."

Andrew: That's what Dustin was getting at.

Dustin: I was getting at "similar accessible and useable outdoor areas."

Florin: Does that look good (referencing the language typed on the screen)?

*1004.7 Outdoor areas. The means of egress for yards, patios, occupied roofs, courts and similar accessible and usable outdoor areas shall be maintained in accordance with the applicable building code.*

Dustin and Andrew: Agree it looks good.

Florin: We will mark this down as consensus as amended.

### 1203.2.5 Exhaust ventilation

Andrew: This is similar to other language we have provided with regard to exhaust ventilation. This removes the construction concept and includes the maintenance concept.

Florin: Any questions?

Dustin: Is this a case where we would want to preface this with, "When required," because this statement makes the assumption that this is required in every case.

Andrew: The closest language we have gotten to is, "Where required or provided," so if we wanted to provide that language that would be fine.

Florin: Does the amended text on the screen meet what you're trying to accomplish?

Dustin: Yes, the clarification there helps.

Florin: It sounds like the modified version is something that everyone agrees with.

Jeff: In reading this again, it is reading a little funny, "Where provided or required..." Suggests reversing the order to read: "Where standby power for mechanical exhaust ventilation systems is provided or required by the applicable building code, it shall be maintained."

Dustin: You may want to add, "standby power shall be maintained accordingly."

Jeff: Makes the edit on the spreadsheet and asks if that works:

*1203.2.5 Exhaust ventilation. Where standby power for mechanical exhaust ventilation systems is provided or required by the applicable building code, the standby power shall be maintained.*

Dustin: That looks good.

### 1207.1.1 Scope and Table 1207.1.1

Andrew: This proposal is to revert back to the model codes and not have a state amendment. This section is a scoping section, it is not a construction or maintenance requirement. This is identifying what types of ESS are within the scope of this particular section. This may have been overlooked and seen as a construction table and we feel it is appropriate to have the scope for this section and what it applies to.

Florin: Could there be existing facilities that are in compliance with the applicable building code but not necessarily the 2021 IFC. Are we creating a situation here where when the 2021 goes into effect, there could be a chance that existing buildings are in non-compliance with the SFPC?



Andrew: No, this is a scoping section. This says that any smaller devices that do not meet the threshold values do not have maintenance requirements. This would not affect construction or put anything in non-compliance.

Florin: Any other questions?

Jeff: If we continue going through 1207 using maintenance language, the scoping language will not be a problem. There are places in 1207 addressing mobile ESS, which might have some construction requirements, and we may have to revisit this to see if we need to tweak it a little bit. Believes we are fine now, but wants the group to keep this in mind as we move forward.

Andrew: As we go down through this, when we get to mobile ESS, that is a separate section and there are construction requirements, but it is outside of 1207.1

Jeff: Believes that scoping is referring to all of 1207. Reiterates that we are okay, but if we get into construction provisions, we can talk about it and maybe revisit.

Jeff: During the discussion of 1207.1.5, suggests going back to the scoping language in 1207.1 and 1207.1.1 and adding language stating, "Mobile ESS shall comply with this section." We should maybe make it clear for mobile ESS which are not regulated by the USBC.

Andrew: Would that be something to put in 1207.10, at the beginning of the mobile section? Or should we put it in the scope?

Jeff: Unsure. We could discuss that.

Jimmy: Believes adding it to the scoping section would be best so you will know right from the beginning where this applies. This would make it easier going forward in the changes so you won't have to make sure that all of your language is specific to one or the other.

Florin: Any thoughts regarding that?

Andrew: Agrees with Jimmy. We can certainly come up with language in the scoping section to make it clear.

Florin: Sees a conflict between 1207.1 and 1207.1.1. 1207.1 requires compliance with the applicable building code and 1207.1.1 requires compliance with this section. Is this section imposing anything beyond what the applicable building code would have required?

Andrew: The intent of the scoping section is to make sure we are not regulating very small ESS equipment. It is important to not have maintenance requirements for small, handheld mobile phone chargers, for example. Does not believe that there is a requirement that is conflicting, but it may be something we want to review.

Jeff: Provides updated language on the spreadsheet to 1207.1.1:

"1207.1.1 Scope. Mobile ESS having capacities exceeding the values shown in Table 1207.1.1 shall comply with this section. Other ESS having capacities exceeding the minimum ESS threshold quantities of the applicable building code shall be operated and maintained in accordance with this section and the applicable building code."

Andrew: That should do it.

Florin: Any comments or concerns with this language? Hearing none, we will move this as consensus as modified.

#### 1207.1.4 Hazard mitigation analysis

Andrew: This was modified to not necessarily require a hazard mitigation analysis be provided, but to ensure that a copy of that a failure modes and effect analysis (FMEA) be provided to the Fire Official.

Jimmy: As it reads, that approved document has to be provided.

Andrew: Sure. We can add “when an FMEA is required by the applicable building code, a copy shall be provided.” We were just trying to match the model code language as much as possible.

Dustin: Just noticing that it says “Fire Official”. Don’t we typically refer to the “Fire Code Official.”

Jeff: We might actually address that in definitions or Ch. 1.

Ron: Posts in the chat that fire official and fire code official mean the same thing.

Language approved as modified:

*1207.1.4 Hazard mitigation analysis. Where a failure modes and effects analysis (FMEA) or other approved hazard mitigation analysis is required by the applicable building code, a copy shall be provided to the Fire Official under any of the following conditions:*

- 1. Where ESS technologies not specifically identified in Table 1207.1.1 are provided.*
- 2. More than one ESS technology is provided in a room or enclosed area where there is a potential for adverse interaction between technologies.*
- 3. Where allowed as a basis for increasing maximum allowable quantities.*

### **Proposed Changes Withdrawn**

#### 1201.3 Mixed Systems

### **Proposed Changes Receiving Non-Consensus**

#### 901.4.3 Alterations in buildings and structures

Andrew: This is a newer section for the model code, which we have modified a bit to remove the construction provisions to state that fire protection systems and life safety systems need to be maintained during alterations.

Florin: Questions or concerns from the group?

Dustin: As we have talked about earlier, alterations are governed by the Existing Building Code, not necessarily the SFPC. We are primarily concerned about continuity of fire protection and life safety systems while the buildings are being occupied. It sounds like this is sort of crossing over a little bit in to the Existing Building Code realm and also puts a blanket requirement on the contractor for the fire protection and life safety systems.

Andrew: We can certainly add the words, “in the occupied structure.” If there is a better reference to the Existing Building Code, we would be happy to do that. If we wanted to add the words, “Occupied building or structure,” that would be appropriate.

Dustin: Would like to take a little time to think about this and look at the Existing Building Code. Dustin will send Andrew some suggested notation to change a little bit.

## **Other**

Florin: Does anyone have any ideas of suggestions for the group as to what we should bring up next?

Ron: Suggests that it might be worth going through the tent provisions. The construction code and fire prevention code are not consistent.

Dustin: There are some differences between the SFPC and the IFC. The construction code for temporary structures does not really go into much detail at all – it refers back to the IFC. That would be a worthwhile endeavor.

## **Assignments and Next Steps**

Florin: The only assignment falls on DHCD staff to compile these proposals into cdp VA. As far as what Ron brought up, we could compare the SFPC and IFC to come up with a better solution than we have.

Jeff: That is a great idea. We recognize there are some conflicting requirements for permits and approvals. What we can do is go back after this meeting and try and see the best way to handle it and then reach back out to the group. We might try to squeeze a meeting in before the General Workgroup Agenda. There is one other thing that stuck out, when we updated the scoping for Section 1207, we made it clear that there might be some construction provisions in there that would only be applicable to mobile ESS and then as we went through, we made reference to an IFC section. Jeff wonders if that is a dangerous path to go down since there is a lot of confusion about how the SFPC and IFC go together. There may be provisions in Section 1207 that deal with mobile ESS that we’ve deleted and we may want to bring those back instead of confusing people by referencing the IFC.

Andrew: We have all struggled with that Ch. 12 section and how we best make it clear. We thought the cleaner approach was to reference the IFC, but, like you said, that may be unprecedented territory and it may be better to add some construction provision in 1207 that are well within the scope of mobile ESS and not to be confused with other ESS. It would take more work to do that, but we will know which sections to do that to since they are referenced as IFC sections now.

Jeff: Any other thoughts? If others agree that referencing the IFC is an issue, we will have to go back and revisit those sections. These will not be on the March agenda, so we have time. We can go through and pull out the ones that reference the IFC and work with Andrew to come up with the alternative. If it is doable, we can have a quick meeting and see if everyone is good with that.

Florin: Just to confirm what Jeff said – of the proposals we heard today, the only ones being heard in March are the three proposals we discussed at the beginning. The spreadsheet that we went through did not make the agenda because the intent was for the group to go through all of these and have consensus items submitted as one proposal. Those will be heard at the following General Workgroup meeting.

Jeff: The cutoff for that is March 12th, so we would have to figure all of this out before March 12th to make any adjustments to this spreadsheet and get that consensus proposal submitted. It is doable and can hopefully be done without many changes. Jeff asks for thumbs up from the group – all present sub workgroup members are in agreement. That is another piece of homework that we will work on. We will look to have that meeting a week before March 12th to give us time to finalize the proposal and get it submitted in cdp VA.

Florin: Does anyone else have anything else for the good of the order? If not, a big thank you on behalf of DHCD for your work. We appreciate it and Virginia codes would not be where they are without your work.

## Statewide Fire Prevention Code (SFPC) Sub Workgroup Meeting Summary

March 7, 2022 9:00 a.m. – 9:54 a.m.

Virtual Meeting: <https://vadhcd.adobeconnect.com/va2021cdc/>

### ATTENDEES:

#### **VA Department of Housing and Community Development (DHCD) Staff:**

**Jeff Brown:** *State Building Codes Director, State Building Codes Office (SBCO)*

**Richard Potts:** *Code Development and Technical Support Administrator, SBCO*

**Florin Moldovan:** *Code and Regulation Specialist, SBCO*

**Paul Messplay:** *Code and Regulation Specialist, SBCO*

**Travis Luter:** *Code and Regulation Specialist, SBCO*

**Jeanette Campbell:** *Administrative Assistant, Building and Fire Regulations (BFR)*

#### **Sub Workgroup Members:**

**Andrew Milliken:** *Virginia Fire Services Board (VSFB), Chairman of Fire Codes and Standards Committee*

**Dustin Wakefield:** *Virginia Department of General Services (DGS), Division of Engineering and Buildings (DEB)*

**Joshua (Jay) Davis:** *State Fire Marshal's Office, Virginia Department of Fire Programs (VDFP)*

**Linda Hale:** *Virginia Fire Prevention Association (VFPA)*

**Jimmy Moss:** *Virginia Building and Code Officials Association (VBCOA)*

**Steve Shapiro:** *Apartment and Office Building Association (AOBA)*

#### **Other Interested Parties:**

**Ron Clements:** *Chesterfield Building Official, member of VBCOA*

**Randy Grumbine:** *Factory-Built Housing, Virginia Manufactured and Modular Housing Association (VAMMHA)*

**Robert Davidson:** *Davidson Concepts*

**Shahriar Amiri:** *Arlington County Building Official*

**Sean Farrell:** *Prince William County, member of VBCOA, member of BHCD*

#### **Sub Workgroup Members Not in Attendance:**

**Mike O'Connor:** *Virginia Petroleum and Convenience Marketers Association (VPCMA)*

**Lou Wolf:** *SBW Architects, American Institute of Architects (AIA), Virginia Chapter*

**Matthew Lannon:** *Virginia Restaurant, Lodging & Travel Association (VRLTA)*

**Jodi Roth:** *Virginia Retail Federation (VRF)*

**Welcome:**

Jeff Brown: Welcomed members to the meeting and let them know that DHCD staff could assist with any questions.

**Discussion:**

Jeff: Gave an overview of the agenda. There were three items carried over from the last meeting, and one new Sub-workgroup proposal (FP 103.1)

**Proposals****FP103.1 (SFPC SWG Proposal No.1) – 21**

Jeff: Summarized the proposal, which was developed after the last SFPC sub-workgroup meeting. It contains the changes that were initiated by the Virginia Fire Services Board – Code and Standards Committee, and were all consensus for approval by this group. He asked all members to review the document for accuracy, which is located on the cdpVA website or in the file pod on the left in the Adobe meeting room. There are still a few days available to make any edits or corrections if needed before the March 12 cutoff date to include in the April general workgroup meeting.

**Revised SFPC Section 901.4.3**

Jeff: This proposal was carried over from the last meeting. Andrew revised the text according to the feedback. The document was shared on-screen with the original text and the revised text.

Andrew Milliken: This is an update from the last section that was not quite consensus. Dustin provided some updated language to clarify that it was about occupied structures.

Jeff: Asked if there was any further discussion from the group, and since there was none, this was marked as consensus for approval (CA). This will be added to the group of other proposals that are consensus for approval. Andrew will update cdpVA.

**Revised SFPC Section 3107.13.2**

Jeff: This was carried over from the last meeting. The issue was trying to get back to the IFC table, which was deleted from the SFPC. The group decided not to reference the table in the IFC. In this revision, the table from IFC 6104.3 was brought back into the SFPC here into section 3107.13.2.

Andrew: His suggestion is to put it back into 6104.3 following the model code, as long as everyone agrees that it refers to outdoors, and not construction.

Shahriar: Above ground LP gas systems, depending on the capacity, have a required separation from buildings and adjacent property that can be built on. In the case where he is, most buildings are podium buildings which have a parking garage 3-4 stories deep, and a plaza level, which is a building sitting on top of a building. What would this mean in Arlington, where there's a shortage of land, and everything goes on top of the roof? How would the separation distance apply in this case?

Andrew: NFPA 58, the standard for installing LP gas systems, provides specific requirements for when they have to be on the roof or in the building.

Jeff: This table was initially deleted, as it was being left under the IFC. Now, it is being put back in as a reference to tent or membrane structures.

Andrew: Yes, this is for outdoor installations.

Jeff: This is the reason for putting it in section 3107.13.2 instead of back in chapter 61.

Florin: This proposal was already agreed upon by the group. The only change that the DHCD staff made was to incorporate the table into the SFPC and change the numbering. This was done instead of referencing the IFC table 6104.3, which would only compile the existing confusion about which code to use. This kept the intent of the change the same, so DHCD staff haven't changed anything that wasn't already agreed on.

Jeff: Andrew suggested to bring the table back into the original section 6104.3 in the SFPC.

Florin: This table may be referenced in other sections as well, so that would need to be considered.

Sean Farrell: If this table goes back into chapter 61, to Shahriar's point, it would impact the installation of these containers everywhere. If the table remains in 3107, it would cover just those tent areas. If that's correct, I would be in favor of it being in 3107 but not in chapter 61.

Florin: Agrees

Jay Davis: Agrees. He is in favor of putting it in 31, but not in 61.

Florin: Is anyone opposed to putting it in 31, or are there any other concerns? Remember, the content was already agreed upon in the last meeting. With no further comments, this will be marked as consensus for approval (CA). DHCD staff will add it to cdpVA for Andrew to review.

Jeff: This proposal and the last one will be added to FP103.1 (SFPC SWG Proposal No.1) and be submitted in cdpVA as one proposal, by DHCD staff on behalf of the SFPC sub-workgroup.

### **SFPC Section 1207**

Florin: This section is on the agenda to set the stage for a broader conversation in our next meeting. In the last meeting, the group approved several modifications to section 1207. It was also agreed that referencing the IFC was not the best idea, as it might lead to confusion. Looking closer at 1207, it seemed that there was some confusion about provisions applicable to mobile energy storage systems, which should fall under construction code. For example, when units are in a building, being recharged and getting ready for recommission and deployment. The more applicable location for this is the VCC. The SFPC should only include provisions for maintenance and operations. There was also discussion surrounding this in the VEBC workgroup meeting, and it was referred to the SFPC sub-workgroup. There are also some discussions, outside of this sub-workgroup, by other stakeholders about bringing the 2024 IFC Energy Storage System provisions into the 2021 VCC. This item is open for discussion, but it will set the stage for the next sub-workgroup meeting to work out where the provisions should be located.

Shahriar: There's been a lot of discussion about charging stations in Arlington and Northern Virginia, including building officials, fire personnel, manufacturers, energy advocates and others. There was a major building in Crystal City which attempted to put a Tesla mega-pack in use as a 5G backup. Shahriar denied the permit. Cars are not regulated by the building officials, but the damage they can cause can be extensive. New York City has recently had 10 fatalities from faulty batteries. If a car catches on fire, it takes an estimated 5-9 hours and 30,000 gallons of water to put it out. Even after that, a fire may reignite and burn until it is fully burned out. Thermal runoff from lithium-ion batteries has great toxicity both in water and fumes, and can actually penetrate the skin. In addition to charging stations and electric vehicles, other companies are using large battery packs for emergency generators and backup energy. One proposal they want to create is a section in chapter 4 of the VCC for special occupancy energy storage units, which would bring in section 1207 of the 2024 IFC, and put it in the VCC for new construction requirements. Ongoing testing and maintenance would be added to the SFPC. They are also looking at electric charging stations. Does it merit additional sensors, early warning, moving the lower-level charging stations up toward the surface? This technology changes quickly, so discussion is needed now. Some stations now have signs saying that particular car makes cannot use the station, due to the potential fire hazard.

Florin: Is there a time expected for the submission of this proposal?

Shahriar: There are a lot of details to be worked out, especially because there are many variables for fire protection used in energy storage systems. There's a meeting scheduled for March 15 to discuss a draft. Knowing that the deadline is May 1<sup>st</sup>, they will attempt to work within those parameters.

Florin: There are several references to energy storage systems in the 2021 IBC and VCC that will also need to be coordinated.

Jay: This is fascinating. He would be interested in joining the meetings for situational awareness. He doesn't necessarily deal with below-ground level charging stations. However, there are several large buildings with large deep cell power sources in trailers used for backup and alternate energy. If it takes 5 hours and 30k gallons of water for one car fire, as well as toxic runoff, this kind of storage would be many

times worse. This is important for the VCC, including placement in proximity to buildings and firefighting needs.

Shahriar: He appreciates the collaboration between Building Officials and Fire Officials.

Sean: Section 307.1.1 of the VCC addresses battery storage and energy systems. However, this may not be the best location for the reference to the storage systems in the IFC. He would also like to sit in on the conversations with the group Shahriar spoke of.

Shahriar: There are many fire officials from various Virginia localities in the discussions, as well as UL and other laboratories. To Jay's point, there was a charging station proposed on a rooftop in Arlington, which was the size of two 18-wheel trailers.

Sean: They have industries in Prince William County reaching out to him for modification requirements to these types of systems. The conversation is needed.

Shahriar: The other struggle is that building code doesn't have retroactive requirements. Electric vehicle charging comes in after the buildings have already been built. Condominium owners are asking for the stations to be installed in existing buildings. Part of the conversation is how to alert the fire department and get them early warning and ventilation. If there's a lithium-ion battery, it cannot be put out until it burns out, which is extremely dangerous.

Sean: A 500 space garage, with 250 spaces utilizing battery charging stations could be disastrous.

Shahriar: Currently, the Amazon building in design has 200 electrical charging stations below grade to G-4 level. He sent the revised meeting invite to Jeff for distribution to this sub-workgroup.

Jeff: Will send the link out after this meeting.

**Other / Next steps / Next meeting:**

Florin: Asking for further discussion, and none was offered. He summarized what was discussed, including adding the CA items to the group proposal in cdpVA. The next meeting will contain additional discussion about 1207. The meeting date hasn't been set yet, but the invite and agenda will be distributed beforehand. He thanked everyone for participating.



## Statewide Fire Prevention Code (SFPC) Sub Workgroup Meeting Summary

April 18, 2022 9:00 a.m. – 2:45 p.m.

Virtual Meeting: <https://vadhcd.adobeconnect.com/va2021cdc/>

### ATTENDEES:

#### **VA Department of Housing and Community Development (DHCD) Staff:**

**Cindy Davis:** *Deputy Director, Building and Fire Regulations (BFR)*

**Jeanette Campbell:** *Administrative Assistant, BFR*

**Jeff Brown:** *State Building Codes Office Director, State Building Codes Office (SBCO)*

**Richard Potts:** *Code Development and Technical Support Administrator, SBCO*

**Florin Moldovan:** *Code and Regulation Specialist, SBCO*

**Paul Messplay:** *Code and Regulation Specialist, SBCO*

**Thomas King:** *Code and Regulation Specialist, SBCO*

#### **Sub Workgroup Members:**

**Andrew Milliken:** *Virginia Fire Services Board (VFSB), Chairman of Fire Codes and Standards Committee*

**Dustin Wakefield:** *Virginia Department of General Services (DGS), Division of Engineering and Buildings (DEB)*

**Jimmy Moss:** *Virginia Building and Code Officials Association (VBCOA)*

**Joshua (Jay) Davis:** *State Fire Marshal's Office, Virginia Department of Fire Programs (VDFP)*

**Linda Hale:** *Virginia Fire Prevention Association (VFPA)*

**Steve Shapiro:** *Apartment and Office Building Association (AOBA)*

#### **Other Interested Parties:**

**Kenney Payne:** *American Institute of Architects (AIA)*

**Ron Clements:** *Chesterfield Building Official, member of VBCOA*

**Scott Lang:** *Honeywell Fire*

**Sean Farrell:** *Prince William County, member of VBCOA, member of BHCD*

#### **Sub Workgroup Members Not in Attendance:**

**Mike O'Connor:** *Virginia Petroleum and Convenience Marketers Association (VPCMA)*

**Lou Wolf:** *SBW Architects, American Institute of Architects (AIA), Virginia Chapter*

**Matthew Lannon:** *Virginia Restaurant, Lodging & Travel Association (VRLTA)*

**Jodi Roth:** *Virginia Retail Federation (VRF)*

## **Welcome:**

Jeff Brown: Welcomed members to the meeting and let them know that DHCD staff could assist with any questions. Anyone can join in the discussion, but only Sub-Workgroup members will vote on the proposals.

Steve Shapiro: Asked if proposal EB1209 could be moved up on the agenda because he has to leave early.

Jeff: Asked Andrew Milliken if that was acceptable.

Andrew Milliken: Doesn't mind presenting first. All three of his proposals are related.

Jeff: All three of Andrew's proposals will be presented first.

## **Proposals:**

### **FP3303.3.1-21**

Andrew: The first proposal corrects a reference to IFC 112.3 and changes it to 111. Next, a reference to IFC section 110 is stricken, and says instead that the fire official may request a stop work order from building official. Next is a change of language to indicate maintenance instead of construction. Other references were cleaned up related to the Fuel Gas Code, standpipes, stairways and removing construction provisions.

Ron Clements: Thinks that separation between construction areas does not need to specifically mention Type I and Type II construction, since noncombustible materials was stricken. In section 3314.1, the current requirement triggers a standpipe at 40 feet. That was changed to "Where required by the applicable building code, a temporary or permanent standpipe shall be maintained..." This removed exceeding 40 feet as trigger. What is the trigger now?

Andrew: Construction language referencing 40 feet was removed. That remains in the building code.

Ron: He understands and agrees.

Andrew: For Ron's first comment, does he suggest striking the Type I and II construction or adding back the noncombustible materials?

Ron: Does it matter?

Andrew: He thinks Type I and II construction provides context and doesn't think the intent is to deal with separations in Types III, IV, and V construction.

Ron: He understands and is fine with leaving it.

Kenney Payne: Does 3305.8.7.6 setup .9? Does .8 talk about separation between other construction types, or does this stand on its own?

Andrew: This stands alone for Type I and Type II construction. The idea is to remove construction language from the SFPC and keep it in the VCC. Does he see something else in IFC?

Kenney: No, he was just wondering if there's a separate section for each type.

Jeff: Confirmed that 3305.9 is a new section, unique to Type I and Type II.

Andrew: Thinks it does provide context.

Jeff: Hearing no other discussion, this proposal will be marked as supported by the Sub-Workgroup. Does the Sub-Workgroup want to be a co-proponent? Since there was no opposition, this will add the SFPC Sub-Workgroup as a co-proponent.

***NOTE: After all 3 of Andrew's proposals were reviewed, it was decided by the group that FP3303.3.1-21, B3302.4-21 and EB1209.1-21 would all be Carried Over until the next meeting.***

***Subsequent Decision: At the end of the meeting, it was decided that Andrew would work on the language and submit the final proposals in cdpVA before May 1 for the June Workgroup meeting.***

### **B3302.4-21**

Andrew: This proposal adds two sections to the VCC, revises a section for an inaccurate reference and deletes another section, which belongs in the SFPC. The first part is separation of construction areas. The IFC reference is removed from the SFPC, but it should be added to the VCC. Section 3302.4 is for Type I Type II construction and section 3302.5 is for Type IV construction. In section 3312.1, the only change is the reference for

temporary occupancy information. The last one is a large deletion, which belongs in the SFPC. The 2021 editions of the IFC and the IBC have a number of requirements for water supply for fire protection during construction. These requirements should be kept in the SFPC and deleted from the VCC, with a reference to the SFPC located here in the VCC instead.

Kenney: For sections 3302.3.4 and 3302.3.5, since they are located in the IBC or the VCC, would this extend to existing buildings? For example, if a Type I or Type II building is converting to a media center, would all of this be required?

Andrew: Not unless it's subject to Chapter 33 in the VCC. The VEBC has its own section for buildings under construction.

Kenney: If you make these changes in the VCC, do you also intend to make these changes in the VEBC?

Andrew: Just for the water supply requirements.

Kenney: When you say water, what requirements are being added? What if there's no water.

Andrew: That's a section for the next proposal in the VEBC.

Jeff: Section 3302.4 comes from Chapter 33 of the 2021 IFC?

Andrew: Yes, they should be emphasized in the VCC since they are being deleted from the SFPC.

Jeff: Section 3302.3 of the VCC says that fire safety during construction shall be provided according to Chapter 33 of the IFC. There does seem to be a link available.

Andrew: Agrees that there's a link. Yet, emphasizing that is easier if it's an actual section in the VCC.

Ron: Section 1201.5 in the VEBC references the IBC and IFC. There's a link to the existing building code here. If this provision is specific to work under construction, doesn't this really belong in the VEBC? There's a link, but when would you be in the VCC in an occupied building?

Andrew: Is the proposal to add language from 3302.4 to the VEBC?

Ron: Yes. It should probably be in the VEBC first.

Andrew: Is not opposed to that.

Ron: Over the last few cycles, they have tried to get things from the VCC into the VEBC where applicable. This is a friendly suggestion, not opposition.

Jeff: Asked Andrew if he wanted to table this to have more discussion about consistency in the codes before moving forward.

Andrew: Yes, that makes sense.

Kenney: Is in favor of carrying it over. The concern is occupied portions of a building. If the intent is adding a separate section to an occupied building, that's ok, since a lot of the existing building code is altering spaces in the existing buildings. However, a lot of Type I and Type II construction, doesn't have any separation. For example, converting classrooms in a building to a media center; would this require ripping out the ceiling and building walls up to the roof deck with noncombustible materials? The charging statement doesn't distinguish between a building and an existing space within a building. That's something to think about before it's carried over to next meeting.

Ron: It is fairly common for contractors to separate occupied and non-occupied space, but it's not done with noncombustible material.

Jeff: This will be marked as Carried Over.

#### **EB1209.1-21**

Andrew: Instead of having an open requirement for water supply, it would point to the SFPC, which regulates water supply for fire protection. This gets into vertical construction with a standpipe system. There needs to be water available. It uses the same language as the VCC.

Steve: This talks about standpipe systems in buildings under construction. Why would buildings under construction be in the VEBC instead of the VCC?

Andrew: This is existing language in section 1209.1, which speaks to water supplies for fire protection. It's an attempt to have consistent language across the codes. He can't speak to why it would or should be in the VEBC, but it already is.

Steve: Asked about pulling out the phrase "buildings under construction".

Andrew: That's what we're talking about, specifically buildings under construction. Chapter 12 of the VEBC speaks to that.

Kenney: Last code cycle, language was developed about what an addition is. It's construction without a fire wall. If it has a fire wall, it would need to be under the VCC. With no fire wall, it's only an addition to an existing building. Perhaps using the word "addition" would capture what Andrew is trying to say.

Jeff: They should try to decide if this language is clear enough. "Under construction" doesn't sound like it falls under the VEBC.

Steve: Thinks Kenney is on the right track. The language currently sounds like a building that would be covered under the VCC.

Andrew: In Chapter 12 of the VEBC, there are provisions for standpipe systems, means of egress, demolition, sprinklers, fire extinguishers and other safeguards that are related to construction. Water supply is just one of the things in that section. He's not understanding what the suggestion is for this, since the whole chapter has construction related language.

Kenney: Doesn't want to delete the whole section. He wanted to address Steve's concern, and substitute the word "building" with the word "addition".

Jeff: Could there ever be a case where someone is adding standpipes to an existing building?

Kenney: Yes.

Jeff: Is it ok to say "buildings under construction" is limited to new buildings in the VCC, but describes existing buildings in the VEBC, addition of a fire wall alterations, renovations, etc.

Ron: Suggested using language similar to what is in section 1201.3, where it talks about requirements that shall be maintained at all times "during alterations repairs or additions". Using that phrasing instead of "buildings under construction" should make the point, and also be consistent with other sections.

Jeff: Asked Andrew what he thought about that, and if he wanted to carry this over until the next meeting. He also noted that Steve gave a thumbs up sign.

Andrew: Yes, that sounds good.

Jeff: This will be marked as Carried Over until the next meeting.

## **EB1102-21**

Jeff: Scott wanted to bring his energy storage systems proposal to this group to get additional insight before he submits the final version.

Scott Lang: This proposal is an effort to bring in a change that's coming to the 2024 IFC related to existing energy storage systems. Some incidents that have happened recently has led to the idea that the older systems need to be looked at with an eye toward the latest standards of care. This would require that the owners of these older commercial systems complete a Failure Modes and Effects Analysis (FMEA) or a Hazard Mitigation Analysis (HMA). This does not cover residential systems. There's an exception for detached one- and two-family dwellings and townhouses. The 2018 IFC was the year that a lot of changes were made to energy storage systems. Before that, there was only requirements for battery backup. It will be Chapter 11 in the 2024 IFC. He's not exactly sure where to put this. Or, if there's a better way to word it.

Kenney: What are the potential mitigation requirements? Also, since Virginia is very clear about not requiring existing buildings meeting a current code, unless there's a retrofit, how would it even be enforced? Would the Board or General Assembly give the ok? What if later requirements are more stringent? Would they have to do this again? Personally, he agrees with this, but he doesn't know how it will land.

Jeff: If this goes forward, the Board will be made aware of it, but the Board cannot approve retrofit provisions in the building code. Retrofit provisions come as a directive from the General Assembly and they tie back to legislation. Also, retrofit provisions require a one-time upgrade by a certain date.

Steve: When this came up in the resiliency meeting, the retroactive nature of this was discussed. For that reason, he would be against this for AOBA and VAMA.

Ron: Doesn't see this as a retrofit. Other retrofits require something to be done to the building. This proposal doesn't say that. It requires that information to be given to the fire official. It makes more sense to put it into Chapter 12 of the Statewide Fire Prevention Code.

Jeff: Asked Scott to discuss the corrective action plan in 1102.1.2 to mitigate hazards, including if it would require the fire official to approve the plans and inspect after the corrective actions have been taken.

Scott: Yes, that would be the intent. Once the system is looked at and a hazard mitigation analysis is done, if things don't meet current standards of care, mitigations would be put in place that would then be inspected and approved. These are complex systems which could consist of anything. In UL9540 and 9540A, things identified include the types of gasses that are produced, thermal runaway, gas protection systems, fire protection systems, spacing that is required, etc. This is not intended to be updated every year. The codes and standards are pretty evolved now. Currently, the first edition of NFPA 855 is being used, but there were many things we didn't know when developing it. The second edition is coming out this year. Those standards have evolved quite a bit. He doesn't see that kind of change happening in the future. This has been an area over the last 5 years or so which has exploded. They want to make sure the older systems are safe.

Jeff: This is in the VEBC, enforced by the building official. The corrective action plan is to be submitted to the fire official under the SFPC. If there's a plan that needs construction or installation to be done under the USBC, that goes back to the building official. As this proposal stands now, it seems like there would only need to be a plan submitted to fire code official with no other action.

Kenney: The code change only asks for a plan, not actual work. However, the intent is that there would be mitigation performed, not just a plan submitted. He would suggest that it goes into chapter 4 of the IFC or the SFPC. Section 407 is about hazard communication and hazardous materials management plans. Could this be part of that section? As Scott said, people are installing these things. There could be existing buildings that already have a permit for storage systems. Is this intended to apply to existing buildings that already have the systems, or to buildings that don't have systems, but want to add them?

Scott: The intent is that when there's an existing energy storage system which doesn't meet the UL9540 or fire code standards, they should be looked at and addressed. This isn't really storage of batteries. It's more about electrical energy storage systems that are used to provide power. Storage of batteries themselves are not the main concern. The way to think of this is that it might not be in the right section, but the question is are we concerned about existing energy storage systems in Virginia. If it is about electrical energy storage systems that are used to provide power, what would the solution be?

Jeff: The group is about to discuss a very big proposal to section 1207 of the SFPC. This group made some agreements, but it still needed work. DHCD staff started from the beginning of SFPC 1207 and realized that any ESS system should be approved by the building official for installation or other upgrades under the USBC. SFPC section 1207 is all maintenance language. After an ESS system is deployed, and already approved as per the USBC, all maintenance falls under the SFPC section 1207. If Scott's proposal can be coordinated with this proposal, it would help to decide where Scott's proposal would go. A hazard mitigation analysis should be done before deployment, so the building official would approve it. Corrective action plans in existing systems should also go to the building official for approval, based on what is being proposed in SFPC 1207. He asked Scott if he would like to carry over his proposal and look at it again in the next meeting. He noted that Scott's proposal is already submitted in cdpVA, so it will be presented at the June Workgroup meeting. He said that DHCD staff would be happy to help him if he wanted to make changes in cdpVA before May 1<sup>st</sup>.

Scott: Does think that it should be coordinated, so he thinks it's ok to carry it over. He also noted that a main reason for this proposal is to get the discussion started, since it is on deck to be in the 2024 IFC.

{BREAK: 10:05-10:15}

### **Amendments to SFPC Section 1207**

Jeff: At the previous meeting, the group reviewed a list of changes to the SFPC, proposed by the VFSB Sub-Committee, including several changes throughout SFPC Section 1207; however, the group decided that some additional work was still needed on Section 1207. DHCD staff agreed to go through the proposed changes to Section 1207 and make some additional edits to remove references to the IFC and address potential confusion related to mobile ESS. This proposal is the draft that DHCD developed.

In an Excel spreadsheet shared on-screen in the Adobe Connect meeting room, Column A showed the 2021 SFPC Base Document text. Column B showed the 2021 IFC text. Column C showed the 2021 SFPC text suggested by this code change proposal. Today's group decisions will be recorded in column D.

Each of the sections below were introduced by DHCD staff and there was a main theme of changing construction-related language to maintenance-related language.

**107.2** – Says that a permit is required for stationary and mobile energy storage systems regulated by section 1207. Approved by group members as proposed.

**1207.1** – No changes were made to this section. Approved by group members as proposed.

**1207.1.1 and table 1207.1.1** – Following the discussion, section 1207.1.1 was approved by the group members to keep the original IFC language, and table 1207.1.1 will remain in the code as approved by the group members.

Linda Hale: Asked about the size of the systems. Is there a minimum size?

Jeff: The USBC says all systems have to comply, and points to section 1207.1.1, which is a capacity table. This lays out the requirements by size. If the system is smaller than the smallest one on the table, it's not regulated in section 1207.

Linda: A 20kw lithium ion battery is lower than the threshold. How can fire officials ensure that it's safe and maintained?

Jeff: Whatever can be regulated under the IFC now, this is keeping with those numbers. Whatever the general maintenance requirements are according to the capacity.

Andrew: 1207.1.1 is a scoping section. He wants to keep the table and the minimum. There's no maximum. It would be important for a minimum threshold for what's regulated by the SFPC.

Jeff: The intent is to keep with what is in the IFC. Instead of providing a table, it refers to the applicable building code.

Andrew: This isn't a maximum allowable quantity table. It scopes what is and what isn't regulated. Deciding what is regulated by the IFC isn't the way to go with scoping provisions and the SFPC. It should be very clear. The quantities and building code. What is regulated by SFPC has to be clear.

Jeff: Anything less than 3 kWh is not regulated. Anything less than minimum quantities isn't even regulated by the IFC.

Linda: Has been seeing a lot of fires from small lithium ion batteries and it's a concern for her.

Jeff: It's already in the IFC, but if it's less than the table, section 1207 doesn't even apply. Not losing anything here. There may be another section where they are included.

Andrew: Can't think of another section where this is referenced. There will be enforcement beyond the threshold. The SFPC is a stand-alone document. Thresholds would apply. That will regulate any hazards. For a scoping provision, there needs to be that language in the SFPC. It's fundamental for enforcement.

Jeff: Has there been any change in the IFC capacity? They wouldn't want an installed system being non-compliant if it was compliant in the past.

Linda: In her experience, they only add to it, not take away.

Andrew: If SFPC is maintenance, retroactive action would not be applicable. It won't follow what was in place when it was installed.

Jeff: Andrew and Linda are proposing to keep the table. Everything else will be maintenance and operation.

**1207.1.2** – Approved by group members as proposed.

**1207.1.2.1** – Approved by group members as proposed.

Andrew: standard exemption for communication utilities. Its' not regulated by the SFPC

**1207.1.3** – Replaced installation and construction language with maintenance language. Approved by group members as proposed.

**1207.1.4** – Changed language from construction related to maintenance related. After the discussion, this was approved by group members as modified, by striking the word "identified" from the proposed language and

leaving in the reference to table 1207.1.1.

Florin: There were a few revisions to this. It adds context to when an analysis is required as part of the permit application process. It says that the analysis shall be provided to the fire official, and it adds a paragraph defining who can prepare and stamp the analysis.

Andrew: Is this something required for all energy storage systems?

Florin: Anything specifically included in table 1207.1.1, the same as in the IFC. He asked for confirmation that table 1207.1.1 will remain in the code.

Jeff: Yes, keeping table 1207.1.1 was the decision.

Florin: Asked the group if they wanted to strike the word “identified”, and have the sentence in item #1 read “Where ESS technologies not specifically in Table 1207.1.1”. The group members agreed.

#### **1207.1.4.1 and 1207.1.4.2 –**

Florin: These sections should be deleted, as they refer to actions performed under the USBC, and the fire official wouldn’t actually approve them, building official would. Approved by group members as proposed.

**1207.1.4.3 –** Approved by group members as proposed.

**1207.1.5 –** Following the discussion, this section was approved by group members as proposed.

Andrew: What is this requiring?

Florin: ESS to be maintained in such a way as to safeguard an adjacent ESS. Doing the same thing that most other sections do. Maintain in accordance with applicable building code.

Florin: Asked the group if they wanted to strike the section out totally or keep it as proposed. Andrew and Joshua thinks it should be stricken completely, and Steve and Linda think it should be kept as proposed. Florin asked Andrew and Joshua if they would be opposed to keeping the language as proposed.

Andrew: Is ok to move forward as proposed and not strike the section out. Seems a little confusing, but it doesn’t really hurt anything.

**1207.1.6 and 1207.1.6.1 –** No changes were made to this IFC section. Approved by group members as proposed.

{BREAK 11:05-11:10}

**1207.2 –** No changes were made to this IFC section. Approved by group members as proposed.

**1207.2.1 –** Following the discussion, this was approved by group members as proposed.

Florin: This was revised from construction language (under USBC) to maintenance language. Items required in commissioning plan were removed, since those requirements are in the USBC. However, the requirement to provide documentation to the fire official was retained.

Andrew: Is there another section about decommissioning?

Florin: Yes. Decommissioning falls under the purview of the building official.

Andrew: Can the fire official get a copy of the decommissioning plan? There’s a commissioning report for the fire official, but not a decommissioning report.

Florin: 1207.2.3 talks about decommissioning and it has to be approved in accordance with the applicable building code.

Andrew: OK.

**1207.2.1.1 –** Covered under the USBC, stricken from the SFPC. Approved by group members as proposed.

**1207.2.1.2 –** Keeps the commissioning responsibility under the applicable building code, but allows the fire code official to request documentation if desired. Approved by group members as proposed.

**1207.2.2 & 1207.2.2.1 –** No changes were made to this IFC section. Approved by group members as proposed.

**1207.2.3 –** Following the discussion, this was approved by group members as modified according to Jeff’s proposed language in the chat box.

Florin: This section identifies the owner as the person responsible to notify the code official about decommissioning an energy storage system. It also says that the decommissioning plan is approved in accordance with the applicable building code. Detailed steps were removed (items 1 and 2). He asked the group if “code official” (copied from the IFC) should be changed to “fire code official” in the SFPC.

Andrew: Decommissioning should be done by the building official, but he doesn't want to leave the fire official out of the loop.

Florin: For the purpose of this section in the SFPC, someone has to notify the fire official of decommissioning.

Jeff: Proposed alternate language in the chat:

**Jeff Brown - DHCD**: Decommissioning shall be performed in accordance with the decommissioning plan approved in accordance with the applicable building code. The fire code official shall also be notified by the ESS owner prior to the decommissioning of an ESS.

**1207.3, 1207.3.1 and 1207.3.2** – No changes were made to these IFC sections. Approved by group members as proposed.

**1207.3.3** – This was originally not going to be modified, but there's a similar section for mobile ESS. At the beginning of the body of the code, perhaps "when required by the applicable building code" should be added. Approved by group members as modified by adding "when required by the applicable building code".

**1207.3.4** – Changed the word "provided" to "maintained". Approved by group members as proposed.

**1207.3.5** – Changed to "maintained in accordance with applicable building code". Approved by group members as proposed.

The changes to the following provisions were already agreed to at the last meeting of this group:

**1207.3.6** – Changed "repairs" to "repairs and alterations in accordance with applicable building code". Approved by group members as proposed.

**1207.3.7 and 1207.3.7.1** – Stricken. Approved by group members as proposed.

**1207.3.8 and 1207.3.9** – Stricken. Deleted. Approved by group members as proposed.

**1207.4** – Replace "installations" with "maintenance". Approved by group members as proposed.

**1207.4.1** – No changes were made to this IFC section. Approved by group members as proposed.

**1207.4.2 and 1207.4.3** – Changes were made and agreed to at the last meeting. Approved by group members as proposed.

**1207.4.4** – Stricken with agreement at the last meeting. Approved by group members as proposed.

**1207.4.5 and 1207.4.6** – No changes were made to this IFC section. Following discussion, this was approved by group members as proposed.

Joshua: Section 4.5 says "shall be provided". Should it say "shall be maintained"?

Florin: In most cases it would. However, the group has historically agreed that vehicle impact protection and signage are things that can be required by the fire official.

Sean Farrell: typed in the chat box "It's operational more so than construction".

**1207.4.7** – Following the discussion, this was approved by group members as modified according to Steve's proposed language in the chat box, except for replacing "provided" with "maintained".

Florin: The addition of "Hazardous exhaust systems" was approved at the last meeting. Since then, DHCD staff has added "shall be operated and maintained" to the end of the sentence.

Steve: The proposed language sounds a little strange. What's currently in the IFC says discharging shall be "provided and maintained" with the hazardous exhaust system, which sounds better.

Florin: This version has no technical changes, just an edit to the language. He asked Steve to type in the chat box language that he would propose.

Linda: The concern is if there's a hazardous exhaust system, it needs to be operated properly as designed. That's why language seems funny.

Steve: typed in chat:

**Steve Shapiro, AOBA/VAMA**: Hazardous exhaust systems for ESS that have the potential to release toxic and highly toxic gas during charging, discharging and normal use conditions shall be provided and maintained.

Florin: What does group think about this language?

Andrew: Likes "operated and maintained" better than "provided and maintained".

Florin: Asked for a group vote, which resulted in using Steve's text, with the exception of replacing



“provided and maintained” with “operated and maintained”.

**1207.4.8 and 1207.4.9** – No changes were made to these IFC sections. Approved by group members as proposed.

**1207.4.10** – Following the discussion, this was Approved by group members as modified by Andrew to include the words “secured and”.

Florin: This proposal was approved by the group in the last meeting, but DHCD edited the wording a bit to read more clearly.

Andrew: Asked if the cabinet where the ESS system is located can be locked. He asked to add “secured” to the text to read “shall be secured and provided with signage”.

Florin: Yes. That can be added.

**1207.4.11** – Changed from construction to maintenance language. Approved by group members as proposed.

**1207.4.12** – No changes were made to this IFC section. Approved by group members as proposed.

**1207.5** – Following the discussion, this was approved by group members as modified: keep section 1207.5; delete table, and where the table is referenced, replace with “applicable building code”

Florin: Originally, in the base document, the subsections were deleted, but this proposal brings them back and uses maintenance language instead of construction language.

Andrew: Only sees one reference to the table in sub-section 1207.5.2. He proposed that sub-section 1207.5.2 stays and delete the table. Reword so that maximum allowable quantities are “in accordance with applicable building code”.

Jimmy Moss: Likes that idea.

Florin: Asked for a vote to strike the table and where it’s referenced, say “applicable building code”. The vote showed support of Andrew’s suggestion.

**1207.5.1** – reworded construction language to maintenance language. Approved by group members as proposed.

**1207.5.2** – Strike out exceptions, and as per Andrew’s proposal, reference “applicable building code” instead of table 1207.5, which was stricken. Approved by group members as modified.

**1207.5.2.1-** Approved by group members as proposed.

**1207.5.3** – Added “unless otherwise approved” and changed from construction to maintenance language. Approved by group members as proposed.

{Lunch Break – 12:01 – 12:35}

**1207.5.4** – Following discussion of **1207.5.5**, this was also Approved by group members as modified by adding “Chapter 9” to read “in accordance with Chapter 9 and the applicable building code”

**1207.5.4.1** – Following the discussion, this was approved by group members as proposed.

Florin: Changed construction language to maintenance language, and added “in accordance with applicable building code”.

Andrew: Wondering if this was previously a deleted section. There is a lot of different language here and the simple idea is to maintain the fire system.

Jeff: Originally, in the base document, all of section 1207.5, including sub-sections, was deleted.

Andrew: Thinks that if these sub-sections will stay in the code, they should be written in simple maintenance language. For example, the first sentence starts with “where required” and then it’s a long way down before it mentions “maintained”.

Florin: The way he reads it is that the systems mentioned need to be maintained.

Andrew: After reading further, he can see that.

Florin: One reason to keep this is that it refers to specialized systems, which would be helpful for the fire official, who may not be familiar with those types of the systems.

Andrew: Ok with this language.

**1207.5.5** – Approved by group members as modified, adding “Chapter 9”

Florin: This deleted items 1-3 and the exception, and changed the language to apply to maintenance instead of construction.

Andrew: This should also reference Chapter 9.

Florin: This should then say, "in accordance with Chapter 9 and the applicable building code" in sub-sections 1207.5.4 and 1207.5.5.

**1207.5.5.1** – Changed from construction to maintenance language. Approved by group members as proposed.

**1207.5.6** – Added "unless otherwise approved in accordance with the applicable building code". Approved by group members as proposed.

**1207.5.7** – No changes were made to this IFC section. Approved by group members as proposed.

**1207.5.8** - Deleted the exception, modified language to apply to maintenance instead of construction, and added "in accordance with building code". Approved by group members as proposed.

**1207.6** – Added "maintain in accordance with the applicable building code". Deleted table. Approved by group members as proposed.

**1207.6.1** – Changed construction language to maintenance language, added "in accordance with the applicable building code". Approved by group members as proposed.

**1207.6.1.1** – Changed construction language to maintenance language, added "in accordance with the applicable building code". Approved by group members as proposed.

**1207.6.1.2 and sub-sections 1207.6.1.2.1, 1207.6.1.2.2, 1207.6.1.2.3 and 1207.6.1.2.4** – Following the discussion, section and sub-sections were Approved by group members as proposed.

Andrew: Proposed deleting the entire section and subsections, since it refers to construction.

Steve: Ventilation based on LFL is ok, but ventilation based on exhaust rate is not?

Andrew: This is a complicated section, since it was intended for construction, and it's difficult to break out and reclassify what needs to be stated in maintenance language. In the past, in other sections of the SFPC, they leave LFL in the code because it's important to identify an extremely hazardous situation. The exhaust rate is not so much.

Steve: He's not suggesting to delete the LFL section, but if they are deleting the exhaust rate, how would the code user see that?

Andrew: Exhaust ventilation needs to be maintained in section 6.1, but LFL needs an additional requirement.

Joshua: Language removed in other sections of the SFPC are left here. If these sub-sections are taken out, it's in line with what has already been done. But, it's ok with him to leave them in, if it's not construction language.

Florin: The proposed text does change construction language to maintenance language. Sub-section 1207.6.2.1 talks about associated standby power. If it's deleted, could it negatively impact the ability to enforce it?

Andrew: It's ok with him to leave it in.

Joshua: Likes leaving it in with the changed language. He thinks it is helpful for the inspector.

**1207.6.2 and sub-sections 1207.6.2.1 and 1207.6.2.2** – Approved by group members as proposed.

**1207.6.2.3** – No changes were made to this IFC section. Approved by group members as proposed.

**1207.6.3** – Added "maintained in accordance with applicable building code", and removed exceptions. Approved by group members as proposed.

**1207.6.4** – Changed from construction language to maintenance language. Approved by group members as proposed.

**1207.6.5** – Changed from construction language to maintenance language. Approved by group members as proposed.

**1207.7** – Added "maintain in accordance with applicable building code". Table was stricken. This is in line with other decisions. Approved by group members as proposed.

**1207.7.1** – Following the discussion, this was approved by group members as modified. Changed language to require maintenance with applicable building code. Deleted items 1-4.

Andrew: Dedicated use buildings should only be used for ESS.

Florin: These dedicated buildings were approved already under the USBC. They just have to be maintained here. He asked Andrew what he would propose.

Andrew: How about “shall only be used for ESS”, instead of “shall be maintained”?

Florin: How about “shall continue to be used as a dedicated use building”?

Andrew: typed in chat box:

**Andrew Milliken**: Buildings classified as Group F-1 occupancies and approved as dedicated-use ESS buildings in accordance with the applicable building code, shall only be used or occupied as approved.

Florin: The group liked his proposal, and this was approved as modified by Andrew.

**1207.7.2** – Approved by group as modified by Andrew.

Florin: The group may want to say something about non-dedicated-use buildings, similar to 1207.7.1, as indicated by Andrew’s proposed language. “approved as non-dedicated-use buildings.....shall be used or occupied as approved”.

**1207.7.3** – Added “unless already approved”, and modified “shall be allowed” instead of “installed”. Approved by group members as proposed.

**1207.7.4** – Modified to remove construction language, and added “maintained in accordance with the applicable building code”. Approved by group members as proposed.

**1207.8** – Added “maintained in accordance...” and deleted a table. Approved by group members as proposed.

**1207.8.1 & 1207.8.2** – This previously referenced the deleted table 1207.8, it was modified to reference the text in section 1207.8. Approved by group members as proposed.

**1207.8.3** – Dimensions were eliminated. Added “shall be maintained in accordance...” Exceptions were deleted. Approved by group members as proposed. \*Note: Upon further discussions later in the meeting, this was approved as modified (see notes towards end of summary, where this section was revisited.)

**1207.8.4** – Added “Where the applicable building code allows...shall be maintained in accordance with the applicable building code”. Approved by group members as proposed.

**1207.9** – Added “in accordance with applicable building code”. Deleted table. Approved by group members as proposed.

**1207.9.1** – Referenced the deleted table 1207.9 and changed the reference to the text in section 1207.9. Approved by group members as proposed.

**1207.9.2** – Refers to section 1207.9 instead of the deleted table 1207.9. Changes a reference to the IBC to read: “the applicable building code”. Approved by group members as proposed.

**1207.9.3** – Added “Where applicable building code requires separation” and “maintained in accordance with applicable building code”. Removed exceptions. Following the discussion, this was marked as non-consensus. \*Note: Upon further discussions later in the meeting, this was approved as modified (see notes towards end of summary, where this section was revisited.)

Andrew: There’s no language about how far away from storage of hazardous materials. It would be difficult for inspector to go back to applicable code at the time of installation. He doesn’t know what the fix might be, but he wanted to bring it up.

Florin: Can appreciate that. This is similar to edits that have been done historically, because of the requirements in the code at the time approved or installed. If they keep specific measurements, it would automatically put things out of compliance that were ok before.

Jimmy: Inspectors have to reference the code under which it was installed.

Linda: The inspector might want to refer to the code before leaving for the site. A problem might be if the ESS or hazardous material was moved after it was originally installed. They should have to come into compliance with 10 ft., if it was moved. Some things should be removed, and some not. Things that are operational, which are brought in after installation should be included.

Florin: If something is brought into any given building, if an ESS is installed, it would have had to go through the USBC installation and approval process, even if it’s in an existing building. If the 10 feet dimension is left here, anything that was already approved with a separation of less than 10 feet, and not moved, would put them out of compliance.

Andrew: This is talking about outdoor areas, not inside a building. It’s not the mobile section, but it is outdoor.

There should be an understanding of what is safe, even without going back to the original code.

Florin: When asked to vote on moving forward as currently proposed, Linda voted thumbs down. He asked Linda what else she would propose.

Linda: When the ESS is installed, then combustible or hazardous materials are stored, then it's mobile, that's the concern. ESS can be approved under whatever code year it's installed, but when things are brought in later, fire official should be able to say it must be 10 ft. away from other things. She proposes leaving in the 10 ft., and striking numbers 1, 2, 3 and 4 on the list, since it's not in the purview of the fire official.

Florin: Would "where the applicable building code requires separation" still be needed?

Linda: No, because it will be in accordance with the SFPC in effect at the time.

Florin: Is she proposing to keep the IFC language and strike items not under purview of fire official?

Linda: Yes.

Jimmy: Is not in agreement. If any of those materials are present, it goes back to the building code.

Steve: Asked Linda what she would do about the exceptions (which were stricken in the proposal)

Linda: The exceptions are not buildings, so they would be structures that would fall underneath #1 and have prescriptive language.

Florin: 1207.9.3 will be marked as non-consensus. He encourages group members to join together before the next meeting to see if they can come up with a new proposal in cdpVA. This can carry over until before May 1<sup>st</sup>, or if a Thursday meeting is needed this week to exhaust the rest of this agenda, it can be addressed at the end of that meeting.

{BREAK: 1:40 – 1:45}

**1207.9.4** – Approved by group members as modified per Andrew's proposal to add "in accordance with Chapter 9 and the applicable building code"

Andrew: Add a reference to Chapter 9 to say "in accordance with Chapter 9 and the applicable building code".

**1207.9.5** – Approved by group members as proposed.

Andrew: This doesn't specify what the separation is.

Florin: The charging statement 9.5 says "applicable building code", so all items listed fall under that. Approved as proposed.

**1207.9.6** – Added "maintained in accordance with applicable building code" and struck the specific construction language in the line items. Approved by group members as proposed.

**1207.10** – The table was left here because the sections referenced have all been modified today. However, footnotes were stricken as they were exceptions to the construction code requirements. The section and table were approved by group members as proposed. This will be double-checked by DHCD staff to make sure all of the sections referenced in the table were approved.

**1207.10.1 and 1207.10.2** – No changes were made to these sections. Approved by group members as proposed.

**1207.10.3** – Strike construction language, and add that permits are required in accordance with section 107.2. Approved by group members as proposed.

**1207.10.4** Construction documents replaced with operational documents. Approved by group members as proposed.

**1207.10.4.1** – Added "at the minimum" so as to not limit what the fire official could ask for, and changed operation to operational. No other changes were made. Approved by group members as proposed.

**1207.10.5** – Added "approved in accordance with applicable building code:" Changed "established on the construction permits" to "identified on the operational permits". Approved by group members as proposed.

**1207.10.6** – Exceptions 1 and 2 were modified to say "applicable building code" and "shall be maintained". Approved by group members as proposed.

**1207.10.7 & 1207.10.7.1** – No changes were made to this IFC section. Approved by group members as proposed.

**1207.10.7.2** – Approved by group members as proposed.

**1207.10.7.3** – \*Note: Upon further discussions later in the meeting, this was approved as modified (see notes towards end of summary, where this section was revisited.)

Florin: This is similar to the non-consensus section earlier. He asked what the group thought about it.

Andrew: How about: “where the applicable building code requires separation of 10 feet, the following...”

Florin: If that is used here, it could also be used for the other section.

Andrew: Thinks there were actually three non-consensus sections.

Florin: Decided to hold off until the end, and to circle back to it.

**1207.10.7.4** – Changed from construction to maintenance language and added “Unless otherwise allowed by the applicable building code, ...” Approved by group members as proposed.

**1207.10.7.5** Changed to say “operational” permit. Approved by group members as proposed.

**1207.10.7.6** – Approved by group members as proposed.

Florin: Fences with gates or other barriers. Added “in accordance with the applicable building code”. This one does say 5 ft.

Andrew: Is ok with this as it is.

**1207.10.7** No changes were made to this section. Approved by group members as proposed.

**1207.11** – Shall be “maintained” instead of “installed”. Approved by group members as proposed.

**1207.11.1** – Added “Unless otherwise approved with the applicable building code”, exceptions were stricken as they were building code provisions. Approved by group members as proposed.

**1207.11.2** – Changed “installation” to “maintenance” and added “applicable building code”. Approved by group members as proposed.

**1207.11.2.1** – Adds “where...required by the applicable building code” and “shall be maintained”. Approved by group members as proposed.

**1207.11.3** – Added “Unless otherwise approved”, changed “installed” to “located” and changed “IBC” to “VCC”. Approved by group members as proposed.

**1207.11.4** – Added “unless otherwise approved...” Approved by group members as proposed.

**1207.11.5** – Changed “electrical installation” to inverters. Removed installation in accordance with NFPA 70. Added “where required by applicable building code”. Approved by group members as proposed.

**1207.11.6** – This was approved by group members as modified by Andrew, adding “in accordance with Section 907.2.10” and “in accordance with Chapter 9”.

Florin: This replaces construction language with maintenance language.

Andrew: please add reference to Chapter 9 in the first sentence and last sentence.

**1207.11.7** – Removed reference to mechanical code, replaced with “applicable building code”. Approved by group members as proposed.

**1207.11.8** – Approved by group members as modified by Andrew to read “operated and maintained...”

Florin: Revised construction language to maintenance language and added “applicable building code”.

Andrew: The last sentence should say “operated and maintained in accordance with the applicable building code”.

**1207.11.9** – Added “Unless otherwise approved in accordance with the applicable building code”. Approved by group members as proposed.

**1207.11.10** – Added “the applicable” NFPA 70. Approved by group members as proposed.

### **VCC New Section**

Florin: this section will say that Electrical ESS shall comply with applicable provisions of IFC. This will make it very clear to all that ESS is regulated by the IFC. Approved by group members as proposed.

Florin: Also noted that another group is making proposals to bring the IFC into the VCC. DHCD staff will ensure that the Board knows about both proposals and how they can work together or independently.

**REVISIT Sections 1207.8.3, 1207.9.3 and 1207.10.7.3** – Approved by group members as modified by Andrew and further modified by Steve.

Florin: Asked Andrew if he had proposed language to address the concerns in this section.

Andrew: Other sections do provide prescriptive language that says when required by the applicable building code for a separation of xy feet, then, the ESS must be maintained. It may have drawbacks, but using such language might get consensus for now. It may still be readdressed in the next code cycle.

Florin: It sounds like it could be a good compromise. Requiring a certain distance, when the applicable building code so requires.

Jimmy: he would be agreeable to that.

Andrew: typed in the chat box:

**Andrew Milliken**: Where the applicable building code requires separation of 10 feet (3048 mm) from the following exposures, the separation shall be maintained in accordance with the applicable building code.

Steve: How about saying "minimum of 10 feet", which is in the IFC language?

Florin: Yes, that's good. All 3 sections will be approved as modified, using the appropriate language for each section as suggested by Andrew and further modified by Steve.

**Other:**

Florin: As a heads up, the DHCD staff proposal referencing requirements for permits is still referencing Chapter 1. Staff will check the IFC sections to make sure that Chapter 1 is there. If not, DHCD staff will create proposal for it.

**Assignments / Next steps / Next meeting:**

Florin: This group will probably meet one more time before the next Workgroup meeting on June 10<sup>th</sup> and discuss any other proposals that have been submitted.

Steve: This morning, the group discussed the fire safety door construction that might be further discussed this coming Thursday. He asked if that was still the intent.

Jeff: The group should meet before the May 1<sup>st</sup> deadline to discuss Andrew's three items. DHCD can share the 1207 decision spreadsheet with the proponent of the EB1102 proposal, to see the direction the group is heading, and allow the proponent to align with this group's proposal.

Andrew: Has a good idea of what to do with B3302 and EB1209. The F3303 proposal was decided as consensus for approval.

Steve: Yes, that's what he has in his notes.

Richard Potts: It was consensus, but got grouped back in with the other two.

Jeff: Asked if Andrew would like to meet again.

Andrew: He will modify according to the group feedback before May 1<sup>st</sup> for the next General Workgroup.

Jeff: The spreadsheet will be cleaned up and the 1207 proposal will be reflected accordingly.

Florin: Sections that have not been modified will not be included in the final proposal.

## Statewide Fire Prevention Code (SFPC) Sub-workgroup

May 11, 2022 9:00 a.m. – 11:21 a.m.

Virtual Meeting: <https://vadhcd.adobeconnect.com/va2021cdc/>

### ATTENDEES:

#### **VA Department of Housing and Community Development (DHCD) Staff:**

**Jeff Brown:** *State Building Codes Office Director, State Building Codes Office (SBCO)*

**Richard Potts:** *Code Development and Technical Support Administrator, SBCO*

**Florin Moldovan:** *Code and Regulation Specialist, SBCO*

**Paul Messplay:** *Code and Regulation Specialist, SBCO*

**Jeanette Campbell:** *Administrative Assistant, Building and Fire Regulations Division (BFR)*

#### **Sub-workgroup Members:**

**Andrew Milliken:** *Virginia Fire Services Board (VFSB), Chairman of Fire Codes and Standards Committee*

**Dustin Wakefield:** *Virginia Department of General Services (DGS), Division of Engineering and Buildings (DEB)*

**Jimmy Moss:** *Virginia Building and Code Officials Association (VBCOA)*

**Joshua Davis:** *State Fire Marshal's Office, Virginia Department of Fire Programs (VDFP)*

**Linda Hale:** *Virginia Fire Prevention Association (VFPA)*

**Mike O'Connor:** *Virginia Petroleum and Convenience Marketers Association (VPCMA)*

**Robert Melvin:** *Virginia Restaurant, Lodging and Travel Association (VRLTA) - \*acted as an alternate voting member to Matthew Lannon, who was not in attendance*

#### **Other Interested Parties:**

**Andrew Clark:** *Home Builders Association of Virginia (HBAV)*

**Dwayne Garriss:** *Retired code official and Georgia state fire marshal*

**Lee Stoermer:** *Loudoun County Fire Department*

**Perry Weller:** *VFSB, Vice Chairman of Fire Codes and Standards Committee*

**Ron Clements:** *Chesterfield Building Official, member of VBCOA*

**Scott Lang:** *Honeywell Fire Systems*

**Steven Sites:** *City of Fairfax*

#### **Sub-workgroup Members Not in Attendance:**

**Jodi Roth:** *Virginia Retail Federation (VRF)*

**Lou Wolf:** *SBW Architects, American Institute of Architects (AIA), Virginia Chapter*

**Matthew Lannon:** *Virginia Restaurant, Lodging & Travel Association (VRLTA)*

**Steve Shapiro:** *Apartment and Office Building Association (AOBA)*

## Welcome and introductions

Florin Moldovan: Thanked participants for attending and noted that the meeting is being recorded. DHCD staff in the meeting were identified. He asked participants to keep their microphones muted when not speaking. The meeting and discussion is open to all, but voting in support or opposition to the code change proposals is limited to Sub-workgroup members only.

Meeting participants introduced themselves.

## Fire Safety During Construction – Andrew Milliken proposals

### FP3303.3.1-21

Andrew Milliken: This is in the fire safety during construction section of the SFPC. The language in Chapter 33 was cleaned up, construction language was removed and replaced with maintenance language and water supply requirements were clarified.

Florin: This did receive group support last time, and it was carried over with the other two companion proposals (B3302.4 and EB1209.1). Hearing no further discussion, a vote resulted in only thumbs up. This will be marked as supported by the Sub-workgroup members as proposed.

### B3302.4-21

Andrew M: This is about fire safety during construction in the VCC. The first two changes are sections which were removed from the SFPC and placed in the VCC, since they pertain to construction. The first one is about separations between construction areas and the second is about Type IV building construction requirements. The next change is to relocate and redirect the water supply needs to the SFPC, so that the fire official would be the agent who determines water supply for fire protection.

Florin: Hearing no further discussion, a vote resulted in only thumbs up. This will be marked as supported by Sub-workgroup members as proposed.

### EB1209.1-21

Andrew M: This is about fire safety during construction in the VEBC. Comments received in the last meeting were around separation in construction areas in buildings that are already occupied. As a result, language was moved from the SFPC and brought here into the VEBC in Section 1201.8. The remaining original change directs the user to the SFPC, where the fire official determines water supply for fire protection.

Dustin Wakefield: Separations between areas under construction in occupied buildings is discussed in NFPA 241 Chapter 8. It covers fire-rated separations in non-sprinklered buildings and protecting openings in those walls. Should that be further considered or correlated? Even though it's only referenced as a standard in the SFPC, it's not in the VEBC.

Andrew M: This is for any separation provided in type I and type II buildings to ensure that they are of the same type of construction. It doesn't speak specifically to rated assemblies. The VEBC and VCC both reference the IFC, which references NFPA 241 for fire-rated separations.

Dustin: That helps. The type I and type II non-combustible construction isn't required to be here, but someone can get to NFPA 241 through the IFC. It's really for temporary separation walls and non-sprinklered buildings where the area under construction is a higher hazard than the occupied portion. There needs to be a 1-hour rated wall if there are no sprinklers. This seems to be ok, as long as the building is sprinklered and the materials have to be noncombustible.

Florin: Asked Dustin if he's ok with language presented.

Dustin: Yes, he is ok with it.

Florin: Pointed out the voting group members listed on the screen. Hearing no further discussion, a vote resulted in only thumbs up. This will be marked as supported by Sub-workgroup members as proposed.

## Code Change Proposals:

### FP1207-21

Florin: This proposal regarding energy storage systems was supported by this Sub-workgroup in the last meeting,



and is provided for informational purposes only. He invited everyone to review the proposal and reach out to DHCD staff should they find and errors within the proposal.

#### **FP107.11-21**

Joshua: This is an update to fees set by the State Fire Marshal's office, which hasn't been updated for several code cycles. It brings fee schedules up to reflect actual costs. Fees are based on hourly rates and equipment used. There is a document attached showing how the fees were set. The State Fire Marshal's office is funded 60% through the General Fund and 40% through Special Funds (revenue received from these fees). Section 107.12 is a new section for permits in hazardous areas and permits for food trucks.

Michael O'Connor: Typed in the chat box:

**Michael O'Connor:** We are not necessarily opposed. However before voting we need to know whether this proposal has been vetted with impacted parties and what their position is.

Joshua: Looked at several local fee schedules, which they are in-line with. He included that information as supporting documentation to the proposal in cdpVA. He hasn't heard any discussion or response from other localities.

Florin: The supporting documentation that Joshua provided is in the meeting agenda, available for download in the Adobe Files Pod, and in cdpVA.

Jimmy Moss: Was the schedule based on actual costs from past history in addition to what the other localities are doing?

Joshua: The hourly fees were based on actual costs for salaries, leased vehicles, leased space and software. Fees for annual permits were based on travel distance and what the localities fee schedules are. The fee schedule is in line with Stanton, Stafford and Virginia Beach, plus travel to the various counties.

Michael: Typed in the chat box:

**Michael O'Connor:** has any outreach been done to stakeholders? The answer that we have not heard anything from anybody about this is a poor one. This needs a public airing

Joshua: Answering Michael's questions typed in the chat box – no, he hasn't reached out to stakeholders. He's sorry that Mr. O'Connor thinks that not hearing back from anyone is a poor answer. They haven't had an opportunity to reach out the public.

Dustin: What's the advantage of posting all the fees in the code as opposed to having a more flexible schedule? Was it always done like this?

Joshua: Yes, it has been this way since 2006. He met with DHCD staff about using a table to set fees, which could be more flexible and might work better. However, these fees won't even take effect until the 2021 fire code is adopted. They are still behind in getting fees, but it seems like this is the available avenue at this time. He would like to use a more flexible fee table for the future.

Florin: Confirmed that this is the appropriate place for the State Fire Marshal fees.

Jeff Brown: Currently, this is part of the state law. They have to be approved by the Board of Housing and Community Development (BHCD). This is the avenue to do that right now. The process can't be changed without changing the state law. Jeff also typed in the chat box:

**Jeff Brown - DHCD:** Mike, this proposal will also be on the June 10th General Stakeholder Workgroup meeting agenda for consideration by all stakeholders. The results of that meeting will be provided to the BHCD along with a recommendation from the General Stakeholder Workgroup.

Linda Hale: Knows that the State Fire Marshal's office is behind in collecting fees and recuperating their costs. She asked why they would make the proposal now, what changed that would prompt this?

Joshua: In the past, the State Fire Marshal's office had a Memorandum of Agreement (MOA) to do life safety code inspections. When the inspections were done, they were compensated by the Center for Medicare/Medicaid Services (CMS). About 70% of the inspections were life safety inspections, and they were primarily enforcing the life safety code over the fire code. The Memo of Agreement ended last year, and they no longer recover fees for the life safety inspections. As they shifted focus from the life safety inspections to enforcing the fire safety code, they reviewed their cost recovery options. They saw that the fees in the SFPC had not been updated in so long that they were no longer reflecting the actual costs that the office incurs.

Michael: Thinks that this is premature. He thinks this will have a big impact with lots of public opinion. He urges

that this would be postponed. He is not in support of it going forward now.

Joshua: Half of the fees are inspection fees, which already exist. The proposal is to increase them. The other half is new annual permit fees. He asked Michael if he was concerned about all of the proposal or just some of it.

Linda: It looks like it may be a huge increase. She asked Joshua if he could walk through one for the group.

Joshua: In the example of a nightclub overcrowding, fire staff has to go out at night and drive to the location and address the issue. In order to recuperate expense for that, the fee increase is based on the hourly rate that it costs the State Fire Marshal's office to do the business. The annual permit fee is a one-time fee for a facility that houses or processes hazardous materials. One recent example is a chemical plant H structure storing hazmat in Wytheville where the building official asked the Fire Marshal's office for assistance with the inspection and function of the plant. Prior to this proposal, the Fire Marshal's office had no way to recover costs for this type of inspection. This type of building would tax water resources, public utilities, the building official and the State Fire marshal's office. Allowing a fee to cover costs also helps to build infrastructure for these kinds of needs. There needs to be oversight for these types of plants in rural areas. He provided all the information as to how the numbers were arrived at and that they are also in line with various localities.

Michael: Typed in the chat box:

**Michael O'Connor**: you are talking about public funds without public input, this is a shortcut

Florin: There seems to be some concerns as well as some support from the group members. He asked group members with concerns if they would be interested in meeting with Joshua outside of the Sub-workgroup meeting to continue discussions. He also noted that Joshua can do a floor amendment at the June 10th Workgroup meeting, to reflect changes, if any, that the stakeholders were able to reach consensus on.

Joshua: Answering Michael's question, he said this is the process, not a shortcut. This is the public forum to make this change. There's no other way to do it. He's happy to review this with anyone outside of this group meeting.

Jeff: This is the public forum. The ultimate decision will be made at the full Workgroup meeting on June 10. There are still about 30 days to discuss concerns with Joshua between now & then. Whatever decision is made at the full Workgroup that is the recommendation that will be forwarded to the BHCD.

Lee Stoermer: typed in the chat box:

**Loudoun County, Fire Rescue, Fire Marshal Office**: State FMO will need to be looking at doing updates to this on a more regular basis. Possibly this sort of language should be adding into the opening code language that this shall be reviewed with each code cycle.

Joshua: Replying to what Lee typed in chat, the Fire Marshal's office should look into updating the fees more often than has been done in the past. These fees are important to paying salaries. This will be addressed going forward in each code cycle. Language allowing review of fees each cycle has been in the code for many cycles.

Andrew Clark: Representing HBAV, thinks this is a good proposal, since the fees have not been updated in many years. He asked if the Sub-workgroup could meet again before the general Workgroup; he wouldn't like to see this proposal go to the Workgroup as Non Consensus.

Jeff: There is no other Sub-workgroup meeting scheduled between now and the June 10 General meeting, but there are still 30 days to review the proposal outside of the Sub-workgroup. DHCD would also be willing to attend any meetings with the stakeholders facilitated by Joshua, and assist if he would like.

Joshua: Would be very happy to have a meeting with anyone who wants to. He would also be willing to review the data he used to arrive at the fee amounts.

Florin: Based on the conversations and opposition from Sub-workgroup members, the proposal cannot be supported by the SFPC Sub-workgroup.

{BREAK 10:08 – 10:15}

## **FP111.2-21**

Steven Sites: Representing the city of Fairfax. This proposal updates the allowable methods for the delivery of code violation notices, to include email. This would be cost and time effective. The notice of violation can be transmitted directly from the system where it's recorded and receipts can be tracked. This is not intended to replace in-person or physical mail delivery of the notification, it's just an additional option for delivery.

Florin: Hearing no further discussion, a vote resulted in only thumbs up. This proposal will be supported by the Sub-workgroup.

#### **FP906.1-21**

Florin: Received a notice of opposition from Steve Shapiro, representing AOBA and VAMA, as well as a letter from VRLTA stating their opposition. The letter is available for download in the Adobe Files Pod. Due to connectivity issues experienced by the proponent, Florin introduced the proposal, which would delete the exception for certain occupancies to not have an additional portable fire extinguisher when sprinklers are installed.

Robert Melvin: Representing VRLTA, they are in opposition and are concerned about the impact to group A occupancies. The redundancy of sprinklers and fire extinguishers is unnecessary. One specific concern is around patrons consuming alcohol and causing vandalism to portable fire extinguishers.

Dwayne Garriss: This brings Virginia in alignment with the IFC. Virginia, New Jersey and Indiana are the only states with the exception, who have removed portable fire extinguishers because of having quick response sprinklers. He included a report from a 2017 NFPA study that showed that 84% of fires don't grow large enough to activate sprinklers. The National Association of Fire Marshals (NASFM), the Georgia chapter of the International Association of Fire Marshals and FEMA all believe in layered fire protections. Another study by David Wells included with the proposal shows that regardless of people being educated to leave the building during a fire, they will still try to fight the fire. They should have the proper tools to do that if needed. Training isn't required under OSHA for using fire extinguishers. FEMA, NASFM and others believe that training is beneficial and can be done via video. In a study done in eastern Kentucky, 98% of people who never used a fire extinguisher before, were able to use it correctly.

Perry Weller: Just experienced a situation in a local high school, where a fire was put out with a portable fire extinguisher. He doesn't think this needs to be changed. If the fires can be caught when they are small, before sprinklers are activated, it would save a lot of damage.

Ron Clements: Was code change submitted to VCC?

Florin: Not as far as he knows. DHCD will look into it.

Ron: It should be coordinated in the codes.

Dwayne: Is not sure what the VCC is. He thought the fire code was where this proposal should be. He asked for someone to explain to him what the VCC is.

Florin: The Virginia Construction Code uses the IBC with Virginia amendments. The SFPC uses IFC as model, but uses only maintenance & operation requirements, while construction requirements stay in the VCC.

Dwayne: Does the VCC refer to Section 906 in the fire code?

Florin: The VCC section 906.1 does have both exceptions 1 and 2, the same as the SFPC.

Ron: This doesn't change anything when buildings are constructed if it's not amended in the VCC.

Dwayne: Isn't there a group that works out correlation?

Florin: Virginia doesn't have a correlation committee like there is at the ICC level. DHCD does some correlation of codes where appropriate.

Dwayne: Addressing Perry's comment, this proposal wants to keep the fire extinguishers, not eliminate them. However, he did miss addressing this in the VCC.

Florin: Asked Dwayne if the intent was for the proposal to apply to new construction.

Dwayne: Yes, that was definitely part of the intent. He does also want it to stay in the SFPC.

Florin: The cutoff for proposals was May 1<sup>st</sup>. However, floor amendments are allowed to be introduced during the general Workgroup meetings. Given that the intent was to also amend the equivalent provisions in the VCC, DHCD staff will coordinate with Mr. Garriss and assist him with the floor amendment submittal to ensure that the proposal will include all the sections intended to be modified. Hearing no further discussion, with several group members in opposition, this proposal will not be supported by the Sub-workgroup.

#### **FP912.2-21**

Florin: This proposal puts the decision about where fire department connection devices are located, under the fire official. It goes back to IFC requirements, which were edited by Virginia a few cycles ago.

Dustin: The proposed language seems to go against the intent of the SFPC by talking about construction instead of maintenance. The fire department connections can only be relocated with a permit. This proposal seems to allow relocation without a permit.

Jimmy Moss: Agrees with Dustin.

Florin: Lee Stoermer typed a suggestion in chat, but the proponent was not on the call to address it.

**Loudoun County, Fire Rescue, Fire Marshal Office**: should it not be "with approval of fire chief and/or fire code official"

Perry: There used to be language in the 2015 code about the fire chief having input to where the access would be. Maybe that was the intent of this, but he's not sure. He does agree that if the proponent is not on the call, they cannot get any further clarification.

Florin: Hearing no further discussion, a vote resulted in all thumbs down. This proposal will not be supported by the Sub-workgroup as written.

#### **FP5601.2.2.1-21**

Steven: This section of the SFPC hasn't referenced NFPA 1124 since 2015. He wants to put a reference to the 2013 edition of NFPA 1124 back in, which contains sound and safe practices for the placement of permissible fireworks at sales or retail display sites. This would give fire officials the ability to ensure safe practices, such as prevention of ignition sources and security of the products within approved buildings, structures or tents. He noted that he didn't make any change to the reference standards section of the code.

Florin: Hearing no further discussion, a vote resulted in all thumbs up. This proposal will be supported by the Sub-workgroup. DHCD staff will help Steven coordinate this with the reference standards section.

#### **FP5705.5-21**

Perry: This proposal is regarding alcohol hand sanitizer dispensers. The code previously only addressed dispensers mounted on the walls. Dispensers can be mounted or stand alone, but they all need to be approved first. This adds language to allow for both types of dispensers.

Dustin: Typed a question in the chat box asking who approves the dispensers.

Perry: Approval of the dispensers is under purview of the fire official.

Dustin: The language sounds vague now. He wonders if it would be a good idea to definitively state in the language that any dispenser shall be approved by the fire code official. SFPC Chapter 2 defines "approved" as "acceptable to authority having jurisdiction".

Andrew M: This is consistent with other language in the SFPC.

Dustin: Gave a thumbs up to the language as written.

Florin: Hearing no further discussion, a vote resulted in all thumbs up. This proposal will be supported by the Sub-workgroup.

#### **Assignments and Next Steps**

Florin: Fire prevention proposals will go forth to the general Workgroup for discussion on June 10. Joshua was encouraged to meet with other stakeholders about his proposal FP107.11, and he was asked to send a Word document to DHCD with any changes he might have to the proposal to be presented to the Workgroup as a floor amendment. He thanked everyone for their participation.

# ACTIVE SHOOTER AND HOSTILE THREATS IN PUBLIC BUILDINGS STUDY GROUP REPORT

March 29, 2022

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT 600 E. MAIN STREET  
SUITE 300 RICHMOND, VA 23219

# TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY .....</b>	<b>1</b>
<b>BACKGROUND .....</b>	<b>3</b>
<b>CURRENT USBC REQUIREMENTS .....</b>	<b>3</b>
<b>CURRENT SFPC REQUIREMENTS .....</b>	<b>4</b>
<b>EXAMPLES OF ESH INSTALLATIONS IN VIRGINIA SCHOOLS .....</b>	<b>4</b>
<b>EXAMPLES OF ESH INSTALLATIONS IN PUBLIC BUILDINGS .....</b>	<b>5</b>
<b>CONSIDERATIONS AND CONCERNS .....</b>	<b>6</b>
<b>PUBLIC BUILDINGS .....</b>	<b>7</b>
<b>AMERICANS WITH DISABILITIES ACT (ADA) .....</b>	<b>9</b>
<b>SUPPORTING DOCUMENTATION AND REFERENCE MATERIALS .....</b>	<b>9</b>
<b>CODE CHANGE PROPOSAL DRAFTED BY</b>	
<b>VIRGINIA FIRE PREVENTION ASSOCIATION .....</b>	<b>10</b>
<b>CODE CHANGE PROPOSAL DRAFTED BY DHCD STAFF .....</b>	<b>10</b>
<b>CONCLUSIONS AND ACKNOWLEDGEMENTS .....</b>	<b>12</b>
<b>APPENDIX A - Agendas, Meeting Summaries, Participants .....</b>	<b>13</b>
<b>APPENDIX B - Study Group Members .....</b>	<b>14</b>
<b>APPENDIX C - Supporting Documentation .....</b>	<b>15</b>
<b>APPENDIX D - Code Change Proposals .....</b>	<b>16</b>
<b>APPENDIX E - General Stakeholders Workgroup Meetings Excerpts .....</b>	<b>17</b>

## EXECUTIVE SUMMARY

Provisions were added in the 2018 editions (effective July 1, 2021) of the Uniform Statewide Building Code (USBC) and the Statewide Fire Prevention Code (SFPC) providing a compliance path for emergency supplemental hardware (aka barricade devices) to be installed in schools.<sup>1 2</sup>

During the 2020 General Assembly Session, Senate Bill 333 and House Bill 670 directed the Department of Housing and Community Development (DHCD) to convene stakeholders to develop code change proposals for the USBC and SFPC, for submission to the Board of Housing and Community Development (BHCD), with the goal of assisting with the improvement of safety and security measures for the Commonwealth's public buildings during active shooter or hostile threat events.<sup>3</sup>

The Active Shooter and Hostile Threats in Public Buildings Study Group convened virtually (through Adobe Connect) three times: December 8, 2021; January 5, 2022; and January 26, 2022. At each of these meetings, the study group discussed the issues and shared pertinent information and concerns related to active shooter or hostile threat events, as well as the impact of installing emergency supplemental hardware in public buildings.<sup>4</sup>

Although consensus was not reached, the meetings resulted in a code change proposal that provides a compliance path for the installation of emergency supplemental hardware within public buildings and defines "public buildings" within the context of the USBC and SFPC.<sup>5</sup>

The following members support the code change proposal:

- Virginia Fire Prevention Association
- Virginia Building & Code Officials Association
- Nightlock

Some of the reasons cited for support:

- Installation of ESH can already be approved under the current code provisions, via the code modification process
- A reasonable expectation that further codifying the ESH requirements would result in more uniformity in building design, as well as code enforcement

The following members do not support the proposal:

- Virginia Fire Chiefs Association

---

<sup>1</sup> USBC: <https://codes.iccsafe.org/content/VCC2018P3>

SFPC: <https://codes.iccsafe.org/content/VFC2018P2>

<sup>2</sup> The USBC defines "emergency supplemental hardware (ESH)" as: "any approved hardware used only for emergency events or drills to keep intruders from entering the room during an active shooter or hostile threat event or drill".

<sup>3</sup> 2020 General Assembly, Senate Bill 333: <https://lis.virginia.gov/cgi-bin/legp604.exe?201+ful+CHAP0533>

2020 General Assembly, House Bill 670: <https://lis.virginia.gov/cgi-bin/legp604.exe?201+ful+CHAP0130>

<sup>4</sup> For a full list of Study Group members, please see Appendix B, "Study Group Members". For a full list of participants during each Study Group meeting, please see Appendix A, "Agendas, Meeting Summaries, Participants".

<sup>5</sup> For a copy of the proposal (B1010.2.8-21), please see Appendix D, "Code Change Proposals".

- Door and Hardware Institute
- Virginia Department of General Services - Division of Engineering
- American Institute of Architects – Virginia Chapter

Some of the reasons cited for opposition:

- The installation of ESH might lower the existing level of safety in certain situations
- Locking arrangements currently allowed by the model building codes are adequate
- According to research, no active shooter has breached a locked door
- Installing ESH in addition to regular locking mechanisms could add to confusion
- Difficulty for first responders in gaining entry and facilitating medical/rescue operations
- Additional training is required for the utilization of ESH
- Concern with treating public buildings different from private buildings

The following members abstained from providing an official position on the proposal:

- Virginia Department of Fire Programs/State Fire Marshal's Office
- Virginia State Police
- Stafford County
- Local Government (Orange County)
- Local Law Enforcement – City (City of Chesapeake)
- Local Law Enforcement – County (Roanoke County)
- Accessibility (Virginia Board for People with Disabilities)

The report that follows provides a summary of the discussions, including questions and concerns that were raised. Supporting documents and the summaries from each of the three Study Group meetings are included as appendices following this report.

*Note:* the links referenced throughout the report were active as of the writing of this report.



## BACKGROUND

During the 2019 General Assembly Session, SB 1755 directed DHCD to convene stakeholders to develop USBC and SFPC proposals, with the goal of assisting in the provisions of safety and security measures for active shooter or hostile threats in public or private elementary and secondary schools and public or private institutions of higher education.<sup>6</sup> The meetings resulted in code change proposal B108.1-18, submitted to the BHCD for consideration on behalf of several stakeholder groups.<sup>7</sup> The proposal, which was approved as modified by the BHCD, culminated in new ESH provisions for inclusion in the 2018 USBC and the 2018 SFPC.

During the 2020 General Assembly Session, SB 333 and HB 670 directed DHCD to convene stakeholders to develop USBC and SFPC proposals with the goal of assisting in the provision of safety and security measures for the Commonwealth's public buildings for active shooter or hostile threats while maintaining compliance with basic ADA accessibility requirements.

The directive also required the examination of (i) door locking devices, (ii) barricade devices, and (iii) other safety measures on doors and windows for the purpose of preventing both ingress and egress in the event of a threat to the physical security of persons in such buildings.

## CURRENT USBC REQUIREMENTS

Current code (2018 USBC, effective July 1, 2021) requirements allow for the installation of ESH in schools. Specifically, they are allowed in the following USBC uses/occupancies, when in compliance with several specific conditions for approval: Group E occupancies, except Group E day care facilities, and in Group B educational occupancies.

Prior to approval of ESH, the building code official must consult with the local fire code official, or state fire code official if no local fire code official exists, and the head of the local law-enforcement agency.

The local fire code official; the state fire code official; and the local fire, EMS, and law-enforcement first responders must be notified by the building code official when approval for ESH installation is granted.

Conditions specific to ESH approval in schools:

- The door must be capable of being opened from outside the room with a key, proprietary device provided by the manufacturer, or other approved means.
- If ESH is installed on fire door assemblies, the installation must comply with Section 716.2 of the Virginia Construction Code.<sup>8</sup>
- Modifications shall not be made to listed panic hardware, fire door hardware, or door closures.
- The ESH shall not be capable of being used on other doors not intended to be used and shall have at least one component that requires modification to, or is permanently affixed

---

<sup>6</sup> 2019 General Assembly, Senate Bill 1755: <https://lis.virginia.gov/cgi-bin/legp604.exe?191+ful+SB1755>

<sup>7</sup> B108.1-18: see Appendix C, "Supporting Documentation"

<sup>8</sup> Virginia Construction Code (VCC): <https://codes.iccsafe.org/content/VCC2018P3>

to, the surrounding wall, floor, door, or frame assembly construction for it to properly function.

- Employees shall engage in lockdown training procedures on how to deploy and remove the ESH, and its use must be incorporated in the approved lockdown plan complying with the SFPC.
- The ESH and its components must be maintained in accordance with the SFPC.
- Approved ESH must be of consistent type throughout a building. The exception allows the building official to approve alternate types of ESH when a consistent device cannot be installed.
- ESH installations, when deployed, are not required to comply with the accessibility provisions set forth by the VCC. VCC Section 1010.1.4.4 (item 2) recommends that school officials consult with their legal counsel regarding provisions of the Americans with Disabilities Act of 1990 (42 USC § 12101 et seq.).

## **CURRENT SFPC REQUIREMENTS**

2018 SFPC provisions specific to ESH:

- Lockdown plans must include a description of how locking means and methods are in compliance with the requirements of the VCC and the applicable provisions of this code for egress and accessibility.
- Where a facility has installed approved ESH, employees must be trained on their assigned duties and procedures for the use of such device. Records of in-service training shall be made available to the fire code official upon request.
- The use of ESH to prevent the ingress or egress from any occupied space is prohibited, with some exceptions:
  - The device is utilized by authorized persons or other persons occupying such space in the event of any actual or perceived hostile threat or active shooter event.
  - The device is utilized in conjunction with any approved lockdown drill requiring the utilization of the approved ESH.
  - Utilization of the device for the testing, use, and training by emergency response personnel.
- ESH must be provided with a readily visible durable sign posted on the egress side on or adjacent to the door stating: "THIS HARDWARE SHALL BE USED BY AUTHORIZED PERSONNEL ONLY."
- Allows the fire code official to revoke the use and storage of ESH for due cause.

## **EXAMPLES OF ESS INSTALLATIONS IN VIRGINIA SCHOOLS**

### **Pre - 2018 USBC Adoption**

Prior to adoption of the 2018 USBC, the USBC did not specifically address ESH. However, Section 106.3 of the USBC allows a building official to 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. This code modification process was utilized by some building officials, prior to the 2018 USBC adoption, to approve installation of ESH.

In accordance with the Nightlock representative's statements, their products have already been installed in 62 Virginia schools, as well as a couple of office buildings, over the past six to seven years.<sup>9</sup> Given the lack of information available, the Study Group was unable to ascertain what the approval process for the installation of ESH in said schools entailed. Speculation was made by study group members that some existing ESH installations may be undocumented and that first responders may be unaware of their existence.

One other anecdotal example of ESH installation, familiar to several Study Group members, is Augusta County Public Schools. The ESH approval in Augusta County schools followed the USBC code modification process and included coordination and consultation between the building official, school officials, local law enforcement and first responders.

### **Post - 2018 USBC Adoption**

Study group members raised the question of whether anyone in the group is familiar with any installations of ESH in schools, since the adoption of the 2018 USBC. The idea being that testimony from building officials with experience on the review and approval of these devices, would be useful for the group during discussions. This testimony could aid the members in understanding what works and what doesn't, as well as what should or could be improved.

No Study Group member was aware of any installations since the adoption of the 2018 USBC.

In an effort to garner more information on the subject, DHCD staff sent a memo to all the Virginia building officials, inviting them to contact DHCD and share their experience, if any, with the review/approval of these devices based on the 2018 USBC provisions. DHCD staff has not received any replies to this request for information.

In another attempt to gather some feedback on this topic, DHCD reached out to Augusta County Public Schools and inquired about their experience with ESH since their installation. The response from Augusta County indicates that they continue to utilize the ESH during the drills mandated by the Virginia Department of Education and the Code of Virginia; new school staff are trained on the use of devices; there has been no need to activate the devices for a hostile threat situation; the ESH are easy to maintain. The School Security Committee has decided to continue to pursue installation of ESH in the remaining seven (7) elementary schools if funds are present, as they see the value in the device.

The Nightlock representative indicated that they are currently in the process of providing estimates to a couple of schools in Virginia.

### **EXAMPLES OF ESH INSTALLATIONS IN PUBLIC BUILDINGS**

The Nightlock representative alluded to a couple of Virginia public buildings where their products have been installed, but only provided the name of one building: The Center for Naval Aviation Technical Training.

Nationwide, while Nightlock's primary market is schools, as per their representative, their products have been installed in varied public buildings, such as military, government, corporate

---

<sup>9</sup> Nightlock: <https://nightlock.com/>

and retail outlets. Nightlock's representative noted that their devices have been installed in all of Abercrombie's 800+ retail stores nationwide.

He added that their devices have been installed in all fifty US States.

## **CONSIDERATIONS AND CONCERNS**

Several concerns associated with the installation of ESH were raised and evaluated by the Study Group members.

- A common theme appeared to be that installation of ESH might lower the level of safety in some situations.
  - The example of schools was given, in which case, the violence has usually come from within, not from outside. Installing ESH could only exacerbate the situation by providing the assailant the opportunity to lock the victim in the room.
  - Active shooters could barricade themselves along with the victims within a room by deploying the ESH. That would make it difficult for the law enforcement, emergency medical service, firefighters, etc. to access the room.
- Public buildings are operated differently than schools. Schools have a hierarchy of authority which enables the orderly deployment of ESH by designated staff. Public buildings are not always set up that way.
- Preference of door locks over supplemental hardware.
  - Research shows that the locking devices/arrangements currently allowed by the model building codes work, as no active shooter has breached a locked door.
  - Common locks are less confusing to operate. They are intuitive, no training is required for their use, unlike ESH.
  - Common locking devices initiated from inside the room can easily be unlocked, allow for access by first responders and are ADA compliant.
  - Installing ESH in addition to regular locking mechanisms could add to confusion.
  - Additional potential issues with ESH could result from insufficient training on utilizing the devices, as well as misplacement of an ESH device or part thereof.
- Benefits of current ESH code provisions: whilst opposition against expanding the current ESH allowances to other uses/occupancies was noted, the merit of existing building code provisions was recognized. Prior to the adoption of the 2018 USBC, there was no uniformity in the approval of these devices. Adding the criteria to the 2018 USBC by which ESH are to be approved made the code safer than it was before.
- Training/policy issue vs. building code issue: electrically locked doors, which are permitted by the current building codes, allow for remote locking activation. The example of an office building with several suites was given, where the ingress doors can be locked/unlocked remotely, and the building occupants/visitors have to identify themselves prior to entering the building.
- Incremental approach concerns: allowing the installation of ESH in public buildings, in addition to schools, is not favored by most Study Group members and is viewed as an incremental approach that could potentially open the door for future expansion to other buildings/occupancies.

- Public buildings vs. private buildings: the intent of developing code change proposals to allow for the installation of ESH in public buildings only, but not in private buildings, was questioned.
  - If there's a need for ESH in public buildings, why is there no need for ESH in private buildings?
  - What is unique about public building occupants that is different from private building occupants?
  - DHCD staff has clarified that the focus of this study is on public buildings as directed by the legislation. Proposals addressing this issue for private buildings could be submitted by anyone, outside of this study, for consideration by the BHCD.
- Allowing vs. requiring ESH: of note is that the intent of potential code change proposals is to create a compliance path to allow installation of ESH in public buildings and is not to mandate that ESH be installed in any building, similar to the existing code provisions for schools. Just because the code allows certain features or devices, it does not necessarily mean that the prospective building owners will chose to install them.

## PUBLIC BUILDINGS

It became evident very early in the discussions that it would be essential to define what a public building is in the context of complying with the charge set forth by SB 333 and HB 670.

The group appeared to be in agreement that the intent of the bills was to address governmental buildings – owned, used, leased or otherwise occupied by a governmental entity.

Several definitions were considered:

- Code of Virginia § 2.2-1159. Facilities for persons with physical disabilities in certain buildings; definitions; construction standards; waiver; temporary buildings.<sup>10</sup>
  - A. "Building" means *any building or facility, used by the public, which is constructed in whole or in part or altered by the use of state, county or municipal funds, or the funds of any political subdivision of this Commonwealth. "Building" shall not include public school buildings and facilities, which shall be governed by standards established by the Board of Education pursuant to § 22.1-138.*
- 10 CFR § 420.2 - Definitions.<sup>11</sup>

Public building means *any building which is open to the public during normal business hours, including:*

  - (1) *Any building which provides facilities or shelter for public assembly, or which is used for educational office or institutional purposes;*

<sup>10</sup> Code of Virginia § 2.2-1159: <https://law.lis.virginia.gov/vacode/title2.2/chapter11/section2.2-1159/#:~:text=%C2%A7%202.2%2D1159.-,Facilities%20for%20persons%20with%20physical%20disabilities%20in%20certain%20buildings%3B%20definitions,standards%3B%20waiver%3B%20temporary%20buildings.&text=%22Building%22%20shall%20not%20include%20public,pursuant%20to%20%C2%A7%2022.1%2D138.>

<sup>11</sup> 10 CFR § 420.2: <https://www.ecfr.gov/current/title-10/chapter-II/subchapter-D/part-420>

(2) Any inn, hotel, motel, sports arena, supermarket, transportation terminal, retail store, restaurant, or other commercial establishment which provides services or retail merchandise;

(3) Any general office space and any portion of an industrial facility used primarily as office space;

(4) Any building owned by a State or political subdivision thereof, including libraries, museums, schools, hospitals, auditoriums, sport arenas, and university buildings; and

(5) Any public or private non-profit school or hospital.

- Law Insider.<sup>12</sup>

Public building and “public work”; means a public building of, and a public work of, a governmental entity (the United States; the District of Columbia; commonwealths, territories, and minor outlying islands of the United States; State and local governments; and multi-State, regional, or interstate entities which have governmental functions). These buildings and works may include, without limitation, bridges, dams, plants, highways, parkways, streets, subways, tunnels, sewers, mains, power lines, pumping stations, heavy generators, railways, airports, terminals, docks, piers, wharves, ways, lighthouses, buoys, jetties, breakwaters, levees, and canals, and the construction, alteration, maintenance, or repair of such buildings and works.

- Biz fluent – Jennifer VanBaren.<sup>13</sup>

Public buildings are any type of building that is accessible to the public and is funded from public sources. Typically, public buildings are funded through tax money by the U.S. government or state or local governments. All types of governmental offices are considered public buildings. Public buildings generally serve the purpose of providing a service to the public. Many of these services are provided free to residents. This list includes public schools, libraries, courthouses and post offices.

- Collins English Dictionary.<sup>14</sup>

Public Building - a building that belongs to a town or state, and is used by the public.

- Study Group member.

Public Building – a building or structure of a governmental entity (local, state, or Federal government) that is accessible to the general public and funded from public sources, that exists for the purpose of providing services to the general public. Examples of such buildings are public schools, governmental offices and facilities, libraries, courthouses, and similar buildings.

- DHCD staff.

“Public Building” - a structure or building that is owned, leased, or otherwise occupied by a municipality or the state and used for any municipal or public purposes by the municipality or the state.

---

<sup>12</sup> <https://www.lawinsider.com/dictionary/public-building>

<sup>13</sup> Biz fluent – Jennifer VanBaren: <https://bizfluent.com/info-7834283-types-public-buildings.html>

<sup>14</sup> Collins English Dictionary: <https://www.collinsdictionary.com/us/dictionary/english/public-building>

## **AMERICANS WITH DISABILITIES ACT (ADA)<sup>15</sup>**

SB 333 and HB 670 charges the Study Group to ensure that any code change proposals will maintain compliance with basic accessibility requirements of the ADA.

The ADA is a federal law with which owners and regulators must comply. It is not to be misconstrued as building code or construction provisions. The individuals charged with the enforcement of the building and fire codes are not normally authorized to interpret or enforce the ADA law.

*As per the U.S. Access Board, “DOJ’s and DOT’s ADA Standards are not a building code, nor are they enforced like one.<sup>16</sup> They constitute design and construction requirements issued under a civil rights law. The ADA’s mandates, including the accessibility standards, are enforced through investigations of complaints filed with federal agencies, or through litigation brought by private individuals or the federal government. There is no plan review or permitting process under the ADA. Nor are building departments required or authorized by the ADA to enforce the ADA Standards (some building departments even include a disclaimer on their plan checks indicating that ADA compliance is not part of their approval process). Entities covered by the law ultimately are responsible for ensuring compliance with the ADA Standards in new construction and alterations.”*

The current building code provisions exempt ESH, when deployed, from complying with the accessibility requirements prescribed by the USBC. In recognition of this, and to ensure that the ADA provisions were also considered, the ESH requirements in the USBC for schools state that school officials should consult with their legal counsel regarding applicable ADA provisions. The same approach could be taken with any code change proposal developed by this group.

*Note:* The Department of General Services representative clarified that the review and permitting process for state buildings does include verification for compliance with the ADA.

## **SUPPORTING DOCUMENTATION AND REFERENCE MATERIALS**

Documentation discussed by the Study Group included the following:

- DHCD staff PowerPoint presentation
- Senate Bill 1755 - 2019 General Assembly
- Senate Bill 333 - 2020 General Assembly
- House Bill 670 - 2020 General Assembly
- 2018 Virginia Code Change Proposal B108.1-18
- Myths (and Facts) About Classroom Barricade Devices - submitted by Virginia Fire Prevention Association
- NFPA 3000 Brochure - submitted by Virginia Fire Prevention Association

---

<sup>15</sup> ADA: <https://www.ada.gov/>

<sup>16</sup> U.S. Access Board: <https://www.access-board.gov/ada/guides/chapter-1-using-the-ada-standards/#:~:text=DOJ's%20and%20DOT's%20ADA%20Standards%20are%20not%20a%20building%20code,under%20a%20civil%20rights%20law.>

- Code Change Proposal - submitted by Virginia Fire Prevention Association
- Code Change Proposal - drafted by DHCD staff

Additional referenced materials include two articles found at the following links, shared with the Study Group by the Virginia Department of General Services representative:

- <https://idighardware.com/2020/01/decoded-barricade-devices-and-the-ada-march-2019/>
- <https://www.tssbulletproof.com/blog/school-door-barricades-could-create-safety-concerns/>

Documents and referenced articles submitted by Study Group members appear to favor the locking arrangements currently allowed by the model codes and advise against the installation of ESH in buildings.

In response to this, the Nightlock representative opined that the articles released by the door and hardware industry do not provide enough information about the facts associated with ESH. They will tell you what they want you to hear. The door and hardware industry see ESH as competition. They also lump all ESH into one item, although some are better than others. The Nightlock representative agrees that there are some ESH devices out there that are not good and should not be approved. However, there are ESH on the market that do comply with the model codes.

### **CODE CHANGE PROPOSAL DRAFTED BY VIRGINIA FIRE PREVENTION ASSOCIATION**

The Virginia Fire Prevention Association representative drafted a code change proposal and shared with the Study Group for deliberation.

The proposal intends to add Section 404.2.3.3 to the SFPC which would require the development, operation and maintenance of lockdown plans, including the use of ESH, to be in accordance with Chapter 9 of NFPA 3000.

The group appeared to be in agreement that the proposal is not specific to public buildings, as required by SB 333 and HB 670, but it is more of a global type change. DHCD staff suggested that the proposal could be submitted outside of this group and offered to assist the VFPA representative with polling other Study Group members on whether they wish to be added as co-proponents to the proposal, in the event that it is submitted for consideration by the BHCD.

*Note:* upon further consideration, the VFPA representative has decided to not submit the code change proposal for consideration by the BHCD due to potential conflicts between NFPA 3000 and the IFC/SFPC.

### **CODE CHANGE PROPOSAL DRAFTED BY DHCD STAFF**

DHCD staff drafted a code change proposal and presented it to the Study Group to facilitate discussions on what it would entail to add public buildings to the current code allowances.

The intent of the proposal is to comply with SB 333 and HB 670 by expanding on the existing provisions for ESH applicable to schools. The gist of the proposal is defining “Public Buildings” and adding public buildings to the list of uses/occupancies already allowed by the USBC to be provided with ESH.



## Brief Summary of Proposed Changes

- Requires a building permit for the removal of ESH.
- Requires consultation between the building official, the local or state fire code official, as applicable, and the local law-enforcement agency prior to the removal of ESH. The local or state fire code official – as applicable; the local fire, EMS and law-enforcement must be notified upon approval/removal of ESH.  
*Note:* current code provisions already require a building permit for the installation of ESH, as well as notification upon approval. There could be instances in the future where the building changes owners/occupants/etc. and the building is no longer a “public building”. Given that the proposal would only allow ESH in public buildings, if the building does not meet the definition for “public building” anymore, it would no longer be in compliance. Thus, the ESH would have to be removed.
- Defines “public building” as: *“a structure or building that is owned, leased, or otherwise occupied by a municipality or the state and used for any municipal or public purposes by the municipality or the state”.*
- Adds “public buildings” to the list of existing uses/occupancies allowed to be provided with ESH. All existing code prescribed conditions for approval of ESH would apply to public buildings, as well.
- Adds “building owner” to existing USBC Note recommending school officials to consult with their legal counsel regarding provisions of the Americans with Disabilities Act of 1990.
- Modifies the SFPC to require the maintenance of ESH in accordance with the conditions of its approval (in addition to the manufacturer’s instructions and the SFPC, which is already stipulated by the SFPC).

Upon deliberations by the Study Group during the meeting on January 26, 2022, the proposal received support from the following stakeholder representatives, in attendance: Virginia Fire Chiefs Association; Virginia Fire Prevention Association; Virginia Building and Code Officials Association; and Nightlock.

At the same meeting, the proposal was specifically opposed by the following stakeholder representatives, in attendance: Virginia Department of General Services; and Door and Hardware Institute. An email from the AIA (VA Chapter) representative, dated February 9, 2022, also indicated opposition to this proposal.

In an effort to provide all the stakeholders (including those not in attendance on January 26, 2022) the opportunity to express whether the entity they are representing supports or opposes the proposal, a doodle poll was sent out to the Study Group members on February 15, 2022. The poll respondents have indicated the following positions:

In support of the proposal: Virginia Fire Prevention Association; Virginia Building & Code Officials Association; Nightlock.

In opposition to the proposal: Virginia Fire Chiefs Association; Door and Hardware Institute; Virginia Department of General Services - Division of Engineering & Buildings; American Institute of Architects - VA Chapter.

## CONCLUSIONS AND ACKNOWLEDGEMENTS

Study Group meetings yielded several fruitful discussions regarding ways in which the safety of public building occupants could be improved during potential active shooter or hostile threats situations. The stakeholders did not reach consensus on what would constitute the best solution. This report documents the key issues discussed and it includes supplementary documents provided by stakeholders. Below are a summary of the key findings, based on the information provided and stakeholder process.

- Common locking arrangements allowed by the model building code are effective and are preferred over ESH.
- There is some concern with treating public buildings different from private buildings.
- Discussions appeared to indicate that the overwhelming majority of stakeholders do not specifically endorse the installation of ESH. Likewise, expanding the code allowances to other uses/occupancies are not welcome by most stakeholders. However, providing a code compliant path for the approval of ESH should lead to uniformity.
- A code change proposal specific to public buildings was developed, as directed by SB 333 and HB 670, and considered by the group. The proposal modifies the USBC and the SFPC to allow the installation of ESH in public buildings while maintaining compliance with basic accessibility requirements under the ADA.

Finally, the staff of DHCD wish to thank the study group participants for the time and energy they committed to this process. The stakeholders presented arguments based on their backgrounds in fire services; fire and building codes; emergency management and prevention; law enforcement; public administration, door hardware and more. This committed group lent many hours of their time submitting documents, conducting conversations, and reviewing their colleagues' arguments and positions. They shared their knowledge and experience in the form of anecdotes, documented case studies, and current practices. We deeply appreciate their expertise and willingness to engage in the Study Group discussions.

## **APPENDIX A: Agendas, Meeting Summaries, Participants**

## **Active Shooter and Hostile Threats in Public Buildings**

**December 8, 2021**

**9:00 a.m.**

**Virtual Meeting:** <https://vadhcd.adobeconnect.com/va2021cdc/>

### **AGENDA**

- 1) Welcome
- 2) Introductions
- 3) Overview of VA Code Development Process
- 4) Background
- 5) Discussion
- 6) Assignments and Next Steps
- 7) Next Meeting

## **Active Shooter and Hostile Threats in Public Buildings Meeting Summary**

**December 8, 2021 9:00 a.m. - 10:55 a.m.**

**Virtual Meeting:** <https://vadhcd.adobeconnect.com/va2021cdc/>

### **ATTENDEES:**

#### **VA Department of Housing and Community Development (DHCD) Staff:**

Cindy Davis: Deputy Director, Division of Building and Fire Regulations (BFR)

Jeanette Campbell: Administrative Assistant, BFR

Jeff Brown: State Building Codes Director, State Building Codes Office (SBCO)

Richard Potts: Code Development and Technical Support Administrator, SBCO

Paul Messplay: Code and Regulation Specialist, SBCO

Florin Moldovan: Code and Regulation Specialist, SBCO

Travis Luter: Code and Regulation Specialist, SBCO

Chad Lambert: Code and Regulation Specialist/South West Virginia, SBCO

#### **Study Group Members:**

Jimmy Moss: Virginia Building and Code Officials Association

Ernie Little: Virginia Fire Prevention Association, Virginia Fire Services Board

Billy Hux: Virginia Department of Fire Programs, Virginia State Fire Marshal

Mark Dreyer: Virginia Department of General Services, Division of Engineering and Buildings, State Review Architect

Patrick Green: Virginia state police First Sergeant and training manager

James Garrett: City of Chesapeake Police Department, Lieutenant in charge of S.W.A.T., and 911 coordinator

Cmdr. Chris Kuyper: Roanoke County Police Department Commander, Special Ops. instructor for county, FBI active shooter taskforce, Washington DC

Kurt Roeper: Door and Hardware Institute

#### **Other Interested Parties:**

Christopher Barry: Virginia Fire Chiefs Association, Fire Prevention Inspector-Loudoun County

Todd Strang: Fire Official-Spotsylvania County

Nadia Vugteveen: Virginia Commonwealth University Student

Stewart Anderson:

Andrew Milliken: Virginia Fire Chiefs Association, Virginia Fire Services Board Chairman of Fire Codes and Standards Committee

Ken Cook: Allegion

Dan Willham: Fairfax County

#### **Study Group Members not in attendance:**

Rob Comet – American Institute of Architects-VA

Frederick Presley - Stafford County

Jim Crozier - Orange County

Jack Taylor - Nightlock

Teri Morgan – Virginia Board for People with Disabilities

**AGENDA AND DISCUSSION ITEMS:** Power Point is on the DHCD website, with a link on the cdpVA website

## 1) Welcome

Jeff Brown: Welcomed participants to the Adobe Connect meeting. He noted that these meetings will be recorded; there will be no video for these meetings due to bandwidth limitations. He went over housekeeping items for participants: stay on mute if not speaking; use 'raise hand' function and wait to be announced; there will be hourly breaks; meetings are open to anyone, but discussions should be only between Study Group members. Documents presented will be posted later. Please be professional, respectful and concise when speaking.

## 2) Introductions

Jeff Brown: Introductions – DHCD staff members introduced themselves; Study Group members introduced themselves. Jeff reminded all that the discussion is among Study Group members and others are welcome to listen in on the meeting.

## 3) Overview of VA Code Development Process

Jeff Brown: Gave an overview of the 2021 Virginia Code Development Cycle with approximate dates by month of when each of the steps happen, i.e.: cdpVA opened for proposals in October 2021, NOIRAs were published in November 2021, groups meet to discuss code change proposals between December and June 2022, BHCD considers proposals in September 2022 and proposed regulations in December 2022, 2021 codes become effective in Virginia in the fall or winter of 2023.

**The cdpVA website** is: [va.cdpass.com](http://va.cdpass.com) The Virginia online code development system accepts proposals from anyone and all the information provided and captured during the process is available for viewing.

**Study Groups** study specific topics, identify areas of consensus and disagreement, and determine if code change proposals or other solutions are appropriate. They may review proposals, provide analysis, make recommendations, and/or develop code change proposals. Topics and proposals are meant to be presented and discussed during the proposed regulation phase, not the final phase, which is reserved for errors or minor corrections. Proposals and recommendations of Study Groups are reviewed by the General Workgroups prior to BHCD consideration. Study Groups are disbanded after they complete discussions.

**Sub-Workgroups** Review all code change proposals within their subject topics. They make recommendations on each proposal, including negotiating compromises where appropriate, in an attempt to form a group consensus on each proposal. They may also develop new code change proposals, or support proposals submitted by others by joining the proposal as a proponent. Proposals and recommendations of Sub-Workgroups are reviewed by the General Workgroups prior to BHCD consideration.

**General Workgroups** are open to all public for discussion and comment. They will review all proposals received, and aim for a consensus to approve or disapprove each one. They will recommend the proposals to the BHCD in blocks, sorted by those receiving consensus to approve or disapprove, as well as non-consensus proposals. The consensus proposals are usually voted through as recommended. Non-consensus proposals go to the BHCD in their entirety, including summaries and all related documents. Recommendations from this Study Group, for example, will go to General Workgroups and then to the BHCD as outlined.

## 4) Background

Jeff Brown: **2019 General Assembly Session: Senate Bill (SB) 1755** directed DHCD to convene stakeholders to develop USBC and SFPC proposals regarding safety and security measures for active shooter or hostile threats. The directive was specific to elementary and secondary schools and public or private higher education

institutions. The review was to include examination of locking devices, barricade devices and other safety measures. This current Study Group has the same objectives, but is not limited to the same type of building.

**2018 Code Development Cycle** formed a School Safety Sub-Workgroup in February-March 2019, which convened April-August 2019. A non-consensus proposal, B108.1-18, was submitted to the BHCD, who approved it in December 2020. The 2018 USBC and SFPC became effective on July 1 this year.

**2018 IBC Code sections: 1010.1.4.4** Locking arrangements in Group E and B educational occupancies. Provided for egress doors with locking arrangements to keep intruders out as long as the door is capable of being unlocked from outside with a key or other approved means, the door opens from inside the room as per Section 1010.1.9 and there are no modifications made to listed panic hardware, fire door hardware or door closers. **1010.1.4.4.1** Included remote operation of locks as per Section 1010.1.4.4. These IBC requirements were the baseline for the 2018 School Safety Sub-Workgroup meetings.

**2018 School Safety Sub-Workgroup** met four times. Multiple code change proposals and versions were considered. A full consensus was not reached, but 2 options were submitted to the BHCD. **B108.1-18:** Compliance path in VCC for ‘emergency supplemental hardware’ and **BO101.1:** Add a VCC appendix including a compliance path for ‘emergency supplemental hardware’ which would be optional for each locality to adopt.

**B108.1-18 was approved:** The term ‘emergency supplemental hardware’ – any approved hardware used only for emergency events or drills to keep intruders from entering the room during an active shooter or hostile threat event or drill (barricades, in short). These devices are allowed in Group E (except day care facilities) and Group B educational occupancies. This was included in the 2018 USBC and SFPC and became effective July 1, 2021. Proponents were noted, but not all in the Sub-Workgroup supported it. **BO101.1.1-18** also included some proponents, but was not approved.

**2020 General Assembly Session: SB 333 and HB 670** Directed DHCD to convene stakeholders to develop USBC and SFPC proposals with the goal of assisting in the provision of safety and security measures for the Commonwealth’s public buildings for active shooter or hostile threats. These two bills are identical, and share the same objective as the 2019 General Assembly SB 1755, except that it relates to public buildings instead of educational institutions.

**Current Study Group objectives: SB 333 and HB 670:** Develop proposals to change USBC and SFPC to provide safety and security measures for active shooter or hostile threats in public buildings. There will potentially be some members who support and some who oppose, however there needs to be a goal of ultimately providing proposals for consideration by the Board, even if not supported by all members. The group is welcome to provide data and presentations regarding their position in any matter discussed. Try to develop proposals in line with what is already established in the codes for education buildings. If there is not full consensus, all information, including proponents and those opposed will be given to BHCD. Before moving forward with developing proposals, group members should review and understand the existing USBC and SFPC requirements.

All Virginia codes are available for free online at: <https://codes.iccsafe.org/codes/virginia>

**2018 USBC - Current Virginia code requirements (effective 7/1/21):**

New term defined: “Emergency Supplemental Hardware” is any approved hardware used only for emergency events or drills to keep intruders from entering the room during an active shooter or hostile threat event or drill. The technical term can be interchangeable with ‘barricades’ or ‘ESH’ in discussions.

Section 108.1: When applications are required. Application for permit shall be obtained before any work is done during construction or demolition and for installations or alterations to any required means of egress system, including the addition of emergency supplemental hardware.

Section 110.1.1: Consultation & Notification. Prior to approval of ESH, the Building Code Official shall consult with local Fire Code Official or state Fire Marshal’s office and local law enforcement agency. All officials need to be notified of approval and installation.

Sec 1010.1.4.4: Locking arrangements in educational Group E (except day care) and Group B institutions; internal doors for classrooms, offices and other occupied rooms are permitted to have ESH when 7 conditions are met:

1. Door can be opened from outside the room with a key, other manufacturer device or other approved means.
2. Door opens from within the room as per Section 1010.1.9, except when ESH not required to comply with Chapter 11. Schools should consult with legal counsel regarding accessibility and any other applicable requirements.
3. Installation of ESH on fire door must comply with Section 716.2 with no modifications to panic hardware fire door hardware or door closures.
4. ESH shall not be capable of being used on other doors not intended for use, and need at least one component requiring modification or is permanently affixed to surrounding wall, floor, door or frame to properly function.
5. Employees shall have lockdown training procedures about how to deploy and remove ESH, and its use shall be in the approved lockdown plan complying with the SFPC.
6. ESH and components shall be maintained in accordance with the SFPC.
7. Approved ESH shall be consistent throughout building (except alternate types of ESH in accordance with Section 110.1 when a consistent device can't be installed).

**2018 USBC: ESH related amendments to general VCC requirements:**

1010.1.9 Door operation prohibits a special key or knowledge to get out (exception added for ESH)

1010.1.9.1 Hardware has no tight grasping, pinching or twisting of wrist required (exception added for ESH)

1010.1.9.2 ESH height – 48” maximum above the floor (lower than 34” is ok for ESH)

1010.1.9.4 Locks and latches permitted. New item #7: Egress doors equipped with ESH complying with 1010.1.4.4

7.1 Visible sign on egress side “This hardware shall be used by authorized personnel only” in 1-inch letters on contrasting background.

7.2 Use of ESH is revocable by building fire official for due cause (in case of unauthorized or abusive use)

1010.1.9.5 Bolt locks: Prohibits manually operated flush or surface bolts (exception added for ESH)

1010.1.9.6 Unlatching shall not require more than one operation (exception to allow one additional operation for release of ESH).

1010.1.9.8 Delayed Egress: Exception to clarify that ESH shall not be considered a delayed egress locking system.

1103.2.15: New exception to the general accessibility requirements added for Group E buildings (except daycare) and Group B educational occupancies, when ESH is deployed during active shooter or hostile threat event.

**2018 SFPC:**

New term defined: Emergency Supplemental Hardware: Any approved hardware used only for emergency events or drills to keep intruders out during an active shooter or hostile threat event or drill.

SFPC 404.2.3.1 Lockdown Plan contents: Items to be included in lockdown plans item 4.4 amended to ensure lockdown plan also includes description of how locking complies with VCC

406.3.4.1 New section: ESH training shall be done and records shall be available to fire code official on request

1001.4 New Section: Unauthorized use – no person shall use ESH to prevent ingress or egress, except:

An authorized person for a real or perceived active shooter or hostile threat

Used in a lockdown drill as required

Used for testing and training by emergency response personnel.

If ESH is used for any of the 3 reasons, it must be removed immediately after the conditions pass.

1010.1.9 Door operations. Except as specifically permitted by the applicable building code (added for approved ESH), egress doors shall be clear to open without use of a key or special knowledge or effort.

1010.1.9.4 Locks & Latches. There must be a visible sign on the egress side of the door with 1-inch letters on a contrasting background stating “THIS DOOR TO REMAIN UNLOCKED WHEN THIS SPACE IS OCCUPIED”. There must also be a visible sign on the egress side of the door, adjacent to the ESH, with 1-inch letters on a contrasting background stating “THIS HARDWARE SHALL BE USED BY AUTHORIZED PERSONNEL ONLY”.

1031.2 Reliability. Unless otherwise permitted by the applicable building code (added for approved ESH), exits shall be free from obstructions.

1031.11 New Section. Maintenance of ESH: Allows the fire code official to revoke the use and storage of ESH for due cause.



## 5) Next Steps

### Jeff Brown:

Group purpose in developing and submitting USBC and SFPC code change proposals includes examining:

1. Public buildings – determine what buildings to include
2. Other devices and safety measures – Identify and consider devices or measures for doors and windows
3. Accessibility – ensure that any proposals address compliance with basic accessibility requirements.

Code Change Proposals expectations:

1. Group members are not expected to be a proponent of any proposal that they do not support
2. Proposals developed by group will be submitted with information clearly identifying members in support
3. Proposals will be submitted in cdpVA for further review by all stakeholders
4. Proposals will be discussed by General Stakeholder Workgroups to determine the recommendation prior to going to BHCD
5. Nobody is prevented from submitting a related proposal at any time.

## 6) Discussion

Jeff Brown opened the floor for discussion:

Kurt Roeper: Process questions – will the slides presented today be available to review later?

Jeff Brown: Yes, there's a copy of this presentation in the bottom left box of this Adobe Connect meeting. There will also be a link to the presentation posted in cdpVA.

Kurt: Regarding the current building code development cycle – does it begin with the current Virginia building code (2018 VCC), or with the ICC code (2021 IBC) as a base?

Jeff: It starts with the current Virginia building code regulations (2018 adopted 7/1/21). Any changes proposed, will be changes to the existing VCC. If there are sections of the IBC that are not amended by Virginia, the 2021 ICC text will be the starting point.

Mark Dreyer: Does anyone on the call have any anecdotal examples of ESH installation at a school since the 2018 VCC code became effective in July?

Jeff Brown: Unaware of any specific examples. He said he would check into it, and also asked group members to share if they find any occurrences.

Mark: He's looking for testimony from individuals who have seen these approved and installed, and thinks it could be useful to the group discussion.

Cindy Davis: As a reminder, Augusta County schools installed something and it precipitated the General Assembly discussion. We could reach out to Augusta County.

Mark: To clarify, he is wondering if any barricades have been approved and installed in any schools after July 2021, using the new Virginia 2018 code language; to see if there were any lessons learned, or expectations not met.

Mark Dreyer: is wondering if they can start a discussion now on what is a 'public building'.

Jeff: His impression is that the intent was not to consider every building open to the public, but that it was more geared towards governmental buildings.

Mark: Was certainly thinking state buildings would be included, but could it also include local city or county buildings (ex: Henrico public library)?

Jimmy Moss: typed in that he agreed with the initial thought that public buildings include state and local.

Cindy: shares a reminder that the legislation came in on the heels of the Virginia Beach shooting. It is probably on point to think state and local government buildings. This may require a new definition.

Jeff: Identifying what is a public building will need to be agreed upon by the group. This is a good start for homework, and a good start for any proposal that is recommended.

## **7) Next Meeting and pre-meeting work:**

Jeff Brown: Prior to next meeting:

1. Review existing code requirements and reach out to DHCD with any questions.
2. Identify other devices or security measures for doors and windows – provide to DHCD by 12/20
3. Identify any other helpful/relevant information (reports/data) for review – provide to DHCD by 12/20

If anyone has something for the group to consider between now and the next meeting, notify DHCD or Jeff directly, so it can be distributed to the current Study Group and interested party email list.

### **Next Meeting (Virtual):**

**January 5, 2022**

**9:00 am to 3:00 pm**

(with lunch break from 12:00 pm to 1:00 pm)

Jeff will try to send the agenda before the holidays (around 12/22)

DHCD attempts to publish all meeting summaries within a week or so for review.

Jeff thanked everyone and dismissed the group with happy holiday wishes.

## **AGENDA**

### **Active Shooter and Hostile Threats in Public Buildings Study Group**

**January 5, 2022**

**9:00 a.m.**

**Virtual Meeting:** <https://vadhcd.adobeconnect.com/va2021cdc/>

I) Welcome

II) Discussion

a) Study Group Members - Initial Thoughts

b) SB333/HB670

e) Documents Submitted by Members

i) Ernie Little - VFPA

III) Other

IV) Assignments and Next Steps

V) Next Meeting

## Active Shooter and Hostile Threats in Public Buildings Study Group

Meeting Summary: January 5, 2022 9:00 a.m. to 10:42 a.m.

Virtual Meeting: <https://vadhcd.adobeconnect.com/va2021cdc/>

### **ATTENDEES:**

#### **VA Department of Housing and Community Development (DHCD) Staff:**

**Jeff Brown:** *State Building Codes Director, State Building Codes Office (SBCO)*

**Richard Potts:** *Code Development and Technical Support Administrator, SBCO*

**Paul Messplay:** *Code and Regulation Specialist, SBCO*

**Jeanette Campbell:** *Administrative Assistant, Building and Fire Regulations (BFR)*

**Kyle Flanders:** *Senior Policy Analyst, Policy and Legislative Office*

#### **Study Group Members:**

**Jimmy Moss:** *Virginia Building and Code Officials Association (VBCOA)*

**Ernie Little:** *Virginia Fire Prevention Association (VFPA), Virginia Fire Services Board (VFSB)*

**Billy Hux:** *Virginia Department of Fire Programs (VDFP), Virginia State Fire Marshal's Office*

**Mark Dreyer:** *Virginia Department of General Services (DGS), Division of Engineering and Buildings, State Review Architect*

**Lt. James Garrett:** *City of Chesapeake Police Department, Lieutenant in charge of S.W.A.T., and 911 coordinator*

**Cmdr. Chris Kuyper:** *Roanoke County Police Department Commander, Special Operations instructor for county, FBI active shooter taskforce, Washington DC*

**Kurt Roeper:** *Door and Hardware Institute*

**Capt. Christopher Barry:** *Virginia Fire Chiefs Association (VFCA), Fire Prevention Inspector-Loudoun County*

**Jim Crozier:** *Virginia Association of Counties; Orange County*

**Rob Comet:** *American Institute of Architects-VA, Retired architect with experience in schools*

#### **Other Interested Parties:**

**Ken Cook:** *Allegion*

**Sean Farrell:** *Prince William County*

#### **Study Group Members not in attendance:**

**Sgt. Patrick Green:** *Virginia State Police, First Sergeant and training manager*

**Frederick Presley:** *Stafford County*

**Jack Taylor:** *Nightlock*

**Teri Morgan:** *Virginia Board for People with Disabilities Executive Director*

## Welcome

Jeff: Welcomed attendees and performed several mic checks to make sure people could be heard. He asked for individuals to stay muted unless they are speaking, and to introduce themselves when speaking. He let everyone know there would be 5 minute breaks each hour, and a one hour break for lunch. He also indicated that the meeting is open to everyone, but only study group members should join in the discussion. He gave Rob Comet the opportunity to introduce himself, as he missed the previous meeting. He introduced himself as a retired architect with experience in schools. He is representing the American Institute of Architects, Virginia.

## Discussion

Jeff: The summary from this group's December 8<sup>th</sup> meeting contained an error on page 4. The 2018 change to the VCC Section 1010.1.9.8 said, "Delayed Egress: Exception to clarify that ESH shall be considered a delayed egress locking system." This should actually say, "Delayed Egress: Exception to clarify that ESH shall **not** be considered a delayed egress locking system." This will be corrected on the DHCD website and in the cdpVA link. The Last meeting was focused on background information. This discussion today will proceed with thoughts and comments based on previous experience, and ideas on how to move forward. He opened the floor for discussion.

## Study Group Members - Initial Thoughts

Rob Comet: Started by asking if there were any other school representatives in the group. He is concerned that the problem may be made worse. In public school discussions in the past, there were concerns about sexual harassment in the classrooms, so windows were put in the classrooms. Then, there was concern about violence, and blinds were added to the windows. He thinks that in most cases, violence in public schools come from within the school, not from outside. Generally, schools are safer than other public spaces. He doesn't want to go too far with barricades by creating new scenarios such as violence within a locked space, fire, firebomb, etc.

Jeff: There are no other school representatives in this group. There were school representatives in the past discussion, but now we're looking at all public buildings.

Chris Kuyper: agrees with Rob. If there's an active shooter in a room with a barricade on the interior door, it will be hard for the police to enter. For that type of circumstance, he agrees with Rob that he doesn't want to make a worse situation. He wants to encourage public buildings to have locks on individual doors, so people can barricade themselves, but still make it accessible for law enforcement personnel to enter the room.

Ernie Little: also shared the concerns about room access. He doesn't think there's a need to fortify a classroom so that people cannot get in or out without the removal of a device. Also, the police would have a problem accessing the shooter and EMS would have trouble accessing patients. Classrooms are different than other public buildings. He provided an example in which each suite in in a building can lock down with a magnetic lock device that can be activated remotely, so that people have to identify themselves coming in. This is more of a training or policy issue than a hardware issue or building code issue. While locking people out is good, there's no need to lock people in a room until a device is removed. He thinks we there are other ways to handle a situation without needing a building code amendment at this time.

Mark Dreyer: He is a DGS architect whose group was involved with initial set of meetings, and they were not in favor of anything being incorporated in the building code, and they still feel that way. NFPA has responded to the dangers of devices in building codes. Everyone should look at that document. Devices in public buildings is even more hazardous than in public schools. Public schools have hierarchy of principal, teachers, etc. to run facilities in a regimented way. Public buildings are not necessarily set up that way. He's leery of applying anything to public buildings.

Billy Hux: from the State Fire Marshal's Office also agrees. Research over several years shows him that an active shooter hasn't gotten past any locked door. We can do our part to make things safer, but let's not compound an issue to fix another one.

Jeff: Jim Crozier is having mic problems and may not be able to participate.

Jeff: Gave a recap of the last meeting. New legislation that initiated this study group gave the directive to develop code change proposals to have additional barricade or safety devices to prohibit active shooters. Some may not be in support of any kind of barricade, but in order to comply with directive, some kind of proposal needs to go forth for consideration. Anything that goes to the Board for consideration will address the concerns raised. Last cycle, during the school barricades discussions, many were opposed to barricades as unnecessary or unsafe, so for each concern identified (training concerns, improper use, accessibility, maintenance, etc.) the group added something in the proposal to address those concerns. At the end of this process, there will be not just a proposal, but also a report to layout all discussion points, other documents submitted and meeting summaries. There will not be a study group recommendation for approval or disapproval; the study group will gather facts and address concerns. Data and other information submitted to DHCD by study group members and reviewed by the group will be included with the report. The goal is to clarify and simplify the information submitted to the Board, so we should avoid providing duplicated information. Ernie has already submitted some documents that will be discussed today.

Mark: Although DGS didn't support barricades in public schools, there was merit in items added to the code that made it safer than it was (when jurisdictions could put things in as they saw fit). The overarching guidance was good.

Jeff: Summarized some of the changes to the 2018 codes to address previously raised concerns. Existing provisions for schools were discussed at great length last time. Rather than reinventing the wheel, the group should build off of the existing code language. For example, there was a concern about consultation with all stakeholders (fire and law officials), so language was added to ensure consultation with law enforcement and fire prior to approving barricades in schools and notify them once installed. There were no minimum requirements in the codes prior to the 2018 editions, so devices for some schools were being approved through the building code modification process. In the last cycle, minimum requirements went into the code, providing some consistency throughout the state, whenever the devices are being considered. The 2018 code changes outlined 7 minimum requirements for devices:

1. Able to open from the outside
2. Can't violate listing on fire door or any other hardware.
3. For door operation to egress, there can be one additional movement.
4. Can't be used on other doors (permanently installed component).
5. Can only be one type in the building.
6. Requires training for employees and be included in the lockdown plan
7. Must be properly maintained (can be revoked if not used properly, according to the approval)

There were also some other exceptions and details in the building code to correlate with the allowance of devices:

- Can require key or special knowledge to egress
- Can require tight grasping or pinching
- Can be lower than 34"
- Locks & Latches: ESH Added to List (Restraint/Detention)
  - Signage Required (Authorized Personnel Only)
- Unlatching can require 2 operations (vs 1)
- Accessibility exception (only when deployed during hostile event or drill)

Even if a device is approved and installed, it is only allowed to be used during an active shooter event or during drills or training. Otherwise, only regular hardware is in place. Changes that were made in the SFPC:

- Lockdown plan contents
- ESH training records available
- Only authorized use (training, drill, or event)
- ESH Signage "Authorized Personnel Only"
- Maintenance

Between now and the next meeting, DHCD will put together a draft proposal to see what it would look like to take the 2018 changes and modify them to include “public buildings”. It could go into code as a separate section or be incorporated in the existing school provisions. That would be a good starting point for our next meeting and further discussions.

### **SB333/HB670**

Jeff: DHCD was directed to convene the study group to develop proposals to address active shooter and hostile threats in public buildings. A couple of key items included in the legislation:

- 1 Public buildings
- 2 Other devices and measures
3. Ensure compliance with the Americans with Disabilities Act (ADA)

Last meeting, this group discussed the idea that ‘public building’ would be governmental (not all buildings open to public anywhere).

Rob: Once a ‘public building’ provision is approved, the public in general should have the same rights and opportunities.

Jeff: Please clarify.

Rob: If there’s a deemed need for the government to have a barrier device to protect employees, why would corporations not have the same privilege? What is special about a public servant that is different from a corporate servant? While a school is a different environment, a public building is so general. What’s the difference between a government office building and a corporate office building?

Jeff: doesn’t disagree, but he thinks the intent of the legislation was government buildings. It came from government and was meant to address government. If a proposal goes in for a public government building, there can always be someone who says why not other buildings? Anyone can submit a proposal. So, even if this group addresses government public buildings, someone could submit an alternative proposal for all types of buildings. The summary from this group could address what was directed – a proposal for government buildings, and someone else might also submit another proposal through cdpVA, addressing all buildings open to the public.

Mark: He works in the public sector, and is not in favor of barricades. He thinks this is an incremental approach, adding public buildings to schools, then it may ‘bleed’ out into all buildings. He does agree with Jeff that the intent is to cover governmental buildings this cycle. He also agrees with Rob that there’s no difference between someone working in a governmental or corporate office building.

Chris Barry: He researched online for what is defined as a public building. Sometimes it is considered a government-owned building for public assembly, but that is not always true. He found 7 sites that all define it differently. There needs to be a straight forward definition

Jim Garrett: Put a definition in the chat box from existing Virginia code for ‘public building’

*§ 2.2-1159. Facilities for persons with physical disabilities in certain buildings; definitions; construction standards; waiver; temporary buildings. A. For the purposes of this section and § 2.2-1160: "Building" means any building or facility, used by the public, which is constructed in whole or in part or altered by the use of state, county or municipal funds, or the funds of any political subdivision of this Commonwealth. "Building" shall not include public school buildings and facilities, which shall be governed by standards established by the Board of Education pursuant to § 22.1-138.*

Jeff: He agrees that there are different definitions and doesn’t think the group will get any additional clarification. However, he is pretty confident that the intent is for governmental (municipal) buildings. He asked everyone to look at what Jim put in the chat box, and he put another possible definition in the chat box:

*Possible Definition: "Public Building" - a structure or building that is owned, leased, or otherwise occupied by a municipality or the state and used for any municipal or public purposes by the municipality or the state.*

Mark: The first definition is based on funding source. In the second definition, the building could have been purchased by a governmental body, so even though it wasn’t originally publicly funded, it could become a public building by a later purchase.

Jeff: Asked everyone to keep thinking about a public building definition and submit any thoughts. They should keep in mind that they don't want to leave any loopholes.

Mark: He thinks it is important for the discussion to reiterate that this proposal would be something that would allow owners to install barricades, but it would not mandate that they be installed anywhere.

Jeff: Good point. It's similar to schools, where it doesn't mean that every school has to have barricades. If this is directed to public buildings, it would only lay out minimum requirements for approval and installation, if someone desires to install them. They would still have to first apply for a permit to install, the local building official would be required to consult with fire and law enforcement, and then all minimum requirements would be required to be met, etc.

{7 minute break: 9:58am - 10:05am}

Jeff: Chris Kuyper put another possible definition in the chat box. The group should continue to consider these definitions and circle back to this discussion later. They do need to pick a direction. He still believes that the proposal should only address municipal/government buildings, but he does want everyone to voice their opinion.

*I like this definition of a public building from DOE: According to 10 CFR 420.2 [Title 10 – Energy; Chapter II -- Department of Energy; the term public building means “any building which is open to the public during normal business hours, including: (1) Any building which provides facilities or shelter for public assembly, or which is used for educational office or institutional purposes; (2) Any inn, hotel, motel, sports arena, supermarket, transportation terminal, retail store, restaurant, or other commercial establishment which provides services or retail merchandise; (3) Any general office space and any portion of an industrial facility used primarily as office space; (4) Any building owned by a State or political subdivision thereof, including libraries, museums, schools, hospitals, auditoriums, sport arenas, and university buildings; and (5) Any public or private non-profit school or hospital.10:05 AM*

Jeff: Read off what the bill asked for regarding ingress and egress prevention. The main thing that is seen for preventing ingress and egress is what are typically called barricade devices. They looked at various devices last time, and Jeff also just performed a search looking for new types of devices or technology that might comply with some of the 7 minimum requirements in current code (permanently installed component, releasable from the exterior, only one additional motion to remove, etc.), but did not see anything new since last cycle. If anybody is familiar with other types of devices, please send to DHCD.

Jeff: The language of the bill says that proposals should be developed while maintaining compliance with the ADA. The ADA is a federal law from the DOJ and DOT (standards are available for free online). The ADA requirements aren't code or construction provisions, but it is a law that owners and regulators have to comply with. It is important to understand that the individuals that will be enforcing the building and fire codes are not authorized to interpret or enforce ADA law. He pulled an excerpt from the legislation and put it in the chat box:

*DOJ's and DOT's ADA Standards are not a building code, nor are they enforced like one. They constitute design and construction requirements issued under a civil rights law. The ADA's mandates, including the accessibility standards, are enforced through investigations of complaints filed with federal agencies, or through litigation brought by private individuals or the federal government. There is no plan review or permitting process under the ADA. Nor are building departments required or authorized by the ADA to enforce the ADA Standards (some building departments even include a disclaimer on their plan checks indicating that ADA compliance is not part of their approval process). Entities covered by the law ultimately are responsible for ensuring compliance with the ADA Standards in new construction and alterations.*

Jeff: The building code is the minimum, but a building owner is also responsible for complying with ADA. In recognition of this last cycle, language was put in to address compliance with ADA. The same existing language can be utilized to address ADA concerns with this new proposal:

*The (owner) “should consult with their legal counsel regarding provisions of the Americans with Disabilities Act of 1990...and any other applicable requirements.*

Chris K: The best way to bar someone from a room is a lock on a door. A government building owner would identify a good lock down location(s) in their space. No active shooter has penetrated a locked room in his



experience. He doesn't think there's a need for additional hardware. In VA Tech, if there was a lock on the door, the shooter wouldn't have penetrated the rooms. A lock initiated from inside a room that can easily be opened from the inside and be accessible to law enforcement, which is ADA compliant, is the best solution.

Jeff: Those same thoughts were expressed last cycle. There are some newer types of hardware that are substantial in their locking mechanism, but still only require one motion to unlatch from inside and use a key from outside. There was a lot of concern previously in schools that retrofitting typical door locks was cost prohibitive, so some were interested in installing barricade devices as an alternative.

Chris K: Some of the barricades are confusing, and people may not know how to use them, as opposed to a standard simple door lock.

Mark: In state buildings in VA today, the ADA is reviewed in the permitting process, and it stands as the accessibility guidelines for code. For example, if there was barrier today in a state building, other than in schools, it would be rejected per the ADA.

Jeff: Since the proposal will be for government buildings only, the building official will be determining code compliance if devices are proposed, and the locality as the building owner will also be responsible for ensuring ADA is complied with as well.

## **Documents Submitted by Members**

### **Ernie Little - VFPA**

Jeff: Ernie had to step away, so this topic was tabled to the next meeting.

### **Mark Dreyer:**

Mark: Submitted articles with information supporting that there's been no forced entry by an active shooter when there's a locked door. Layering barricades on top of a door lock could add to confusion, lack of training, loss of device or method to unlock and other problems can occur. Retrofitting in Public Schools which don't have modern locking mechanisms made barricades popular as an easy fix. He doesn't want to keep discussing things that were already discussed, but he did want to share the articles.

Article links from Mark Dreyer:

<https://idighardware.com/2020/01/decoded-barricade-devices-and-the-ada-march-2019/>

<https://www.tsbulletproof.com/blog/school-door-barricades-could-create-safety-concerns/>

## **Other**

Jeff: Opened the floor for anyone to discuss anything of interest. There was no further discussion.

## **Assignments and Next Steps**

Jeff: Asked if there are any examples of implementing existing school barricades that went into effect since the 2018 code changes? DHCD will search for some. If anyone else knows of any, please share with DHCD before the next meeting.

Jeff: What are other states and jurisdictions doing regarding barricades?

Mark: volunteered to research. He knows that he hasn't seen any public universities come through the permitting process for barricade devices in VA.

Jeff: knows of some other schools in VA that put in barricades prior to the 2018 changes, so DHCD staff will reach out to them. Again, if there is any other information to share, please send to DHCD by January 18<sup>th</sup> at the latest, in order to get the agenda out a week ahead of the next meeting.

## **Next Meeting**

DHCD will send a Doodle poll to select a date for the next meeting during the week of Jan 24-28.

It will be scheduled from 9am - 3pm with an hour lunch break.

It will be a virtual meeting through Adobe. DHCD will send the agenda before the meeting.

DHCD will have a working draft proposal for public buildings based on the 2018 school proposal.

## **AGENDA**

### **Active Shooter and Hostile Threats in Public Buildings Study Group**

**January 26, 2022**

**9:00 a.m.**

**Virtual Meeting:** <https://vadhcd.adobeconnect.com/va2021cdc/>

I) Welcome

II) Discussion

A) Documents Submitted by Ernie Little (VFPA)

B) Other States and Jurisdictions

C) Virginia Experiences

D) Draft Proposal

III) Other

IV) Assignments and Next Steps

V) Next Meeting

## Active Shooter and Hostile Threats in Public Buildings Study Group

January 26, 2022 9:00 a.m. to 10:20 a.m.

Virtual Meeting: <https://vadhcd.adobeconnect.com/va2021cdc/>

### ATTENDEES:

#### **VA Department of Housing and Community Development (DHCD) Staff:**

**Cindy Davis:** *Deputy Director, Building and Fire Regulations (BFR)*

**Jeanette Campbell:** *Administrative Assistant, BFR*

**Jeff Brown:** *State Building Codes Director, State Building Codes Office (SBCO)*

**Richard Potts:** *Code Development and Technical Support Administrator, SBCO*

**Paul Messplay:** *Code and Regulation Specialist, SBCO*

**Florin Moldovan:** *Code and Regulation Specialist, SBCO*

**Kyle Flanders:** *Senior Policy Analyst, Policy and Legislative Office*

#### **Study Group Members:**

**Jimmy Moss:** *Virginia Building and Code Officials Association (VBCOA)*

**Ernie Little:** *Virginia Fire Prevention Association (VFPA), Virginia Fire Services Board (VFSB)*

**Mark Dreyer:** *Virginia Department of General Services (DGS), Division of Engineering and Buildings, State Review Architect*

**Jack Taylor:** *Nightlock*

**Kurt Roeper:** *Door and Hardware Institute*

**Christopher Barry:** *Virginia Fire Chiefs Association (VFCA), Fire Prevention Inspector-Loudoun County*

**Jim Crozier:** *Virginia Association of Counties; Orange County*

#### **Other Interested Parties:**

**Ken Cook:** *Allegion*

**Sean Farrell:** *Prince William County*

#### **Study Group Members not in attendance:**

**Rob Comet:** *American Institute of Architects-VA, Retired architect with experience in schools*

**James Garrett:** *City of Chesapeake Police Department, Lieutenant in charge of S.W.A.T., and 911 coordinator*

**Chris Kuyper:** *Roanoke County Police Department Commander, Special Operations instructor for county, FBI active shooter taskforce, Washington DC*

**Billy Hux:** *Virginia Department of Fire Programs (VDFP), Virginia State Fire Marshal's Office*

**Patrick Green:** *Virginia State Police, First Sergeant and training manager*

**Frederick Presley:** *Stafford County*

**Teri Morgan:** *Virginia Board for People with Disabilities Executive Director*

## **AGENDA AND DISCUSSION ITEMS:**

### **I) Welcome**

Jeff Brown: Reminded the group that the meetings are recorded. Thanked everyone for their time. He's hoping to wrap up discussions today, finalize the proposal and begin working on the report. He asked everyone to be sure and speak up if they had anything to add to the discussion. He gave instructions for members to remain muted unless speaking, and to use the 'raise hand' feature to ask to speak. The study group members are listed in the box on the left. The meeting summary from the last study group meeting has been posted on the DHCD website and is available in cdpVA. He encouraged everyone to review it and let the staff know if there were any corrections needed. The summary from this meeting should be available in about a week. There will be breaks each hour. He asked members to identify themselves when speaking.

### **II) Discussion**

#### **A) Documents Submitted by Ernie Little (VFPA)**

Jeff: asked Ernie to talk about the documents he submitted, since he had to step away from the meeting last time and these documents were not able to be discussed. However, Ernie was not signed in yet. Jeff said they would circle back to this later, when Ernie is available.

#### **B) Other States and Jurisdictions**

Jeff: Mark said in the last meeting that he would look for information on what other states and jurisdictions are doing about barricade devices.

Mark Dreyer: looked into the state of Virginia, and did not see any new activity in any of the jurisdictions he looked into.

Jeff: Anyone else?

Chris Barry: Asked the schools in his district, and there's nothing new in Loudoun.

#### **C) Virginia Experiences**

Jeff: DHCD staff sent a Memo to all Virginia building officials asking them to share any experiences with approving barricade devices in their jurisdictions since the 2018 code changes went into effect on July 1, 2021. There was no response to the request. DHCD also reached out to Augusta County schools, who did install devices prior to the 2018 code update. They still use the devices and it's working well for them. They have procedures in place for maintenance of the devices and training. They are looking into adding them in more schools.

Jack Taylor: His company Nightlock is based in Michigan. He says they have had increased activity recently. They currently have devices in 62 schools in VA. He is also working with a few VA schools, who are looking into their devices, but none of them have mentioned the new code.

Jeff: For the benefit of those that were not able to attend the previous meetings, he summarized the background discussions and activities around barricades in schools last cycle, and the directive to address barricades in public buildings this cycle.

#### **D) Draft Proposal**

Jeff: DHCD has drafted a proposal to meet the intent of the directives given by SB 333 and HB 670, understanding that some in the study group may not support it. The full report will outline the information discussed, including concerns. When the report and proposal are complete, there will still be opportunity to discuss and raise any concerns in the Workgroup meetings before being sent to the Board for a decision.

Jack: stated that the Naval technical training center in VA is using barricades and that while Nightlock barricades are mainly used in schools, they are used in other public buildings as well. He indicated they have barricades in municipal, military, government, corporate and retail buildings. They are primarily in place to protect employees, and give them a place to retreat to and shelter in place if needed.

Jeff: Reviewed the proposal drafted by the DHCD staff, which was sent out with the agenda and is available in the file pod on the left of the meeting space. Section 108.1 - when applications are required. This would impact the devices in any occupancy. Alteration to means of egress already required a permit per the code. Last cycle, language was added to include requiring a permit when adding barricade devices. The draft proposal includes language to require a permit for removing barricade devices as well.

Jimmy Moss: They were able to do all of this previously, but the wording in the proposal is good because it makes it very clear to everyone what is specifically required.

Mark: DEB would not issue a permit for removal. It would be better to say that removal should be coordinated with first responders and the training program.

Kurt Roeper: The existing Code requires permitting and approval of devices. According to a statement made earlier by a study group member, there are at least 62 schools in VA that have installed the devices, but DHCD did not get any response back from building officials when asked for examples of installed devices. How does that reconcile?

Jeff: There were a number of these devices installed prior to the 2018 USBC going into effect. They probably would have been installed with approval of a building official using a code modification or other process. At a previous Study Group meeting, it was acknowledged that barricade devices were already installed. DHCD staff asked for examples of any installations using the new 2018 regulations (effective July 1, 2021). DHCD didn't hear back from building officials on that request.

Jack: The same thing happened in Michigan. Sometimes, when a state goes through the regulating process, schools will wait a bit before implementing the new rules or guidelines. If he knows of any new code changes, he would definitely share those with all schools (or other buildings) who request devices in the state.

Kurt: is concerned that there may be many undocumented installations, where first responders may not have received notification.

Jeff: He isn't sure about what process each of the schools may have used prior to the 2018 code change. However, Augusta's approval process did include coordination and consultation with local law enforcement and first responders

Jeff: finished reviewing the proposal:

- 110.1.1 - Talks about notifying officials of removal of devices.
- Chapter 2 – definition of Public Building was added according to the previous Study Group discussions.
- 1010.2.8 - Was changed to include public buildings.
- 1103.2.15 - Added 'and public buildings'
- 1031.11 In SFPC – Added 'the conditions of its approval' to indicate that a change in building use would nullify the approval, as it was conditioned on the building use. As in a change of occupancy from public to private use for example.
- Reason statement – in compliance with SB 333 and HB 670 to expand the use of barricade devices to public buildings.

Jack: asked if under the draft proposal, there was a change in occupancy, the new owner could apply for use?

Jeff: The proposal would limit approval to "public buildings". The Study Group's directive is only for public buildings. It doesn't prevent anyone from submitting another proposal using different language, which would go to the Workgroups for consideration.

Chris: Indicated that he does not like the generic term 'notify first responders'.

Jeff: Highlighted section 110.1.1 listing the titles of the various officials (which was not changed).

Chris: stated there's a big difference between schools and public building staff structure. He wanted to review the training section.

Jeff: Reminded the group that there's no change to the language in 1010.2.8 #5 – The approval process includes checks to make sure that they are training as required and also requires that they make their training records available for inspection.

Jeff: If there are no other questions or concerns, DHCD will finalize the proposal and put it in cdpVA. They will also begin preparing the report to capture the thoughts and comments of group members. If all in the group support a proposal, they will typically put the study group's name on the proposal. Knowing that's not the case here, he wants to know who supports this, in order to put the proponent names on the proposal. Jeff asked for a show of hands (thumbs up or thumbs down) to indicate those who would support approval of the proposal to add barricades in public buildings.

Ernie Little: asked if he could review his proposal before the vote.

Jeff: wanted to vote first on the DHCD proposal separate from Ernie's proposal. The vote resulted in Jimmy Moss, Ernie Little, Jack Taylor and Chris Barry giving thumbs up, indicating that they would support approval of the DHCD proposal. Mark Dreyer and Kurt Roeper voted with thumbs down to indicate that they would not support approval of the proposal. Jim Crozier did not give thumbs up or thumbs down to indicate his position. Jeff will reach out again one last time for proponents before the draft is submitted for public viewing in cdpVA to confirm whose names will be added as co-proponents of the proposal. He reminded the group that it will be discussed again at the General Stakeholder Workgroup meeting.

### **A) (Revisit) Documents Submitted by Ernie Little (VFPA)**

Ernie: Provided 3 documents (first 2 are background / informational)

1. Lori Greene, door & hardware manufacturers - myths & facts
2. NFPA 3000 toolkit - basis for developing a lockdown plan.
3. Code change proposal: amending 404.2.3.3 ASHER Program Compliance – “The development, operation and maintenance of lockdown plans, including the use of emergency supplemental hardware, shall be in accordance with chapter 9 of NFPA 3000”.

Jack: Likes this; he says there are a lot of devices on the market, and there are only some that comply with code and should be approved. At the permitting process level, they need to have the same information and guidelines to decide whether to approve or not. The article by Lori Greene, door hardware industry, doesn't give enough factual information. Barricades are in competition with other door hardware. Lori lumps all barricade devices together. Some are safe to use and some are not as safe. The door hardware industry thinks that all barricades are in competition with them, so they lump them all together, and that's not a true representation.

Jeff: This discussion will be part of the summary. Ernie's proposal is not specific to public buildings. We can mention it as part of the discussions. This change could be submitted separately, and could include co-proponents. DHCD can assist Ernie with submitting the proposal on cdpVA.

Ernie: Yes, thanks. What does the group think?

Jeff: After Ernie finalizes and submits the proposal on cdpVA, DHCD can circle back to this group to ask for proponents.

Ernie: He asked about the additional public building definitions that he sent via email to Jeff.

Jeff: The definition used in the DHCD drafted proposal was based on group discussions in previous meetings. However, Ernie later submitted some additional definitions for consideration.

{BREAK 10:02 – 10:07}

Jeff: Asked Ernie to discuss the definitions of public buildings that he sent over.

Ernie: He provided a few, and he also put together one from all the choices as his favorite. It included examples of the types of buildings, which he thinks is missing from the DHCD draft proposal.

Jeff: asked the group to review & compare with the definition they chose in the DHCD draft proposal. There were no hands or comments, so he asked once more – if anything Ernie submitted would change the DHCD proposal. Seeing no response, the group will go forward with original draft definition proposed.

### **II) Other**

Nothing further to review.

#### **IV) Assignments and Next Steps**

Jeff: DHCD will prepare and finalize the proposal and begin working on the report with the SG discussions noted. DHCD will put the proposal in cdpVA. They will also help Ernie with his proposal. These proposals should be submitted in time to be discussed at the April Workgroup meetings. The Workgroup date for this proposal is April 12<sup>th</sup>. The Workgroup date for SFPC and Ernie's proposal is April 15<sup>th</sup>. He asked group members to attend if they could to provide any additional perspective to the discussions. When the Workgroup sends the proposal to BHCD with their recommendation to approve or not, the summary report with SG and WG discussions will also be sent as a package.

#### **V) Next Meeting**

Jeff: There's no need for another meeting. He thanked the group members for their participation and closed the meeting.

## **APPENDIX B: Study Group Members**



# ACTIVE SHOOTER AND HOSTILE THREATS IN PUBLIC BUILDINGS

## Study Group Members

Jimmy Moss – [Virginia Building and Code Officials Association](#)

Rob Comet – [American Institute of Architects, VA Chapter](#)

Ernie Little – [Virginia Fire Prevention Association](#)

Billy Hux – [Virginia Department of Fire Programs](#)

Mark Dreyer – [Virginia Department of General Services](#)

Patrick Green – Virginia State Police

Frederick Presley - Stafford County

Jim Crozier - Orange County

James Garrett - City of Chesapeake Police Department

Chris Kuyper - Roanoke County Police Department

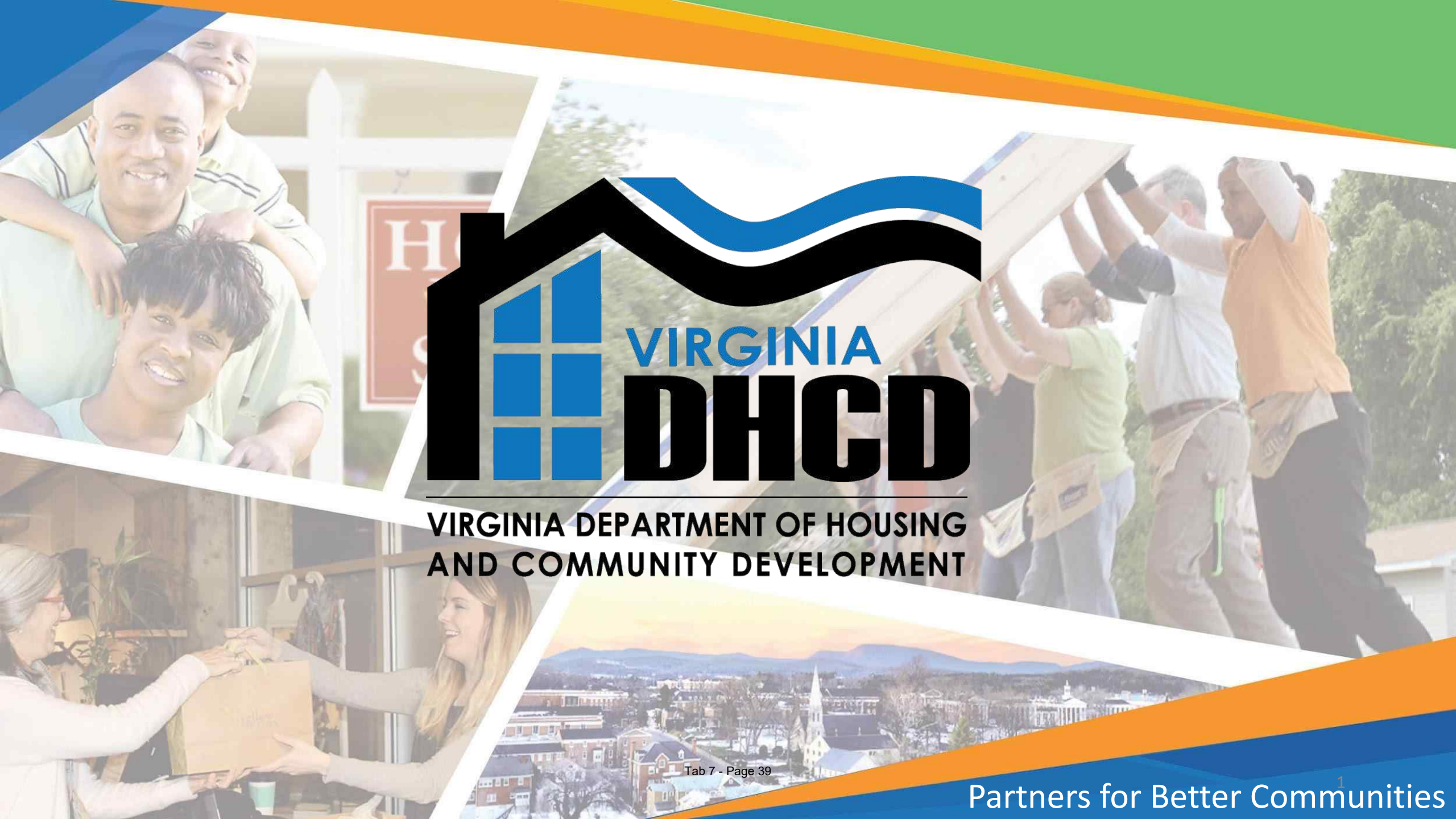
Jack Taylor – [Nightlock](#)

Kurt Roeper - [Door Hardware Institute](#)

Teri Morgan - [The Virginia Board for People with Disabilities](#)

Chris Barry – Loudoun County

## **APPENDIX C: Supporting Documentation**



**VIRGINIA DEPARTMENT OF HOUSING  
AND COMMUNITY DEVELOPMENT**

# Active Shooter and Hostile Threats in Public Buildings Study Group

December 8, 2021 Meeting

2021 Code Development Cycle



**Cindy Davis**, Deputy Director of Building and Fire Regulations

**Jeff Brown**, State Building Codes Office Director

**Richard Potts**, Code Development and Technical Support Administrator

**Florin Moldovan**, Code & Regulation Specialist

**Paul Messplay**, Code & Regulation Specialist

**Jeanette Campbell**, Administrative Assistant

# Study Group members



- Jimmy Moss - VBCOA
- Rob Comet - AIA Va
- Ernie Little - VFPA
- Billy Hux - VDFP
- Mark Dreyer - DGS
- Patrick Green - VSP
- Frederick Presley - Stafford County
- Jim Crozier - Orange Co.
- James Garrett - City of Chesapeake
- Cmdr. Chris Kuyper - Roanoke County
- Jack Taylor - Nightlock
- Kurt Roeper - Door Hardware Institute
- Teri Morgan - VBPD

# 2021 code development cycle (tentative dates)



**October 1st** cdpVA was opened for submission of code change proposals for the 2021 Code Development Cycle

**November 2021:** Notices of Intended Regulatory Action (NOIRAs) Published

**December 2021:** Study Groups begin meeting

**February 2022:** Sub-Workgroups begin meeting

**March-June 2022:** Stakeholder Workgroup meetings

**September 2022:** BHCD meets to consider proposals

**December 2022:** BHCD considers proposed regulations

**Fall/Winter 2023 = 2021 Virginia Codes Effective (Tentative)**



[va.cdpass.com](http://va.cdpass.com)

# Virginia's online code development System (cdpVA)

Virginia DHCD

Virginia's Online Code Development Process

The cdpVA<sup>®</sup> system is Virginia's new online Code Development Process. cdpVA<sup>®</sup> allows you to create code change proposals, submit public comments and access any information about the 2015 Virginia Code Change Process. Virginia is a leader in building and fire code regulations, and stakeholder input is vital to Virginia's code development process. We encourage participation in this process through cdpVA<sup>®</sup>, and ask that you invite colleagues and peers with an interest in the 2015 Virginia Code Change Process to participate.

[CLICK HERE TO REGISTER →](#)

**Sign In or Register Here**

Provide your email address

Provide your password

0 plus 7 Answer the math challenge

[Sign In](#)

Can We Help? [I forgot my password. I Need More Help](#)

cdpVIRGINIA  
HOW IT WORKS

Meeting Information

Information regarding workgroup meetings, including date, time, location and agendas, will be available through cdpVA<sup>®</sup>.

All information is listed under each workgroup, so be sure to follow the workgroups that you are most interested in, and plan to attend meetings throughout the Code Change Process.

cdpVIRGINIA  
Online Code Access

In cdpVA<sup>®</sup>, you will be able to access both the current 2012 Virginia Building Codes, as well as the 2015 International Codes.



- Study specific topics that require additional review and discussion
- Identify areas of consensus and disagreement
- Determine if code change proposals or other solutions are appropriate
- May review proposals, provide analysis, make recommendations, and/or develop code change proposals
- Proposals and recommendations of Study Groups are reviewed by the General Workgroups prior to BHCD consideration

- Review all code change proposals within their subject topics, prior to the proposals being considered by the General Workgroups
- Make recommendations on each proposal, including negotiating compromises where appropriate
- May also develop new code change proposals, or support proposals submitted by others by joining the proposal as a proponent

- All meetings are open to attendance and participation by anyone
- Review and discuss all submitted code change proposals, including all proposals and recommendations from Study Groups and Sub-Workgroups
- A workgroup recommendation is determined for each proposal and the recommendation is provided to the Board of Housing and Community Development
- Workgroup recommendations are classified as follows:

**Consensus for Approval:** No workgroup participant expressed opposition to the proposal

**Consensus for Disapproval:** Any workgroup participant expressed opposition to the proposal and no workgroup participant, other than the proponent, expressed support for the proposal.

**Non-Consensus:** Any workgroup participant expressed opposition to the proposal

**SB 1755** directed DHCD to convene stakeholders to develop USBC and SFPC proposals, with the goal of assisting in the provision of safety and security measures for active shooter or hostile threats:

- Commonwealth's elementary and secondary schools
- Public or private institutions of higher education

## **SB 1755**

The review conducted by the stakeholders shall include the examination of:

- locking devices,
- barricade devices, and
- other safety measures that may be utilized in an active shooter or hostile threat situation that occurs in any classroom or other area where students are located for a finite period of time.

## School Safety Sub-Workgroup Timeline (2018 Cycle)

- **February - March 2019** - School Safety Sub-workgroup formed
- **April - August 2019** - School Safety Sub-workgroup convened
- **October 2019** - BHCD approved proposal B108.1-18
- **December 2020** - BHCD approves final 2018 USBC and SFPC
- **July 1, 2021** - 2018 USBC and SFPC effective

## 2018 IBC code sections

**1010.1.4.4 Locking arrangements in educational occupancies.** In Group E and Group B educational occupancies, egress doors from classrooms, offices and other occupied rooms shall be permitted to be provided with locking arrangements designed to keep intruders from entering the room where all of the following conditions are met:

1. The door shall be capable of being unlocked from outside the room with a key or other approved means.
2. The door shall be openable from within the room in accordance with Section 1010.1.9.
3. Modifications shall not be made to listed panic hardware, fire door hardware or door closers.

**1010.1.4.4.1 Remote operation of locks.** Remote operation of locks complying with Section 1010.1.4.4 shall be permitted.

## 2018 School Safety Sub-workgroup

- Four all day meetings held
- Multiple code change proposals and versions considered
- Ultimately, full consensus not reached on any proposal
- Two proposals (options) submitted for BHCD consideration
  - B108.1-18: compliance path in VCC for “emergency supplemental hardware”
  - BO101.1: add VCC appendix (for local adoption) that includes compliance path for “emergency supplemental hardware”



## Proposal B108.1-18 (Approved)

- “Emergency supplemental hardware” allowed when in compliance with specific conditions for approval
- Emergency supplemental hardware allowed in Group E occupancies (except Group E day care facilities) & Group B educational occupancies
- Proponents: Virginia Building & Code Officials Association; Virginia Department of Education; Augusta County Public Schools; American Institute of Architects (AIA) Virginia; Virginia Tech.
- Approved emergency supplemental hardware requirements for schools included in 2018 USBC and SFPC (effective July 1, 2021)

## **Proposal BO101.1-18 (Not Approved)**

- Technical requirements for emergency supplemental hardware similar to requirements of proposal B108.1-18
- Would have resulted in emergency supplemental hardware being allowed in some localities (where appendix adopted) but not in others
- Proponents: Steven Sites, Virginia Department of Fire Programs; Virginia Fire Prevention Association (VFPA); and Linda Hale (Loudoun County)

**SB 333 and HB 670** direct DHCD to convene stakeholders to develop USBC and SFPC proposals with the goal of assisting in the provision of safety and security measures for the Commonwealth's public buildings for active-shooter or hostile threats.

## **SB 333 and HB 670**

- Develop proposals for changes to the USBC and SFPC for submission to the Board of Housing and Community Development
  - Proposals to provide safety and security measures for “public buildings” for active-shooter or hostile threats.
  - Proposals to maintain compliance with basic ADA accessibility requirements
- Include examination of door locking devices, barricade devices, and other safety measures on doors and windows for the purpose of preventing both ingress and egress in the event of a threat to the physical security of persons in such buildings

[codes.iccsafe.org/codes/virginia](https://codes.iccsafe.org/codes/virginia)

**Free Online Access to  
Virginia and ICC Code books!**



## 2018 USBC

New term defined:

**EMERGENCY SUPPLEMENTAL HARDWARE.** Any approved hardware used only for emergency events or drills to keep intruders from entering the room during an active shooter or hostile threat event or drill.

## 2018 USBC

**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....

1. Construction or demolition of a building or structure. Installations or alterations involving ..... (iv) the alteration of any required means of egress system, including the addition of emergency supplemental hardware,.....

## 2018 USBC

Consultation and notification requirements added:

**110.1.1 Consultation and notification.** Prior to approval of emergency supplemental hardware, the building code official shall consult with the local fire code official, or state fire code official if no local fire code official exists, and head of the local law-enforcement agency. The local fire code official; the state fire code official; and the local fire, EMS, and law-enforcement first responders shall be notified of such approval, after approval of such emergency supplemental hardware by the building code official.



## 2018 USBC

General (amended 2018 IBC Section 1010.1.4.4)

**1010.1.4.4 Locking arrangements in educational occupancies.** In Group E occupancies, except Group E day care facilities, and Group B educational occupancies, exit access doors from classrooms, offices, and other occupied rooms, except for exit doors and doors across corridors, shall be permitted to be provided with emergency supplemental hardware where all of the following conditions are met:

## 2018 USBC

### Seven general conditions

1. The door shall be capable of being opened from outside the room with a key, proprietary device provided by the manufacturer, or other approved means.
2. The door shall be openable from within the room in accordance with Section 1010.1.9, except emergency supplemental hardware is not required to comply with Chapter 11.

Note: School officials should consult with their legal counsel regarding provisions of the Americans with Disabilities Act of 1990 (42 USC § 12101 et seq.) and any other applicable requirements.

## 2018 USBC

### Seven general conditions

3. Installation of emergency supplemental hardware on fire door assemblies must comply with Section 716.2. Modifications shall not be made to listed panic hardware, fire door hardware, or door closures.
4. The emergency supplemental hardware shall not be capable of being used on other doors not intended to be used and shall have at least one component that requires modification to, or is permanently affixed to, the surrounding wall, floor, door, or frame assembly construction for it to properly function.

## 2018 USBC

### Seven general conditions

5. Employees shall engage in lockdown training procedures on how to deploy and remove the emergency supplemental hardware, and its use shall be incorporated in the approved lockdown plan complying with the SFPC.

6. The emergency supplemental hardware and its components shall be maintained in accordance with the SFPC.

## 2018 USBC

Seven general conditions (continued)

7. Approved emergency supplemental hardware shall be of consistent type throughout a building.

Exception: The building official may approve alternate types of emergency supplemental hardware in accordance with Section 110.1 when a consistent device cannot be installed.

## 2018 USBC

ESH related amendments to general VCC requirements:

**1010.1.9 Door operations** - Prohibits a key or special knowledge being required for egress

- Exception for ESH provided in accordance with Section 1010.1.4.4

**1010.1.9.1 Hardware** - Prohibits tight grasping, pinching or twisting of wrist to operate

- Exception for ESH provided in accordance with Section 1010.1.4.4

**1010.1.9.2 Hardware height** - Requires hardware 34” minimum to 48” maximum above floor

- ESH shall be installed 48” maximum above the finished floor (can be installed below 34”)

## 2018 USBC

ESH related amendments to general VCC requirements (cont.):

**1010.1.9.4 Locks and latches** - Conditions where locks and latches are permitted to prevent operation of doors

- New item #7 added for doors equipped with ESH in accordance with Section 1010.1.4.4

“7. Egress doors equipped with emergency supplemental hardware complying with Section 1010.1.4.4, from the egress side provided:

7.1. A readily visible durable sign is posted on the egress side on or adjacent to the door stating: THIS HARDWARE SHALL BE USED BY AUTHORIZED PERSONNEL ONLY. The sign shall be in letters 1 inch (25 mm) high on a contrasting background.

7.2. The use of the emergency supplemental hardware is revocable by the building official or fire official for due cause.”

## 2018 USBC

ESH related amendments to general VCC requirements (cont.):

### **1010.1.9.5 Bolt locks** - Prohibits manually operated flush bolts or surface bolts

- Exception added for ESH provided in accordance with Section 1010.1.4.4

### **1010.1.9.6 Unlatching** - The unlatching of any door or leaf shall not require more than one operation

- Exception added to allow one additional operation for release of emergency supplemental hardware provided in accordance with Section 1010.1.4.4

### **1010.1.9.8 Delayed egress**

- Exception added to clarify that ESH shall not be considered a delayed egress locking system



## 2018 USBC

ESH related amendments to general VCC requirements (cont.):

**1103.2** General exceptions - Existing section includes exemptions from VCC Chapter 11 (accessibility requirements)

- New Section 1103.2.15 added

**1103.2.15** - In Group E occupancies, except Group E day care facilities, and Group B educational occupancies, when emergency supplemental hardware is deployed during an active shooter or hostile threat event and provided in accordance with Section 1010.1.4.4.

## 2018 SFPC

New term defined:

**EMERGENCY SUPPLEMENTAL HARDWARE.** Any approved hardware used only for emergency events or drills to keep intruders from entering the room during an active shooter or hostile threat event or drill.

## 2018 SFPC

### **404.2.3.1 Lockdown plan contents** - Section lists items to be included in lockdown plans

- Item 4.4 amended to ensure lockdown plan also includes description of how locking (during initiation of a lockdown) complies with VCC

## 2018 SFPC

New Section 406.3.4.1 added

**406.3.4.1 Emergency supplemental hardware training.** Where a facility has installed approved emergency supplemental hardware, employees shall be trained on their assigned duties and procedures for the use of such device. Records of in-service training shall be made available to the fire code official upon request.

## 2018 SFPC

New Section 1001.4 added

**1001.4 Unauthorized use of emergency supplemental hardware.** No person shall utilize any approved emergency supplemental hardware to prevent the ingress or egress from any occupied space.

Exceptions:

1. Utilized by authorized persons or other persons occupying such space in the event of any actual or perceived hostile threat or active shooter event.
2. Utilized in conjunction with any approved lockdown drill requiring the utilization of the approved emergency supplemental hardware.
3. Utilization for the testing, use and training by emergency response personnel.

Where such device is utilized in accordance with the Exceptions 1 through 3 above, the hardware device shall be removed immediately following the conditions of such exceptions.

## 2018 SFPC

Section 1010.1.9 amended

**1010.1.9 Door operations.** Except as specifically permitted by this section or the applicable building code, egress doors shall be readily openable from the egress side without the use of a key or special knowledge or effort.

## 2018 SFPC

### Section 1010.1.9.4 amended

**1010.1.9.4 Locks and latches.** Where required, a readily visible durable sign is posted on the egress side on or adjacent to the door stating:

**THIS DOOR TO REMAIN UNLOCKED WHEN THIS SPACE IS OCCUPIED.**

The sign shall be in letters 1 inch (25 mm) high on a contrasting background.

Emergency supplemental hardware provided in accordance with the applicable building code shall be provided a readily visible durable sign posted on the egress side on or adjacent to the door stating:

**THIS HARDWARE SHALL BE USED BY AUTHORIZED PERSONNEL ONLY.**

The sign shall be in letters 1 inch (25 mm) high on a contrasting background.

## 2018 SFPC

### Section 1031.2 amended

**1031.2 Reliability.** Unless otherwise permitted by the applicable building code, required exit accesses, exits and exit discharges shall be continuously maintained free from obstructions or impediments to full instant use in the case of fire or other emergency where the building area served by the means of egress is occupied. An exit or exit passageway shall not be used for any purpose that interferes with a means of egress.



## 2018 SFPC

New Section 1031.10 added

**1031.10 Maintenance of emergency supplemental hardware.** Emergency supplemental hardware shall be installed in accordance with the applicable building code and shall be maintained in accordance with this code and the manufacturer's instructions. The fire code official shall be authorized to direct the practical application of any such hardware device to ensure the device operates as designed, and is free from any defects, damage, or conditions which may restrict the deployment and removal of such hardware device.

Develop and submit USBC and SFPC code change proposals:

- **Public Buildings** - Determine buildings to include
- **Other devices and measures** - Identify and consider various devices or safety measures for doors and windows
- **ADA:** Ensure that any proposals address compliance with basic ADA accessibility requirements

- Study group members will not be expected to join, as a proponent, any code change proposal that they do not support.
- Any code change proposals developed by the group will be submitted with information clearly identifying any members in support.
- Any proposals will be submitted in cdpVA for further review by all stakeholders
- Any proposals will be discussed by the General Stakeholder Workgroup(s) to determine a workgroup recommendation, prior to being considered by the BHCD
- Nothing prevents anyone (study group members or other interested parties) from submitting their own code change proposal(s) related to barricade devices



Prior to the next meeting, please:

- **Review existing code requirements and reach out to other members and/or DHCD staff with any questions**
- **Identify other devices or measures for doors and windows for review**
  - Please provide information to DHCD by December 20th
- **Identify and provide other helpful/relevant information (reports, data, etc.) for review**
  - Please provide to DHCD by December 20th

**Note:** If any member wants to share information with the group between meetings, please send it to DHCD staff and we will distribute it to our email list to make sure we do not miss any interested parties that might be added to our list as we go along.

## Next Meeting (Virtual)

**January 5, 2021**

**9:00 am - 3:00 pm**

(lunch break 12:00 pm -1:00 pm)

Link: <https://vadhcd.adobeconnect.com/va2021cdc/>



## Division of Building and Fire Regulations

State Building Codes Office

[sbco@dhcd.virginia.gov](mailto:sbco@dhcd.virginia.gov)

804-371-7150



**2019 SESSION**

19100912D

**SENATE BILL NO. 1755**

Offered January 18, 2019

*A BILL to direct the Board of Housing and Community Development to revise the Uniform Statewide Building Code and the Statewide Fire Prevention Code to permit the use of temporary barricade devices in classrooms.*

-----  
Patrons-- Hanger; Delegates: Bell, Richard P. and Campbell, R.R.

-----  
Referred to Committee on General Laws and Technology  
-----

Be it enacted by the General Assembly of Virginia:

**1.** *§ 1. That the Board of Housing and Community Development (the Board) is directed to revise the Uniform Statewide Building Code and the Statewide Fire Prevention Code, as appropriate, to permit the use, by a staff member of a public or private elementary or secondary school or public or private institution of higher education, of a temporary barricade device on the door of a classroom or any other area where students are located for a finite period of time during an active shooter emergency or active shooter drill. The Board shall require that (i) such device not be permanently mounted to a door, (ii) such device require minimal steps to remove after it is engaged, and (iii) each public or private elementary or secondary school or public or private institution of higher education provide training to its staff members on the use of such device. Additionally, the administrator of any building in which a temporary barricade device is intended to be used shall be required to notify local law-enforcement authorities, local emergency medical services personnel, and the local fire marshal, if one has been appointed, of the intent to use such device prior to its use.*



**2020 SESSION****CHAPTER 130**

*An Act to direct the Department of Housing and Community Development to convene stakeholders for the purpose of developing proposals for changes to the Uniform Statewide Building Code and the Statewide Fire Prevention Code to address active shooters or hostile threats.*

[H 670]

Approved March 4, 2020

Be it enacted by the General Assembly of Virginia:

**1.** *§ 1. That the Department of Housing and Community Development is directed to convene stakeholders representing entities that enforce the Uniform Statewide Building Code (USBC) (§ 36-97 et seq.) and the Statewide Fire Prevention Code (SFPC) (§ 27-94 et seq.), other law-enforcement organizations, and representatives of local governments throughout the Commonwealth of Virginia to develop proposals for changes to the USBC and SFPC for submission to the Board of Housing and Community Development. Such proposals shall have the goal of assisting in the provision of safety and security measures for the Commonwealth's public buildings for active shooter or hostile threats while maintaining compliance with basic accessibility requirements under the Americans with Disabilities Act (42 U.S.C. § 12131 et seq.). The review of the stakeholders shall include the examination of (i) door locking devices, (ii) barricade devices, and (iii) other safety measures on doors and windows for the purpose of preventing both ingress and egress in the event of a threat to the physical security of persons in such buildings.*

**2020 SESSION****CHAPTER 533**

*An Act to direct the Department of Housing and Community Development to convene stakeholders for the purpose of developing proposals for changes to the Uniform Statewide Building Code and the Statewide Fire Prevention Code to address active shooters or hostile threats.*

[S 333]

Approved March 31, 2020

Be it enacted by the General Assembly of Virginia:

**1.** § 1. *That the Department of Housing and Community Development is directed to convene stakeholders representing entities that enforce the Uniform Statewide Building Code (USBC) (§ 36-97 et seq.) and the Statewide Fire Prevention Code (SFPC) (§ 27-94 et seq.), other law-enforcement organizations, and representatives of local governments throughout the Commonwealth of Virginia to develop proposals for changes to the USBC and SFPC for submission to the Board of Housing and Community Development. Such proposals shall have the goal of assisting in the provision of safety and security measures for the Commonwealth's public buildings for active shooter or hostile threats while maintaining compliance with basic accessibility requirements under the Americans with Disabilities Act (42 U.S.C. § 12131 et seq.). The review of the stakeholders shall include the examination of (i) door locking devices, (ii) barricade devices, and (iii) other safety measures on doors and windows for the purpose of preventing both ingress and egress in the event of a threat to the physical security of persons in such buildings.*

# B108.1-18

VCC: 108.1, 110.1, 110.1.1 (New), (New); IBC®: 1010.1.4.4, 1010.1.4.4.1, 1010.1.9, 1010.1.9.1, 1010.1.9.2, 1010.1.9.4, 1010.1.9.5, 1010.1.9.6, 1010.1.9.8, 1103.2, 1103.2.15 (New); VFC: (New); IFC®: 404.2.3, 404.2.3.1, 404.2.3.2, 406.4.1 (New), 1001.4 (New), [BE] 1010.1.9; VFC: (N) 1010.1.9.3; IFC®: 1031.2, 1031.2.1; VFC: 1031.10 (New)

**Proponents:** DHCD Staff on behalf of the following stakeholders represented at the School Safety Subworkgroup: Virginia Building & Code Officials Association; Virginia Department of Education; Augusta County Public Schools; American Institute of Architects (AIA) Virgi

## 2015 Virginia Construction Code

**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 including the addition of emergency supplemental hardware; (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 by the VEBC.
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.

**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.

**Add new text as follows:**

**1 110.1.1 New Code Section Consultation and notification..** Prior to approval of *emergency supplemental hardware*, the building code official shall consult with the local fire code official or state fire code official if no local fire code official exists, and head of the local law enforcement agency. The local fire code official, the state fire code official, and the local fire, EMS and law enforcement first responders shall be notified of such approval, after approval of such *emergency supplemental hardware* by the building code official.

**1 New Code Section EMERGENCY SUPPLEMENTAL HARDWARE..** Any *approved hardware* used only for emergency events or drills to keep intruders from entering the room during an active shooter or hostile threat event or drill.

## 2018 International Building Code

**1010.1.4.4 Locking arrangements in educational occupancies..** In Group E occupancies, except Group E day care facilities, and Group B educational occupancies, egress-exit access doors from classrooms, offices and other occupied rooms shall, except for exit doors and doors across corridors, shall be permitted to be provided with locking arrangements designed to keep intruders from entering the room emergency supplemental hardware where all of the following conditions are met:

1. The door shall be capable of being ~~unlocked~~ opened from outside the room with a key, proprietary device provided by the manufacturer, or other approved means.
2. The door shall be openable from within the room in accordance with Section 1010.1.9, except emergency supplemental hardware is not required to comply with Chapter 11.

NOTE: School officials should consult with their legal counsel regarding provisions of the Americans with Disabilities Act and any other applicable requirements.

3. Installation of emergency supplemental hardware on fire door assemblies must comply with Section 716.2. Modifications shall not be made to listed panic hardware, fire door hardware or door closers.
4. The emergency supplemental hardware shall not be capable of being used on other doors not intended to be used and shall at least one component that requires modification to, or is permanently affixed to, the surrounding wall, floor, door and/or frame assembly construction for it to properly function.

5. Employees shall engage in lockdown training procedures on how to deploy and remove the emergency supplemental hardware and its use shall be incorporated in the approved lockdown plan complying with the SFPC.
6. The emergency supplemental hardware and its components shall be maintained in accordance with the SFPC.
7. Approved emergency supplemental hardware shall be of consistent type throughout a building.  
Exception: The building official may approve alternate types of emergency supplemental hardware in accordance with Section 110.1 when a consistent device cannot be installed.

**1010.1.4.4.1 Remote operation of locks..** Remote operation of locks complying with Section 1010.1.4.4 shall be permitted.

**1010.1.9 Door operations..** Except as specifically permitted by this section, egress doors shall be readily openable from the egress side without the use of a key or special knowledge or effort.

**Exception :** Emergency supplemental hardware provided in accordance with Section 1010.1.4.4.

**1010.1.9.1 Hardware..** Door handles, pulls, latches, locks and other operating devices on doors required to be *accessible* by Chapter 11 shall not require tight grasping, tight pinching or twisting of the wrist to operate.

**Exception.** Emergency supplemental hardware provided in accordance with Section 1010.1.4.4.

**1010.1.9.2 Hardware height..** Door handles, pulls, latches, locks and other operating devices shall be installed 34 inches (864 mm) minimum and 48 inches (1219 mm) maximum above the finished floor. Emergency supplemental hardware provided in accordance with Section 1010.1.4.4. shall be installed 48 inches (1219 mm) maximum above the finished floor. Locks used only for security purposes and not used for normal operation are permitted at any height.

**Exception:** Access doors or gates in barrier walls and fences protecting pools, spas and hot tubs shall be permitted to have operable parts of the latch release on self-latching devices at 54 inches (1370 mm) maximum above the finished floor or ground, provided that the self-latching devices are not also self-locking devices operated by means of a key, electronic opener or integral combination lock.

**1010.1.9.4 Locks and latches..** Locks and latches shall be permitted to prevent operation of doors where any of the following exist:

1. Places of detention or restraint.
2. In buildings in occupancy Group A having an *occupant load* of 300 or less, Groups B, F, M and S, and in *places of religious worship*, the main 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 THIS SPACE IS OCCUPIED. The sign shall be in letters 1 inch (25 mm) high on a contrasting background.
  - 2.3. The use of the key-operated locking device is revocable by the *building official* for due cause.
3. Where egress doors are used in pairs, *approved* automatic flush bolts shall be permitted to be used, provided that the door leaf having the automatic flush bolts does not have a doorknob or surface-mounted hardware.
4. Doors from individual *dwelling* or *sleeping units* of Group R occupancies having an *occupant load* of 10 or less are permitted to be equipped with a night latch, dead bolt or security chain, provided such devices are openable from the inside without the use of a key or tool.
5. *Fire doors* after the minimum elevated temperature has disabled the unlatching mechanism in accordance with *listed fire door* test procedures.
6. Doors serving roofs not intended to be occupied shall be permitted to be locked preventing entry to the building from the roof.
7. Egress doors equipped with *emergency supplemental hardware* complying with Section 1010.1.4.4. from the egress side provided:
  - 7.1. A readily visible durable sign is posted on the egress side on or adjacent to the door stating: THIS HARDWARE SHALL BE USED BY AUTHORIZED PERSONNEL ONLY. The sign shall be in letters 1 inch (25 mm) high on a contrasting background.
  - 7.2. The use of the *emergency supplemental hardware* is revocable by the building official or fire official for due cause.

**1010.1.9.5 Bolt locks..** Manually operated flush bolts or surface bolts are not permitted.

**Exceptions:**

1. On doors not required for egress in individual *dwelling units* or *sleeping units*.
2. Where a pair of doors serves a storage or equipment room, manually operated edge- or surface-mounted bolts are permitted on the inactive leaf.
3. Where a pair of doors serves an *occupant load* of less than 50 persons in a Group B, F or S occupancy, manually operated edge- or surface-mounted bolts are permitted on the inactive leaf. The inactive leaf shall not contain doorknobs, *panic* bars or similar operating

4. <sup>hardware.</sup> Where a pair of doors serves a Group B, F or S occupancy, manually operated edge- or surface-mounted bolts are permitted on the inactive leaf provided that such inactive leaf is not needed to meet egress capacity requirements and the building is equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1. The inactive leaf shall not contain doorknobs, *panic* bars or similar operating hardware.
5. Where a pair of doors serves patient care rooms in Group I-2 occupancies, self-latching edge- or surface-mounted bolts are permitted on the inactive leaf provided that the inactive leaf is not needed to meet egress capacity requirements and the inactive leaf shall not contain doorknobs, *panic* bars or similar operating hardware.
6. Emergency supplemental hardware provided in accordance with Section 1010.1.4.4.

**1010.1.9.6 Unlatching..** The unlatching of any door or leaf shall not require more than one operation.

**Exceptions:**

1. Places of detention or restraint.
2. Where manually operated bolt locks are permitted by Section 1010.1.9.5.
3. Doors with automatic flush bolts as permitted by Section 1010.1.9.4, Item 3.
4. Doors from individual *dwelling units* and *sleeping units* of Group R occupancies as permitted by Section 1010.1.9.4, Item 4.
5. One additional operation shall be permitted for release of *emergency supplemental hardware* provided in accordance with Section 1010.1.4.4.

**1010.1.9.8 Delayed egress..** Delayed egress locking systems shall be permitted to be installed on doors serving the following occupancies in buildings that 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.

1. Group B, F, I, M, R, S and U occupancies.
2. Group E classrooms with an *occupant load* of less than 50.

**~~Exception~~ Exceptions:**

1. Delayed egress locking systems shall be permitted to be installed on exit or *exit access* doors, other than the main exit or *exit access* door, serving a courtroom in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.
2. Emergency supplemental hardware shall not be considered a delayed egress locking system.

**1103.2 General exceptions..** *Sites*, buildings, *structures*, *facilities*, elements and spaces shall be exempt from this chapter to the extent specified in this section.

**Add new text as follows:**

**1 1103.2.15 New Code Section Emergency supplemental hardware..** In Group E occupancies, except Group E day care facilities, and Group B educational occupancies, when *emergency supplemental hardware* is deployed during an active shooter or hostile threat event and provided in accordance with Section 1010.1.4.4.

## 2015 Virginia Statewide Prevention Fire Code

**Add new text as follows:**

**1 New Code Section EMERGENCY SUPPLEMENTAL HARDWARE..** Any *approved* hardware used only for emergency events or drills to keep intruders from entering the room during an active shooter or hostile threat event or drill.

## 2018 International Fire Code

**404.2.3 Lockdown plans..** Lockdown plans shall only be permitted where such plans are approved by the *fire code official* and are in compliance with Sections 404.2.3.1 and 404.2.3.2.

**404.2.3.1 Lockdown plan contents..** Lockdown plans shall include the following:

1. Identification of individuals authorized to issue a lockdown order.
2. Security measures used during normal operations, when the building is occupied, that could adversely affect egress or fire department operations.

3. A description of identified emergency and security threats addressed by the plan, including specific lockdown procedures to be implemented for each threat condition.
4. Means and methods of initiating a lockdown plan for each threat, including:
  - 4.1. The means of notifying occupants of a lockdown event, which shall be distinct from the fire alarm signal.
  - 4.2. Identification of each door or other access point that will be secured.
  - 4.3. A description of the means or methods used to secure doors and other access points.
  - 4.4. A description of how locking means and methods are in compliance with the requirements of the VCC and the applicable provisions of this code for egress and accessibility.
5. Procedures for reporting to the fire department any lockdown condition affecting egress or fire department operations.
6. Procedures for determining and reporting the presence or absence of occupants to emergency response agencies during a lockdown.
7. Means for providing two-way communication between a central location and each area subject to being secured during a lockdown.
8. Identification of the prearranged signal for terminating the lockdown.
9. Identification of individuals authorized to issue a lockdown termination order.
10. Procedures for unlocking doors and verifying that the means of egress has been returned to normal operations upon termination of the lockdown.
11. Training procedures and frequency of lockdown plan drills.

**404.2.3.2 Drills.** Lockdown plan drills shall be conducted in accordance with the approved plan. Such drills shall not be substituted for fire and evacuation drills required by Section 405.2.

**Add new text as follows:**

**1 406.4.1 New Code Section Emergency supplemental hardware training.** Where a facility has installed approved emergency supplemental hardware, employees shall be trained on their assigned duties and procedures for the use of such device. Records of in-service training shall be made available to the fire code official upon request.

**1 1001.4 New Code Section Unauthorized use of emergency supplemental hardware.** No person shall utilize any *approved emergency supplemental hardware* to prevent the ingress or egress from any occupied space.

**Exceptions:**

1. Utilized by authorized persons or other persons occupying such space in the event of any actual or perceived hostile threat or active shooter event.
2. Utilized in conjunction with any approved lockdown drill requiring the utilization of the approved *emergency supplemental hardware*.
3. Utilization for the testing, use and training by emergency response personnel.

Where such device is utilized in accordance with the Exceptions 1 through 3 above, the hardware device shall be removed immediately following the conditions of such exceptions.

**[BE] 1010.1.9 Door operations.** Except as specifically permitted by this section or the applicable building code, egress doors shall be readily openable from the egress side without the use of a key or special knowledge or effort.

## 2015 Virginia Statewide Prevention Fire Code

**(N) 1010.1.9.3 Locks and latches.** Where required, a readily visible durable sign is posted on the egress side on or adjacent to the door stating: THIS DOOR TO REMAIN UNLOCKED WHEN THIS SPACE IS OCCUPIED. The sign shall be in letters 1 inch (25 mm) high on a contrasting background ~~and shall be maintained.~~ Emergency supplemental hardware provided in accordance with the applicable building code shall be provided a readily visible durable sign posted on the egress side on or adjacent to the door stating: THIS HARDWARE SHALL BE USED BY AUTHORIZED PERSONNEL ONLY. The sign shall be in letters 1 inch (25 mm) high on a contrasting background.

## 2018 International Fire Code

**1031.2 Reliability.** ~~Required~~ Unless otherwise permitted by the applicable building code, required *exit accesses, exits* and *exit discharges* shall be continuously maintained free from obstructions or impediments to full instant use in the case of fire or other emergency where the building area served by the *means of egress* is occupied. An *exit* or *exit passageway* shall not be used for any purpose that interferes with a *means of egress*.

**1031.2.1 Security devices and egress locks.** Security devices, excluding emergency supplemental hardware, affecting *means of egress* shall be subject to approval of the *fire code official*. Security devices and locking arrangements in the *means of egress* that restrict, control, or delay egress

shall be installed and maintained as required by this ~~chapter~~ chapter or as otherwise permitted under the applicable building code.

## 2015 Virginia Statewide Prevention Fire Code

Add new text as follows:

**1 1031.10 New Code Section Maintenance of emergency supplemental hardware.** *Emergency supplemental hardware shall be installed in accordance with the applicable building code and shall be maintained in accordance with this code and the manufacturer's instructions. The fire code official shall be authorized to direct the practical application of any such hardware device to ensure the device operates as designed, and is free from any defects, damage, or conditions which may restrict the deployment and removal of such hardware device.*

**Reason Statement:** This proposal allows limited types of barricade door devices in Group E and B educational occupancies only, by "taking over" the current 2018 IBC language and adding exceptions to the various door-related requirements to allow such hardware. A barricade door device would not necessarily need to go through the code modification process in accordance with VCC 106.3, unless it was a type that did not comply with the "openable from outside," limited height above finished floor requirements, and has a fixed component to function, among others.

**Resiliency Impact Statement:** This proposal will neither increase nor decrease Resiliency

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction

*Note: The SFPC text shown in this proposal does not reflect the final text in the 2018 SFPC. The text found here has been further modified by the BHCD and by proposals considered during the Final Regulations phase.*

# 8

## Myths (and Facts) about Classroom Barricade Devices

By Lori Greene, AHC/CDC,  
FDAI, FDHI, CCPR

The following myths and facts about classroom barricade devices were presented at the annual conference of the National Association of State Fire Marshals (NASFM), where I represented the Door Security & Safety Foundation in an effort to help each state fire marshal understand the safety concerns associated with the use of secondary locking devices.

NASFM members approved a resolution at the 2015 conference, supporting its Classroom Door Security Checklist. These documents are available on the Foundation's website, [doorsecuritysafety.org](http://doorsecuritysafety.org); on NASFM's website at [firemarshals.org](http://firemarshals.org); or by visiting [iDigHardware.com/schools](http://iDigHardware.com/schools).

### 1. MYTH: The benefits of barricade devices outweigh the risks.

**FACT:** The perceived benefit of barricade devices is the relatively low cost; most ranging from \$50-\$150, and the easy procurement and installation. The school custodian could buy a slide bolt or padlock and hasp at the hardware store and accomplish a similar level of security. Historically, fire marshals have not allowed these security methods, because they're not code-compliant. Some jurisdictions are continuing to enforce current

codes that do not allow these devices, and some are being pressured by school districts and politicians to put the codes aside in favor of security.

### 2. MYTH: Emergency responders can easily defeat a barricade device.

**FACT:** I'd like to know how emergency responders are going to gain access to a classroom once a barricade device is in place. There have already been school shootings where the intruder brought materials with them to barricade the doors, including the incidents at Virginia Tech, the

West Nickel Mines schoolhouse, and Platte Canyon High School. At Platte Canyon High School, explosives were used by emergency responders to gain access to the classroom, and a student hostage was killed by the shooter during the chaos. After the West Nickel Mines shooting at an Amish schoolhouse, several news reports discussed law enforcement officers' concerns that they are not equipped to overcome classroom barricades.

### 3. MYTH: Some agencies recommend barricading with furniture; barricade devices are a better option.

**FACT:** A classroom barricade device may be easier to install than using furniture to barricade the door, but it may also be easily installed by an unauthorized person to secure a classroom and prevent access by school staff and emergency responders.

A 2007 study called *Barricaded Hostage and Crisis Situations in Schools: A Review of Recent Incidents*, examined 19 hostage situations that occurred in schools between 1998 and 2007. In 16 of the 19 cases, the perpetrator was



Photos courtesy of Lori Greene



MYTH 2



a student at the school—the threat was already in the room. A barricade device available to anyone in the classroom could make these crimes easier to carry out, or could even encourage criminal acts.

#### **4. MYTH: School shootings are very common and should be the main security concern for schools.**

**FACT:** Statistics for school shootings are quite subjective. Some lists include gang-related shootings on school grounds, suicides, and accidental discharge of weapons. Other reports include only random shootings inside of the building, and omit suicides, gang related incidents, and deaths resulting from interpersonal conflicts.

In 2012, the year of the school shooting at Sandy Hook Elementary School, there were seven K-12 school shootings in the U.S. All of the school shooters were students except for two. The other casualties—three deaths and six injuries—were the result of students who brought guns to school.

While each incident is tragic, the statistics show that school shootings, although widely publicized, are very rare.

In comparison, the incidence of non-fatal victimization at school is very high. According to the National Center for Education, in 2012, students ages 12–18 were victims of more than 1.37 million nonfatal victimizations at school, including 615,600 thefts and 749,200 violent victimizations; 89,000 of which were serious violent victimizations.

#### **5. MYTH: The risk of fire during an active shooter situation is low, so code requirements are not a priority.**

**FACT:** Barricade devices are installed during a lockdown, so some may consider them safe for this limited period. One of the problems is that there are currently no widely-used standards for school security, and schools frequently call lockdowns for events that do not involve an active shooter. There are many situations that could require

an evacuation while a school is in lockdown, and doors must provide free egress to facilitate evacuation.

I don't know of a barricade device that meets the current model code requirements for fire protection, accessibility, or egress—particularly when installed along with existing latching hardware.

#### **6. MYTH: Lots of other states are allowing classroom barricade devices.**

**FACT:** Although there are a few states where barricade devices have been allowed either by the state fire marshal or because of political intervention, there are many states that have issued directives addressing their requirements for code-complaint hardware.

In Minnesota, I found the rationale requiring code-compliant locks very compelling given the fact that the state is the location of the 2005 school shooting at Red Lake High School, where a 16-year-old killed seven people and wounded five others.

Although the classroom doors were locked, the shooter broke the glass and gained access to the classroom by turning the inside lever. And yet, Minnesota has not responded to this incident by choosing inexpensive security over free egress, fire protection, and accessibility. There are glazing products and films that will delay access to the inside lever, and would be a much more logical solution than installing a barricade device.

#### **7. MYTH: Fire marshals do not have authority over barricade devices that are not permanently attached to doors.**



Photo courtesy of Wayne Ficklin

**FACT:** How many fire marshals would allow this chained and padlocked panic hardware (above) in an occupied school? This photo was taken after the end of the school day, but while the school was occupied for an event. The fire marshal has the authority to order the chains and padlocks removed, even though they aren't permanently attached. Why would classroom doors be any different?

#### **8. MYTH: Locksets do not provide enough protection against active shooters.**

**FACT:** There are many locks that provide the necessary level of security and meet the model code requirements for egress, fire protection, and accessibility. These products are certified to meet recognized industry standards for security and durability and are listed for use on a fire door assembly. In some cases, schools looking to use barricade devices already have locking hardware but may not have distributed keys or established the protocols for lockdown.

In addition to standard mechanical locksets, there are also electrified locks available which can be locked using a fob, a code, or from a remote location. All of these classroom locking products will allow free egress at any time.

The Final Report of the Sandy Hook Advisory Commission states: "The testimony and other evidence presented to the Commission reveals that there has never been an event in which an active shooter breached a locked classroom door." A holistic approach must be taken for classroom security including training, drills, key distribution, and impact-resistance of glazing adjacent to the hardware, and there is no reason to sacrifice life safety in favor of security.



# NFPA 3000™ (PS)

---

**Standard for an Active  
Shooter/Hostile Event  
Response (ASHER) Program Toolkit**

---

**2018**

# IS YOUR COMMUNITY READY TO COME TOGETHER AT A MINUTE'S NOTICE?



When the unthinkable occurs, it's imperative that everyone knows the role they have to play. **NFPA 3000™ (PS), Active Shooter/Hostile Event Response (ASHER) Program** is a provisional standard created to help communities develop an integrated program for planning for, responding to, and recovering from active shooter or hostile events. NFPA 3000™ (PS) is not a list of measures to take, but a set of guidelines with which any community can create a unified plan of response specific to their needs.

## GETTING UNIFIED WITH NFPA 3000™ (PS)

### STEP 1 ASSESS

Whether you're a first responder, facility manager, civic leader, or school administrator, the first step is to identify whether an integrated plan exists to deal with an active shooter or hostile event.

- Take the risk assessment we've created to analyze the strengths and weaknesses of your current plan, or lack of one, available at [nfpa.org/nfpa3000-assessment](https://nfpa.org/nfpa3000-assessment).
- Share the results of the assessment among your community partners to raise awareness of shortcomings and propose the creation of an integrated program.

### STEP 2 ALIGN

Begin developing your integrated program by assigning a project leader and bringing together all stakeholders relevant to the mission.

- Participating partners can include but are not limited to Law Enforcement, Fire, EMS, Emergency Management, Facility Management, Business Leaders, Community Leaders, and Education Leaders.

### STEP 3 PLAN

Start creating a specific plan for the whole community using the completed risk assessment as a starting point.

- Purchase the standard and the (optional) online training course.
- The online training course includes additional tools, such as the Program Planning Checklist. Download a sample at [nfpa.org/nfpa3000checklist](https://nfpa.org/nfpa3000checklist).
- Use the standard to help identify gaps and resource needs.

### STEP 4 EDUCATE

Once the plan is complete, the team begins to educate the community at large, assigning roles and responsibilities to police officers and firefighters, emergency services, teachers, doctors, nurses and anyone else who may be called on to play a crucial role in a hostile event.

- Ensure the best program is in place by training together, doing practice drills or exercises, evaluating the results, and revising the plan as needed.

Implementing NFPA 3000™ (PS) is a way for communities, their facilities, and responders to begin coming together to develop the relationships and trust that are essential to an integrated response. And given the stakes, the more unified we can act during a hostile event, the more potential we have for saving lives.



# NFPA 3000™ (PS): STANDARD FOR AN ACTIVE SHOOTER/ HOSTILE EVENT RESPONSE (ASHER) PROGRAM

## What You Need To Know About NFPA 3000™ (PS)

As more hostile events continue to occur, it is critical for law enforcement, first responders, emergency personnel, facility managers, hospital officials, community members, and others to have the information they need to be prepared when attacks happen. To address that need, NFPA® developed a new standard – NFPA 3000™ (PS), *Standard for an Active Shooter/ Hostile Event Response (ASHER) Program*.

The purpose of NFPA 3000™ (PS) is to identify the minimum program elements needed to organize, manage, and sustain an active shooter and/or hostile event response program and to reduce or eliminate the risks, effect, and impact on an organization or community affected by these events. The document addresses the following areas and others:

- Planning
  - Assessing risks
  - Developing community-wide programs
- Responding
  - Establishing competencies
  - Communicating to all stakeholders
- Recovering
  - Planning recovery efforts
  - Taking into account healthcare and mental health issues

### 4 Main Concepts

Every chapter is written with these 4 concepts in mind.

Whole Community

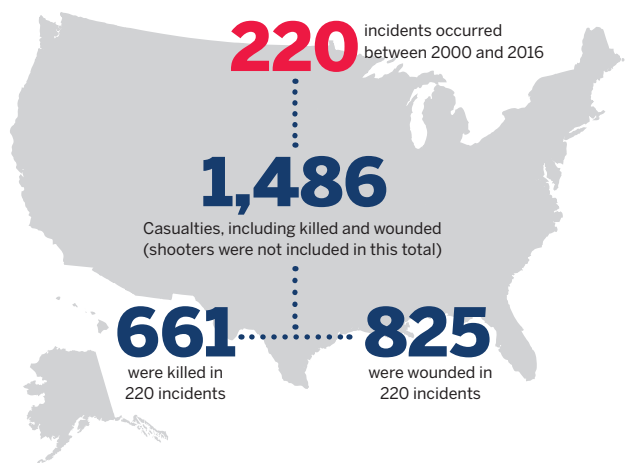
Unified Command

Integrated Response

Planned Recovery

## By the Numbers

### Active shooter events in the US: 2000–2016



## Active Shooter/Hostile Event Response Program





# NFPA 3000™ (PS): STANDARD FOR AN ACTIVE SHOOTER/ HOSTILE EVENT RESPONSE (ASHER) PROGRAM *CONTINUED*

## What You Should Know



If you are a **policymaker**, you need to know how implementing NFPA 3000™ (PS) can help make your entire community safer. As a leader, you can influence all aspects of your community to put into practice the parts that are relevant and be the connection that brings everyone together.



If you are a **facility manager**, you need to be involved in the creation of an active shooter/ hostile event response plan, integrate the plan with your response community, and train all personnel on the plan.



If you are a **first responder** (law, fire, or EMS), you must work together across disciplines to have the needed knowledge and training to reduce harm.



If you are a member of the **public**, ask your local officials if they have an active shooter/ hostile event response program in place that is integrated with the entire community.

## Who Worked on Developing NFPA 3000™ (PS)?

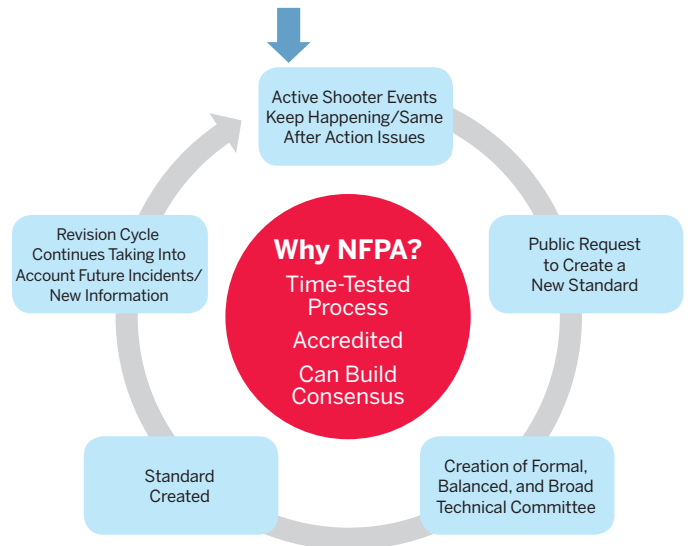
The standard was created with widespread support from fire service, law enforcement, EMS, emergency management, higher education, and facility management professionals. Committee members include representatives from 46 government agencies, organizations, and associations.

➔ **BECOME AN NFPA MEMBER**  
FOR MORE OF THESE RESOURCES

## Is NFPA 3000™ (PS) Only for the Fire Service?

No, NFPA 3000™ (PS) is for all safety planners, first responders, and policy makers. This includes fire, EMS, police, school superintendents, facility managers, building owners, safety officers, safety and security consultants, loss control/risk safety officers, risk managers, emergency services directors, and federal, state, city, and municipal government officials. All of these stakeholders need to be at the table and working together.

## How was NFPA 3000™ (PS) Developed?



## Next Steps You Can Take

- ✓ Learn more by going to [www.nfpa.org/3000](http://www.nfpa.org/3000) where you can follow the standard’s development process and sign up for updates.
- ✓ Identify and implement the components that are relevant in your community.
- ✓ Visit [www.nfpa.org/3000news](http://www.nfpa.org/3000news) for access to all the resources you need to implement NFPA 3000™ (PS) in your community.
- ✓ Engage with our experts and your peers on NFPA Xchange™ at <https://community.nfpa.org/>.



IT'S A BIG WORLD.  
LET'S PROTECT IT TOGETHER.™

This material contains some basic information about NFPA 3000™ (PS), *Standard for an Active Shooter/Hostile Event Response (ASHER) Program*. It identifies some of the requirements in NFPA 3000™ (PS) as of the date of publication. This material is not the official position of any NFPA Technical Committee on any referenced topic which is represented solely by the NFPA documents on such topic in their entirety. For free access to the complete and most current version of all NFPA documents, please go to [www.nfpa.org/docinfo](http://www.nfpa.org/docinfo). References to "Related Regulations" are not intended to be a comprehensive list. The NFPA makes no warranty or guaranty of the completeness of the information in this material and disclaims liability for personal injury, property, and other damages of any nature whatsoever, from the use of or reliance on this information. In using this information, you should rely on your own judgment and, when appropriate, consult a competent professional.

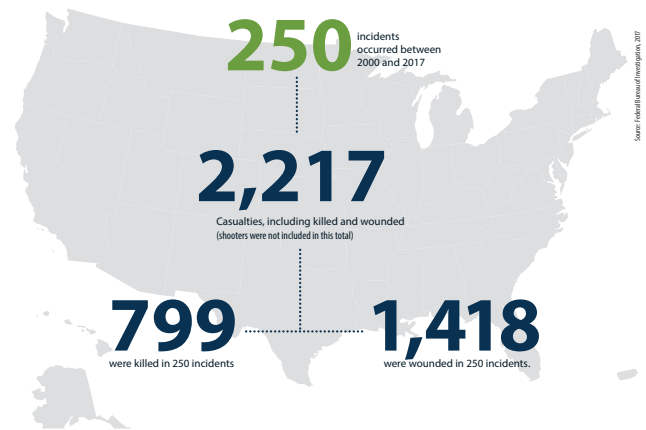


# NFPA 3000™ (PS) READINESS ASSESSMENT

## How prepared are you in the event of an active shooter incident?

Active shooter/hostile event incidents are not exclusive to big cities or to any particular area of the United States. These incidents are occurring all across the country. This map from [www.fbi.gov](http://www.fbi.gov) shows the number of incidents from 2000-2017.

Are you adequately prepared to respond if such an event occurs on your community or organization? Take this brief assessment to help evaluate your readiness. Gauge your readiness level by answering Yes or No to the questions that follow.



### Yes No

- Your community or organization is adequately committed to preparing for, responding to, and recovering from an active shooter/hostile event incident in a coordinated manner — not only internally but in partnership with other organizations.
- Individuals in your community have discussed and have planned for coordinated roles in the event of an incident.
- You know what is expected of you in your job role if an incident occurs.
- You have a planning team that integrates public and private partners in your community that creates active shooter/hostile event plans together.
- You participate in planning or training with organizations outside of your own.
- Based on your needs and risk assessments, you have adequate supplies and resources to meet the mission of preparing, responding, and recovering from an event.
- You have adequate financial resources to prepare for, respond to, and recover from an incident.

### Yes No

- Your community (or organization) has conducted a risk assessment to evaluate relative risks for facilities or locations.
- You have an adequate communication plan for yourself, your community and your stakeholders that would allow you to stay in touch with your stakeholders and loved-ones in the event of an incident.
- You have planned with outside agencies and non-governmental partners for support in order to recover.

### Next Steps You Can Take

- ✓ Visit [www.nfpa.org/3000news](http://www.nfpa.org/3000news) for helpful materials and access to all the resources you need to implement NFPA 3000™ (PS) in your community or organization.
- ✓ Learn more by going to [www.nfpa.org/3000](http://www.nfpa.org/3000) where you can follow the standard's development process and sign up for updates.
- ✓ Engage with our experts and your peers on NFPA Xchange™ at <https://community.nfpa.org/>.



IT'S A BIG WORLD.  
LET'S PROTECT IT TOGETHER.™

This material contains some basic information about NFPA 3000™ (PS), *Standard for an Active Shooter/Hostile Event Response (ASHER) Program*. This material is not the official position of any NFPA Technical Committee on any referenced topic, which is represented solely by the NFPA documents on such topic in their entirety. For free access to the complete and most current version of all NFPA documents, please go to [www.nfpa.org/docinfo](http://www.nfpa.org/docinfo). The NFPA makes no warranty or guaranty of the completeness of the information in this material and disclaims liability for personal injury, property, and other damages of any nature whatsoever, from the use of or reliance on this information. In using this information, you should rely on your independent judgment and, when appropriate, consult a competent professional.



# NFPA 3000™ (PS) ACTIVE SHOOTER / HOSTILE EVENT RESPONSE PROGRAM PLANNING SUMMARY CHECKLIST

## ORGANIZATION INFORMATION

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Position: \_\_\_\_\_

Community/Facility: \_\_\_\_\_

## GOALS

This checklist helps guide the planning process for communities and facilities responsible for developing, managing, and sustaining an ASHER program by addressing emergency operations plans, standard operating procedures, and standard operating guidelines. The numbers that follow each item below refer to a specific section in NFPA 3000™ (PS), *Standard for an Active Shooter/Hostile Event Response (ASHER) Program*. Please use this checklist to help you get started. A more detailed checklist and other tools can be found in the NFPA 3000™ (PS) online training. For more information, visit [www.nfpa.org/3000](http://www.nfpa.org/3000).

## PLAN DEVELOPMENT (6.2)

Yes No

- Develop an ASHER plan organized in a logical framework based on resource capabilities and risk assessment. (6.2)
- Establish multi-agency and multidisciplinary relationships to develop plans, risk assessments, mutual aid agreements, and memoranda of understanding (MOUs). (6.2.1)
- Use formal management systems to ensure that plans are developed, maintained, updated, tested, and activated during the entire four-step process that follows: (6.2.2)
  - Needs or gap assessment
  - Implementation
  - Plan development
  - Evaluation
- Ensure the planning team performs a needs or gap assessment of resources necessary to meet the plan's mission. (6.2.3)

Yes No

- Ensure the plan is based on the results of a risk assessment and an analysis of ASHER program capabilities in relation to the risk. (6.2.4)
- Confirm that, at a minimum, the analysis includes the following: (6.2.4.1)
  - Review of minimum standards\* for emergency responder competencies in Chapter 12, Law Enforcement, and Chapter 13, Fire and EMS
  - Analysis of current capabilities, including other plans and mutual aid of the authority having jurisdiction
  - Review of agreements already in place between agencies
  - Identification of gaps between applicable existing standards\*\* and current capabilities
  - Development of capabilities required to bridge gaps
- Ensure plans address coordination between agencies, including the following: (6.2.5)
  - Resource management across all disciplines
  - Staffing
  - Integrated training
  - Health and medical issues (including behavioral and holistic health)
  - Financial responsibilities and management
  - Recovery and restoration
- Check that plans are flexible so they can be adjusted as circumstances and environments change and serve as a starting point for multi-agency multidisciplinary operations. (6.2.6)

\* NFPA 3000™ (PS) provides the minimum requirements.

\*\* Existing standards include, but are not limited to: NFPA 99, NFPA 101, NFPA 450, NFPA 451, NFPA 1500, NFPA 1521, NFPA 1581, NFPA 1600, NFPA 1616, NFPA 1620, NFPA 1700, NFPA 1710, and NFPA 1720. For more information on any of these standards, visit [www.nfpa.org/docinfo](http://www.nfpa.org/docinfo).

## NOTES:

---



---



---



---



---



IT'S A BIG WORLD.  
LET'S PROTECT IT TOGETHER.

This material contains information about NFPA 3000™ (PS), *Standard for an Active Shooter/Hostile Event Response (ASHER) Program*. For free access to the complete and most current version of this standard and all NFPA documents, please go to [www.nfpa.org/docinfo](http://www.nfpa.org/docinfo).

## **APPENDIX D: Code Change Proposals**



# Code Change Proposal Drafted by Virginia Fire Prevention Association

## Key Points for Consideration:

- After numerous international and national code development cycles, there remain no model codes that permit the use of emergency supplemental hardware in buildings other than group E, Group B educational and I-4 occupancies.
- Expanding the scope of emergency supplemental hardware to other use groups is inconsistent with the code development guideline found in Code of Virginia 36-99 where, “In formulating the Code provisions, the Board shall have due regard for generally accepted standards as recommended by nationally recognized organizations, including, but not limited to, the standards of the International Code Council and the National Fire Protection Association” • There IS a national standard that provides guidelines for facility preparedness of ALL OCCUPANCIES regarding active shooter and hostile events. NFPA 3000 is the Standard for an Active Shooter/Hostile Event Response (ASHER) Program and chapter 9 is specifically for facility preparedness.
- Active Shooter/Hostile Event protection of public buildings (and more broadly ALL occupancies) can be accomplished by referencing Chapter 9 of NFPA 3000 in the development, operation and maintenance of lockdown plans. This added reference to the only national standard for these events directly accomplishes the goals outlined in HB670 and SB33.

## Proposal:

### Virginia Statewide Fire Prevention Code

#### ***404.2.3.3 ASHER Program Compliance***

*The development, operation and maintenance of lockdown plans, including the use of emergency supplemental hardware, shall be in accordance with Chapter 9 of NFPA 3000.*

# B1010.2.8-21

VCC: Section 108.1, 110.1.1, SECTION 202, 1010.1.4.4, 1103.2.15; VFC: 1031.11

**Proponents:** DHCD Staff on behalf of the following stakeholders represented at the Active Shooter and Hostile Threat Events in Public Buildings Study Group: Virginia Building & Code Officials Association, Virginia Fire Prevention Association, Nightlock

## 2018 Virginia Construction Code

Revise as follows:

**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, including the addition or removal of *emergency supplemental hardware*, (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 by the VEBC.
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.

**110.1.1 Consultation and notification.** Prior to approval or removal of *emergency supplemental hardware*, the building code official shall consult with the local fire code official, or state fire code official if no local fire code official exists, and head of the local law-enforcement agency. The local fire code official; the state fire code official; and the local fire, EMS, and law-enforcement first responders shall be notified by the building code official of such approval or removal. after approval or removal of such *emergency supplemental hardware* by ~~the building code official.~~

**SECTION 202 DEFINITIONS.** "Public Building" - a structure or building that is owned, leased, or otherwise occupied by a municipality or the state and used for any municipal or public purposes by the municipality or the state.

~~1010.1.4.4~~ **1010.2.8 Locking arrangements in educational occupancies** **Emergency Supplemental Hardware.** In Group E occupancies, except Group E day care facilities, ~~and~~ Group B educational occupancies and public buildings, *exit access doors* from classrooms, offices, and other occupied rooms, except for exit doors and doors across corridors, shall be permitted to be provided with *emergency supplemental hardware* where all of the following conditions are met:

1. The door shall be capable of being opened from outside the room with a key, proprietary device provided by the manufacturer, or other *approved* means.
2. The door shall be openable from within the room in accordance with Section 1010.1.9, except *emergency supplemental hardware* is not required to comply with Chapter 11.

Note: School officials and building owners should consult with their legal counsel regarding provisions of the Americans with Disabilities Act of 1990 (42 USC § 12101 et seq.) and any other applicable requirements.

3. Installation of *emergency supplemental hardware* on fire door assemblies must comply with Section 716.2. Modifications shall not be made to listed *panic hardware*, fire door *hardware*, or door closures.
4. The *emergency supplemental hardware* shall not be capable of being used on other doors not intended to be used and shall have at least one component that requires modification to, or is permanently affixed to, the surrounding wall, floor, door, or frame assembly *construction* for it to properly function.
5. Employees shall engage in lockdown training procedures on how to deploy and remove the *emergency supplemental hardware*, and its use shall be incorporated in the *approved* lockdown plan complying with the SFPC.
6. The *emergency supplemental hardware* and its components shall be maintained in accordance with the SFPC.
7. *Approved emergency supplemental hardware* shall be of consistent type throughout a building.

**Exception:** The *building official* may approve alternate types of *emergency supplemental hardware* in accordance with Section 110.1 when a consistent device cannot be installed.

**1103.2.15 Emergency supplemental hardware.** In Group E occupancies, except Group E day care facilities, ~~and~~ Group B educational occupancies, and public buildings, when *emergency supplemental hardware* is deployed during an active shooter or hostile threat event and provided in accordance with Section ~~1010.1.4.4.~~ 1010.2.8, is not required to comply with this chapter.

## 2018 Virginia Statewide Fire Prevention Code

### Revise as follows:

**1031.11 Emergency supplemental hardware.** *Emergency supplemental hardware* shall be installed in accordance with the *applicable building code* and shall be *maintained* in accordance with this code, the conditions of its approval and the manufacturer's instructions. The *fire code official* shall be authorized to revoke the use and storage of *emergency supplemental hardware* within a *building* for due cause based on failure to comply with requirements in this code or the *applicable building code*. Revocations shall be rescinded upon achieving compliance with this code and the *applicable building code*.

**Reason Statement:** The proposal intends to comply with the SB 333 and HB 670 by expanding on the existing provisions for ESH. The gist of the proposal is the addition of "public buildings" to the list of uses/occupancies already allowed to be provided with ESH. The proposal was generated as a result of discussions during the Active Shooter and Hostile Threats in Public Buildings - Study Group, convened pursuant to the aforementioned bills. For more information on the Study Group activities and discussions, please see attached Study Group Report.

**Resiliency Impact Statement:** This proposal will neither increase nor decrease Resiliency  
While the proposal does not increase the resiliency of buildings, arguments could be made that the resiliency of building occupants could be increased against active shooter or hostile threats events. Conversely, it could also be claimed that the resiliency of occupants could be reduced by enabling assailants to lock occupants in a given room and prevent first responders from entering.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction  
The proposal intends to **allow** the installation of ESH in public buildings, it does not **mandate** such. Should the building owner(s) decide to install ESH, the proposal could reduce or increase the cost of construction, depending upon the type of locking devices selected.

## **APPENDIX E:**

### **GENERAL STAKEHOLDERS WORKGROUP MEETINGS EXCERPTS**

**Note:** This Appendix contains excerpts from the General Stakeholders Workgroup Meetings related to the code change proposal resulted from the Study Group discussions and submitted by DHCD staff on behalf of the following stakeholders represented at the Active Shooter and Hostile Threat Events in Public Buildings Study Group: Virginia Building & Code Officials Association, Virginia Fire Prevention Association, Nightlock.

## Code Change Proposal B1010.2.8-21

### Excerpt from April 12, 2022, General Stakeholders Workgroup Meeting

Jeff Brown (DHCD staff): This is a proposal that was developed as part of the Active Shooter and Hostile Threats in Public Buildings Study Group. In the 2018 cycle, the General Assembly directed DHCD to develop regulations to allow barricade devices in school buildings for active shooter events. A Study Group was formed and a code change proposal was developed to layout a compliance path in both the USBC and SFPC for anyone who wanted to install these devices in schools. The proposal laid the framework for minimum safety criteria, training requirements and coordination between officials and first responders. In 2020, the General Assembly directed DHCD to form a Study Group to develop a code change proposal that would allow these devices in public buildings, which is where this proposal came from. This proposal takes what was laid out in the USBC and SFPC for schools in the last cycle, and added public buildings as another occupancy where ESS hardware would be allowed. The proposal also defines public buildings. Some Study Group members supported this and are listed as proponents, while other members didn't support it. Some who are not proponents of barricade devices in general did support the proposal, since devices could already be added and approved by officials using the code modification process without clear guidance otherwise. They thought that this would provide at least minimum standards and consistency in application if someone chooses to install them.

Dan Willham (Fairfax County): The wording in section 1103.2.15 seems incomplete, like there's one or more words missing. It says when emergency supplemental hardware is deployed in accordance with section 1010.2.8, is not required. Does it mean that it's not required to comply with the chapter?

Jeff Brown: Thinks that the subsection that is being amended in this proposal is part of a list of things that wouldn't apply (taken out of context from another section not shown in the proposal).

Kenny Payne (representing self): 1103.2 is the charging statement and 1103.2.15 is one of a list of items. Also, there's need to correct another word in 1031.11.

Jeff Brown: Kenny is correct about the list. The other word will be fixed.

Dan Willham: Still thinks "when" sounds out of place.

Jeff Brown: Explained that if the device isn't active, there is no exception. When the device is active, there is an exemption from accessibility compliance.

Dan Willham: If it said "the deployment" that would make sense. But, saying "when" followed by another "when" isn't a good sentence.

Jeff Brown: If it said "supplemental hardware, when deployed..."

Dan Willham: He suggests "the deployment of ESH during an active shooter event..."

Jeff Brown: Can't speak on behalf of the Study Group to make the change. It will be marked as Carried Over for the Study Group to revisit the proposed language.

## Excerpt from June 7, 2022, General Stakeholders Workgroup Meeting Summary

### **B1010.2.8-21**

Jeff Brown: The DHCD staff prepared this proposal on behalf of some stakeholders in the Active Shooter and Hostile Threats in Public Buildings Study Group. It uses language from a previously-approved use of barricades in schools to approve use of barricades in public buildings. Many members of the Study Group were in support of this, even if they were not in support of barricades in general, because it gives guidelines for proper use.

Jimmy Moss (Virginia Building and Code Officials Association): He was in the Study Group and there was a thorough discussion. He supports this proposal.

Andrew Milliken: Representing the VFSB – Codes and Standards Committee, stated that they discussed the proposal and the group supports the proposal.

Andrew Milliken: Representing self, noted that the proposal goes beyond the scope of the model code and although there was some good feedback for and against the proposal, he thinks it is appropriate for additional discussions to take place at the Board level, so the proposal should move forward as Non Consensus.

Jeff: With some support and some opposition, this proposal will be marked as Non Consensus.

### **DHCD Staff Notes:**

- The concern raised at the April General Stakeholders Workgroup Meeting regarding wording in Section 1103.2.15 was related to existing code language; no stakeholder opposition to the changes suggested by the proposal was noted. The proposal was carried over so that the Study Group members have an opportunity to review any potential alternative language. After the meeting, the opposing party decided to submit a separate and distinct proposal to address the concerns with the existing code language. As such, the proposal was not brought back for further discussions by the Active Shooter and Hostile Threat Events in Public Buildings Study Group, but was included in the Agenda for the June 7<sup>th</sup> GSWG meeting.
- The proposal submitted to address the existing code language, included below for context, received a recommendation of consensus for approval by the stakeholders during the June General Stakeholders Workgroup Meeting.

# B1103.2.15-21

VCC: 1103.2.15

**Proponents:** Daniel Willham (daniel.willham@fairfaxcounty.gov)

## 2018 Virginia Construction Code

### Revise as follows:

**1103.2.15 Emergency supplemental hardware.** In Group E occupancies, except Group E day care facilities, and Group B educational occupancies, ~~when emergency supplemental hardware is not required to comply with this chapter when~~ deployed during an active shooter or hostile threat event and provided in accordance with ~~Section 1010.1.4.4. Section 1010.2.8.1010.1.4.4.~~

**Reason Statement:** This proposal is just a language clean-up with revised wording to make it a complete sentence (instead of a series of dependent clauses), similar to the other sub-sections in this section. The change in section number only reflects the new section location in the 2021 code. There is no technical change.

**Resiliency Impact Statement:** This proposal will neither increase nor decrease Resiliency  
This proposal is not related to resiliency.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction  
This proposal is a language clean-up for grammar and does not affect construction cost.





COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

IN RE: HYBRID PUBLIC HEARING  
HEARD BEFORE: BOARD OF HOUSING AND COMMUNITY  
DEVELOPMENT  
ANDREW FRIEDMAN, PRESIDING

MARCH 21, 2022

CONFERENCE ROOM

4224 COX ROAD

GLEN ALLEN, VIRGINIA

10:05 A.M.

COMMONWEALTH REPORTERS, LLC  
P. O. Box 13227  
Richmond, VA 23225  
804-859-2051 (ofc.) 804-291-9460 (fax)

1 APPEARANCES:

2 Andrew Friedman, Presiding  
3 HCD Board member

4 BOARD MEMBERS:

5 Mark Jackson  
6 HCD Board

7 Patricia Shields  
8 HCD Board

9 Susan Dewey  
10 HCD Board

11 Sean Farrell  
12 HCD Board

13 Claudia Cotton  
14 HCD Board

15 Abby Johnson  
16 HCD Board

17 Scott Garber  
18 Virginia Fire Services Board

19 Keith Johnson  
20 HCD and Virginia Fire Services Board

21 Ernie Little  
22 Virginia Fire Services Board

23 Larry Murphy  
24 HCD Board

25 Sylvia Hallock  
HCD Board

1 BOARD MEMBERS (con't.):

2 Paykon Sarmadi  
3 HCD Board

4 DHCD STAFF:

5 Bryan Horn  
6 Director, Housing and Community Development

7 Jay Grant  
8 Director of Outreach, Planning and Compliance

9 Tory McGowan  
10 Program Manager Real Estate

11 Sandra Powell  
12 Senior Deputy, Housing and Community Development

13 Cindy Davis  
14 Deputy Director Building and Fire Regulation

15 Jeff Brown  
16 Director, State Building Codes Office

17 Kristen Dahlman  
18 Policy and Legislative Director

19 Grace Wheaton  
20 Senior Policy Analyst

21 LeGrand Northcutt  
22 Senior Policy Analyst

23 Kyle Flanders  
24 Senior Policy Analyst and Regulatory  
25 Administrator

A G E N D A

1		
2	AGENDA ITEM	PAGE
3	Welcome and Call to Order.....	5
4	Introduction of Board Members.....	6
5	Hybrid Public Hearing Instructions.....	8
6	Statewide Fire Prevention Code.....	10
7	Uniform Statewide Building Code.....	11

COMMENTS

8		
9		
10	NAME	PAGE
11	Steve Shapiro.....	11
12	Bob Shippee.....	12
13	Susan Miller.....	14
14	Laura Baker*.....	17
15	William Penniman*.....	19
16	Frederick Krimgold*.....	21
17	Kate Walker*.....	23
18	Sally Newkirk*.....	25
19	Maren Mahoney*.....	27
20	Kristel Riddervold*.....	29
21	Andrew Clark*.....	31

22 Adjournment

25 \*Public speakers offering comments via Google Meets.

1 (The hybrid public hearing commenced at  
2 10:05 a.m., and the Board's agenda commenced as  
3 follows:)

4  
5 MR. FRIEDMAN: Good morning. We'd  
6 like to call to order the meeting of the  
7 Board of Housing and Community Development.  
8 I'm serving as the -- actually, Bryan is  
9 going to do the first order of business,  
10 which is the election chair.

11  
12 MR. HORN: I think that we're good.

13  
14 MR. FRIEDMAN: Oh, okay. So we are  
15 in the meeting of the Housing and Community  
16 Development. We're calling the public  
17 hearing -- okay. You're dealing with an  
18 amateur chair and so I apologize.

19 So we're going to call the --  
20 Chairman Abbasi is unable to attend today,  
21 so we're holding a public hearing to receive  
22 comments prior to the proposed regulations.  
23 And at this point, we welcome all the  
24 members of the Board of Housing and  
25 Community Development and the Fire Services

1 Board that are present today. I think we'd  
2 like to go around to them and have them be  
3 introduced so we know who's in the room.  
4 Can we start with Mark at the end?

5  
6 MR. JACKSON: Sure. Mark Jackson  
7 with -- I'm actually with Community Housing  
8 Partners out in southwest Virginia.

9  
10 MS. SHIELDS: Patricia Shields.  
11 I'm from Falls Church, Virginia.

12  
13 MS. DEWEY: Susan Dewey. And I'm  
14 with Virginia Housing.

15  
16 MR. FARRELL: Good morning,  
17 everybody. I'm Sean Farrell, board member  
18 and with the Virginia Building and Code  
19 Officials Association as the director of  
20 regulatory compliance.

21  
22 MS. COTTON: Good morning. I'm  
23 Claudia Cotton, CEO of the Coastal Virginia  
24 Building Industry Association. I'm  
25 representing the -- the Third Congressional

1 District on the Board. And also serving now on  
2 the Fire Services Board.

3  
4 MS. JOHNSON: Hi, I'm Abby Johnson in  
5 Williamsburg, Virginia representing the First  
6 Congressional District and I'm with a nonprofit  
7 out of Williamsburg.

8  
9 MR. GARBER: Good morning. I'm Scott  
10 Garber. I'm the chair of the Virginia Fire  
11 Services Board as well as the fire chief for the  
12 City of Staunton.

13  
14 MR. FRIEDMAN: And I'm Andy Friedman. I  
15 represent the Second Congressional District.

16  
17 MR. HORN: I'm Bryan Horn. I'm the new  
18 director the Department of Housing and Community  
19 Development. And I serve as secretary for this  
20 Board.

21  
22 MR. FLANDERS: Kyle Flanders. I'm the  
23 staff support to the Board on the DHCD. And if  
24 at all possible, myself included, please speak up  
25 when you're speaking. Thank you.

1 MR. JOHNSON: I'm Keith Johnson, full  
2 time fire chief in Loudoun County, represents --  
3 representing this Board at the Virginia Fire  
4 Service Board co-chair -- vice-chair.

5  
6 MR. LITTLE: Ernie Little, Fire Services  
7 Board. I'm representing the Virginia Fire  
8 Prevention Association.

9  
10 MR. MURPHY: I'm Larry Murphy  
11 representing the Fourth Congressional District.  
12 President of Urban Development for -- for  
13 Petersburg-Chesterfield area. I'm also the past  
14 president of the Home Builders of Southside  
15 Virginia.

16  
17 MR. SARMADI: I'm Paykon Sarmadi. I'm  
18 the department head of Balzer and Associates out  
19 of our Shenandoah Valley Office. And nice to see  
20 everybody again.

21  
22 MR. FRIEDMAN: Okay. So at this point,  
23 I will -- before we begin to receive public  
24 comment, I would like to explain how the hearing  
25 will be conducted. Anyone wishing to speak



1 should sign in at the registration desk near the  
2 door or enter their name in the chat online.  
3 Comments offered by a speaker -- previous speaker  
4 need not be repeated.

5 The speaker may establish their  
6 position on any point simply by referring to the  
7 earlier statement which expresses their position.  
8 We ask that each speaker limit remarks to two  
9 minutes due to the number of people we expect to  
10 comment on the various issues.

11 We welcome the submission of written  
12 statements. In such cases, oral comments are not  
13 necessary. The Board will review all written  
14 materials that are submitted.

15 If you have written statements  
16 today, please let -- leave them with Kyle  
17 Flanders or send them to  
18 [kyle.flanders@dhcd.virginia.gov](mailto:kyle.flanders@dhcd.virginia.gov). We will receive  
19 public comment in this order.

20 First on the Statewide Fire  
21 Prevention Code. Next on the Uniform Statewide  
22 Building Code, then the Virginia Amusement Device  
23 Regulations. And last, the Virginia  
24 Industrialized Building Safety regulations. We  
25 will go first to those people here in person and

1 then to those online. I now open the public  
2 hearing and have Kyle call the first speaker.

3  
4 MR. FLANDERS: Thank you. First speaker  
5 in person is Steve Shapiro.

6  
7 MR. SHAPIRO: I'm speaking on the  
8 building amendments.

9  
10 MR. FLANDERS: Oh, I'm sorry. We do not  
11 have anyone registered for the Statewide Fire  
12 Prevention Code at this time, either online or in  
13 person.

14  
15 STAFF MEMBER: Online or for the  
16 Statewide -- no.

17  
18 MR. FRIEDMAN: Okay. So then, we'll  
19 hear comments on the Uniform Statewide Building  
20 Code.

21  
22 MR. SHAPIRO: Good morning, all. Happy  
23 Spring.

24  
25 MR. FLANDERS: Good morning.

1 MR. FRIEDMAN: Welcome.

2  
3 MR. SHAPIRO: I'm Steve Shapiro. I  
4 retired as a building official after 34 years in  
5 Hampton, Virginia. And I've been involved in the  
6 code-development process in Virginia for over 40  
7 years.

8 I'm here today on behalf of AOBA,  
9 which is the Department of Office Building  
10 Association, and also VAMA, which is the Virginia  
11 Apartment and Management Association.

12 Together, they represent 172M square  
13 feet of commercial office space and 630,000  
14 residential and rental units. I'm also a past  
15 president of the ICC, International Code Council  
16 and have traveled the nation visiting ICC  
17 chapters.

18 And I can tell you that Virginia is  
19 held up as a model -- a national model for our  
20 code development process. And the reason is  
21 because of our inclusive process.

22 All stakeholders are invited to the  
23 table, all stakeholders have a voice at the  
24 table. And only changes that achieve consensus  
25 are advanced out of the work groups. And it's

1 really come to be known as the Virginia way. And  
2 believe me, we are held up as a national model  
3 because of this.

4 I also want to give a shout out to  
5 Cindy Davis and -- and all the DHCD staff who've  
6 done a fantastic job facilitating the subwork  
7 groups and the work groups.

8 I'm a member of several of the  
9 subwork groups. I've gone to all the work group  
10 meetings. And they do a fantastic job. They're  
11 second to none, we couldn't be where we are  
12 without them.

13 So that's really all I want to say  
14 and ask you all is to trust the process. We've  
15 got a great process in Virginia. It works well  
16 and I hope that you'll -- you'll trust that as we  
17 go forward with the 2021 cycle. Thanks for  
18 allowing me to speak.

19  
20 MR. FRIEDMAN: Thank you.

21  
22 MR. FLANDERS: Thank you. Next up, we  
23 have Mr. Bob Shippee.

24  
25 MR. SHIPPEE: Good morning. My name is

1 Bob Shippee. I'm a resident here in Henrico. I  
2 am very interested in energy efficiency. And  
3 after having observed this group for the last  
4 couple of years, I'm -- I appreciate what you do  
5 and the impact you can have on Virginians.

6 I just want to call out two items  
7 that maybe in the past you haven't had to weigh  
8 as heavily as you contemplate the Code standards.  
9 One is inflation that's currently becoming more  
10 of an issue, especially for low and moderate  
11 income Virginians.

12 One of the ways that we can help  
13 Virginians with affording those monthly bills is  
14 to help reduce utility costs. And one of the  
15 best ways to do that is to have higher efficiency  
16 building standards.

17 So I would encourage you to weigh  
18 that maybe a little more heavily than -- than you  
19 have in the past. The other issue, obviously,  
20 that's going on in the world today is -- is the  
21 war in Ukraine.

22 And -- and whether it's that or  
23 disruption in the Middle East or something else,  
24 it's pretty clear that going forward, we do risk  
25 energy disruption. And we -- we should seek to

1 have energy independence as -- as much as  
2 possible in this country and in this state. One  
3 of the best ways to do that, again, is to use  
4 less energy. And again, higher efficiency  
5 building codes helps with that. So I appreciate  
6 your time. Thank you.

7  
8 MR. FRIEDMAN: Thank you.

9  
10 MR. FLANDERS: Susan Miller.

11  
12 MR. FRIEDMAN: Welcome.

13  
14 DR. MILLER: Good morning. I'm  
15 Dr. Susan Miller. I'm a retired family doctor  
16 and a member of the Virginia Clinicians for  
17 Climate Action on behalf -- on whose behalf I  
18 present the comments.

19 VCCA is an organization of about 450  
20 physicians and other health providers, which is  
21 the state branch of a national organization  
22 called the Medical Society Consortium on Climate  
23 and Health. We were founded in 2017 to bring the  
24 clinician voice to climate change advocacy in  
25 Virginia through education, advocacy and

1 community outreach. As clinicians, we're  
2 concerned about the health of our patients and  
3 communities and are aware of the impacts of  
4 climate change effecting them now.

5 So why would we be commenting about  
6 building codes? The health benefits of strong  
7 building codes are significant. Buildings are  
8 the third largest source of carbon pollution.

9 And numerous scientific studies have  
10 demonstrated that housing renovations that  
11 improve ventilation, insulation, heating and  
12 cooling equipment result in reduced pollutants.

13 Increased insulation protects  
14 against cold-heat related deaths in areas that  
15 experience extreme temperatures. And improved  
16 air quality reduces asthma and exacerbations  
17 chronic obstructive lung disease.

18 Better controlled moisture in  
19 buildings reduces mold and allergies. An  
20 avoidance of building materials that contain  
21 hazardous substances reduce the risk of cancer.

22 Improved indoor air quality can  
23 particularly benefit those who are in low income  
24 populations. Upgraded HVACs limits exposure to  
25 particulates to gaseous pollutants and to mold.

1 And studies conducted in 2014 found that low  
2 income populations living in green buildings  
3 experienced fewer symptoms of respiratory illness  
4 and generally improved health. Many of the  
5 impacts of a changing climate are being felt by  
6 our patients today.

7 Heat illness is increasing, allergy  
8 season is earlier. Lyme disease is spreading.  
9 The way we build and renovate impacts our health.  
10 Structural efficiency improvements are much less  
11 costly if --

12  
13 MR. FRIEDMAN: Ms. Miller.

14  
15 DR. MILLER: -- installed during the  
16 initial construction.

17  
18 MR. FRIEDMAN: Excuse me, but that's --  
19 that's your two minutes.

20  
21 DR. MILLER: Okay. And for these  
22 reasons -- just about done -- VCCA supports the  
23 adoption of the full 2021 IECC without any  
24 weakening amendments. Better building codes  
25 protect Virginians' health.



1 MR. FRIEDMAN: Thank you very much.  
2 Next speaker.

3  
4 MR. FLANDERS: Next we'll move to  
5 virtual speakers unless there's anyone else in  
6 the room in person to speak. Okay. The first  
7 are Laura Baker or Eric Lacey.

8  
9 MS. BAKER: Yes, good morning. Can you  
10 hear me okay?

11  
12 MR. FLANDERS: Yes.

13  
14 MS. BAKER: Great. Good morning. I'm  
15 Laura Baker and I'm with the Responsible Energy  
16 Codes Alliance. RECA strongly supports  
17 Virginia's proposed adoption of the 2021 IECC for  
18 both residential and commercial construction.

19 The full 2021 IECC provides clear  
20 energy costs savings. According to a report from  
21 the US DOE, new homes built in Virginia after  
22 2021 will save almost 18% in energy costs in the  
23 first year alone as opposed to -- compared to  
24 Virginia's current energy code. And on the  
25 commercial side, DOE also did a study that showed

1 that building -- commercial buildings built under  
2 the 2019 version of Actuary Standard 9.1 -- which  
3 is a client's option. And the 2021 IECC will  
4 save an average of three cents -- 3.7 cents a  
5 square foot on average every year in energy cost  
6 savings.

7 Now we'd like to see Virginia  
8 eventually eliminate the weakening amendments  
9 that are currently in the Code and adopt a full,  
10 unamended version of the 2021 IECC. And we've  
11 put some proposals in. We've been working  
12 through the working groups and we're looking  
13 forward to that process.

14 At -- and the proposed 2021 IECC is  
15 a big step forward and will provide immediate and  
16 long-lasting cost savings for -- as well as help  
17 Virginia reach its energy policy goals.

18 Thank you for your time. And yeah  
19 -- I'm available for questions. I notice we're  
20 not doing questions today. So I appreciate it.  
21 Thank you.

22  
23 MR. FRIEDMAN: Thank you very much.  
24 Next speaker.

1 MR. FLANDERS: Next we'll have William  
2 Penniman.

3  
4 MR. PENNIMAN: Thank you. I am William  
5 Penniman. I participated in the last cycle on  
6 behalf of the Virginia Chapter of the Sierra Club  
7 and three other organizations with a total of  
8 30,000 members -- or more than 30,000 members in  
9 Virginia.

10 Since I last spoke to you -- and I  
11 submitted comment back in December. But more  
12 importantly, I would mention three items that  
13 have occurred first in 20 -- late 2020, the IECC  
14 published in 2021.

15 An IECC which, significantly,  
16 improved energy efficiency compared to 2018 Code,  
17 which Virginia is still behind. Second, in early  
18 2021, the General Assembly amended Virginia law  
19 to require that the Code meet or exceed -- and it  
20 be at least as stringent as the latest IECC,  
21 which was then the 2021 IECC.

22 With the exceptions only that the  
23 construction costs increment exceed the savings  
24 to residents and the public and the benefits for  
25 the public over time, including pollution

1 reduction benefits. In the summer of 2021, as  
2 Laura just mentioned, the Department of Energy --  
3 through a specific national northwest laboratory  
4 -- published data finding that the 2021 IECC had  
5 [unintelligible] and benefit the public.

6 So the starting point should be a  
7 2021 IECC not weakening amendments of the past.  
8 I have -- I have submitted proposals in the new  
9 cycle.

10 I will be working in the work group  
11 to try and get them adopted and work with members  
12 of -- of all communities in trying to improve  
13 those provisions and the like -- eventually to  
14 get Virginia to and beyond the 2021 IECC.

15 I would note that we sent reports of  
16 climate change show that it is getting worse  
17 faster than ever predicted, that Virginia's --  
18

19 MR. FRIEDMAN: Mr. Penniman.

20  
21 MR. PENNIMAN: [unintelligible].  
22

23 MR. FRIEDMAN: Mr. Penniman, that's your  
24 two minutes.  
25

1 MR. PENNIMAN: We need to reduce our  
2 energy consumption and allow residents to save  
3 money by have -- using less energy. Thank you.  
4

5 MR. FRIEDMAN: Thank you for your  
6 comments.  
7

8 MR. FLANDERS: Next we have Mr. Eric  
9 Dopplerue [sp]. Oh. We'll check back. Eric --  
10 so Mr. Michael Topperman. Try back there.  
11 Mr. Frederick Krimgold.

12  
13 MR. KRIMGOLD: Yes. My name is Fred  
14 Krimgold. And I'm the former associate dean for  
15 the College of Architecture and Urban Space for  
16 Research and Public Service.

17 And also a -- a former resident of  
18 the Architectural Research Center's consortium of  
19 the AIA Research Corporation. And I would like  
20 to speak strongly in favor of the adoption of the  
21 2021 IECC model code without any weakening  
22 provisions as been included in the past. The  
23 AIA, nationally, has established a -- a 2030  
24 challenge and a 2030 commitment which commits the  
25 organization -- that is the National Organization

1 of Architects -- to the accomplishment of net  
2 zero construction of new buildings and major  
3 renovations by the year 2030.

4 And that implies a definite decrease  
5 in the amount of greenhouse gas emissions from  
6 new construction and major renovation over the  
7 intervening period.

8 I might add to that that the  
9 important implication of the new legislation is  
10 that we consider the life cycle cost, including  
11 construction and operation of buildings over the  
12 useable lifetime of that building.

13 And that optimizing that life cycle  
14 cost is -- really has to become the principle on  
15 which we base our regulatory effort. I'd add to  
16 that that builders, architects and engineers and  
17 building regulators have a major responsibility  
18 in defending us against the challenges of climate  
19 change.

20  
21 MR. FRIEDMAN: Mr. Krimgold, thank you

22 --

23  
24 MR. KRIMGOLD: Thank you.

1 MR. FRIEDMAN: Thank you for your  
2 comments.

3  
4 MR. FLANDERS: Next we have Angie Ticama  
5 [sp]. Angie. We'll come back. Next, Karen  
6 Potter. Okay. Kate Walker.

7  
8 MS. WALKER: Good morning.

9  
10 MR. FRIEDMAN: Good morning.

11  
12 MS. WALKER: Good morning, Chairman  
13 Abbasi, Vice-Chairman Meringoff and members of  
14 the Board. I'm Kate Walker. I'm the  
15 environmental programs coordinator for the City  
16 of Falls Church.

17 And my comments represent the  
18 vision, goals and legislative priorities of the  
19 city. We strongly urge the Board to adopt the  
20 2021 IE -- International Energy Conservation Code  
21 without weakening amendments as it updates USBC.

22 Under H2227, the Board is required  
23 to assess the public health, safety and welfare  
24 benefits of adopting standards at least as  
25 stringent as the IECC, including potential energy

1 savings that add to energy benefits over time.  
2 And you've heard several times already this  
3 morning, the US Department of Energy and the  
4 Pacific Northwest National Laboratory have shown  
5 the potential energy savings from the 2021 IECC,  
6 exceeding costs of construction.

7 It'll make buildings more energy  
8 efficient and lower utility costs. And the net  
9 savings will make housing more affordable, which  
10 is a top policy priority for -- in the City of  
11 Falls Church.

12 Adopting the 2021 IECC in whole will  
13 also provide important public health, safety,  
14 welfare and [unintelligible] benefits, including  
15 healthier and more comfortable living  
16 environments, increased resilience -- which is  
17 becoming increasingly important -- and reduced  
18 greenhouse gas emissions.

19 The City of Falls Church has the  
20 goal of reducing its greenhouse gas emissions 80%  
21 by 2050, and many jurisdictions throughout  
22 Virginia have similar goals.

23 With more than half of our  
24 greenhouse gas emissions resulting from buildings  
25 and energy efficient, US can see incorporating



1 the 2021 IECC is absolutely essential for the  
2 city to successfully achieve its goals. So we  
3 urge you to adopt the full 2021 IECC without  
4 weakening amendment. Thank you.

5  
6 MR. FRIEDMAN: Thank you very much.

7  
8 MR. FLANDERS: Sally Newkirk.  
9 Ms. Newkirk, we can't hear you at this time.

10  
11 MS. NEWKIRK: Can you hear me now?

12  
13 MR. FLANDERS: Yes.

14  
15 MS. NEWKIRK: Okay. My name is Sally  
16 Newkirk and I live in Rockingham County. And I'm  
17 speaking today on behalf of Climate Action  
18 Alliance of the Valley. I'm also a real estate  
19 agent.

20 I've been a real estate agent for 20  
21 years. And I believe that comfort, security and  
22 relaxation make a house a home. I like to sell  
23 and help people buy healthy, energy efficient and  
24 comfortable homes. People need to be able to pay  
25 their monthly mortgage and their utility bill. I

1 often provide advice to clients -- sellers and  
2 buyers -- about the importance of energy  
3 efficiency and in keeping a home more comfortable  
4 and more affordable.

5 And here in Harrisonburg, in  
6 Rockingham County, the central Habitat for  
7 Humanity district, we've been building EarthCraft  
8 standard homes for almost a decade now. And in  
9 this particular district, we have -- are  
10 beginning to put solar panels.

11 Because we all talk about housing  
12 affordability these days. But if you have to  
13 choose between paying your mortgage and paying  
14 for your heat or your groceries, then it's not  
15 affordable.

16 It's vital for Virginia's building  
17 codes to recognize the importance of building  
18 into new homes houses with EV and solar ready --  
19 readiness.

20 And it's -- and lasting value that  
21 energy efficient and low energy use home has. As  
22 a realtor, I can assist with messaging and  
23 marketing for these homes. I urge this Board to  
24 adopt the 2021 IECC standards to make this a  
25 reality in Virginia. Thank you so much.

1 MR. FRIEDMAN: Thank you for the  
2 comments. Next speaker.

3  
4 MR. FLANDERS: We have Maren Mahoney.

5  
6 MS. MAHONEY: Hi, good morning. My name  
7 is Maren Mahoney. Thank you for the opportunity  
8 to provide comments this morning. I'm speaking  
9 today to urge the adoption of the 2021  
10 International Energy Conservation Code without  
11 weakening amendments, as you consider updates to  
12 Virginia's -- the state's Uniformed Statewide  
13 Building Code over the next year.

14 I'm here today on behalf of Ceres, a  
15 non-profit sustainability organization that works  
16 with major institutional investors and companies  
17 and support policies that increase access to  
18 modes of economical de-carbonization.

19 The Ceres' business for innovative  
20 climate and energy policy or BICEP network has a  
21 coalition of more than 80 major businesses and  
22 employers committed to advocating for stronger  
23 climate and clean energy policies at the state  
24 and federal level. BICEP members and  
25 headquarters are significant footprints in

1 Virginia, including MARS, Inc., Nestle,  
2 Salesforce, Unilever, Workday and Worthen  
3 Industries.

4 Ceres also organizes an energy  
5 optimization work group and a complementary  
6 business group comprised of leading businesses,  
7 service providers, product manufacturers and  
8 users engaging on the state and federal level  
9 energy optimization policies.

10 Many of these members have been  
11 businesses in Virginia as well. Building codes  
12 are one of the most cost effective ways to reduce  
13 the energy use and emissions from our  
14 environment.

15 They are especially important  
16 because buildings account for more than 48% of  
17 all energy consumed by our state. Moreover,  
18 energy efficient construction replaces the  
19 likelihood that a home will default and is a  
20 critical tool for building the economic and  
21 resilience of our communities.

22 As you've heard from previous  
23 commenters, recent independent analysis from the  
24 US Department of Energy, specific Northwest  
25 National Lab, shows that it will be a boon for

1 the state for decades to come by delivering \$2.5B  
2 in energy cost savings, avoiding more than 11M  
3 metric tons of carbon emissions and creating more  
4 than 6,000 new jobs in the construction sector  
5 alone.

6 On behalf of Ceres, we hope that you  
7 will adopt the 2021 International Energy  
8 Conservation Code without weakening amendments as  
9 part of this Code update cycle. And I thank you  
10 for my -- for the consideration of my comments  
11 today.

12  
13 MR. FRIEDMAN: Thank you very much.

14  
15 MR. FLANDERS: Kristel Riddervold.

16  
17 MS. RIDDERVOLD: Hi, good morning. My  
18 name's Kristel Riddervold, and I'm the  
19 environmental sustainability manager for the City  
20 of Charlottesville. My comments represent the  
21 vision and legislative priorities of the city.

22 I appreciate in advance the hard  
23 work that will go into this cycle of building  
24 code development. In both this and last year's  
25 legislative packet, the City of Charlottesville

1 included support for the state to adopt  
2 residential and commercial building codes that  
3 meet or exceed the latest national and  
4 international standards.

5 As such, I'm speaking today to urge  
6 the adoption of the 2021 IECC without weakening  
7 amendments as you consider updates to Virginia's  
8 Uniformed Statewide Building Code.

9 The City of Charlottesville supports  
10 this position for the following reasons, and as  
11 previously mentioned, the US DOE and the Pacific  
12 Northwest National Laboratory -- the I -- the  
13 2021 IECC will develop -- will deliver  
14 significant energy saving costs -- cost savings,  
15 avoid substantial carbon emissions and create new  
16 jobs.

17 The 2021 IECC will make buildings  
18 more energy efficient and lower utility costs, as  
19 well as help to improve indoor and outdoor air  
20 quality.

21 The net savings will make housing  
22 more affordable, which is also a policy priority  
23 for the city. In 2019, Charlottesville adopted  
24 updated greenhouse gas reductions goals of 45% by  
25 2030 and carbon neutrality by 2050. We're

1 currently developing a climate action plan to  
2 meet these targets. With about 60% of our  
3 emissions coming from the residential and  
4 commercial sectors combined, an energy efficient  
5 USBC incorporating the 2021 IECC is essential for  
6 the city to successfully achieve its goals.

7 As a member of a Virginia local  
8 government energy and sustainability  
9 professionals peer network, I know that there are  
10 several other cities and counties across the  
11 Commonwealth with similar climate goals.

12 And we have routinely discussed the  
13 critical, positive impact of improved building  
14 codes. Thank you for your consideration of these  
15 comments and we hope you will adopt the 2021 IECC  
16 without weakening amendments as part of this Code  
17 update cycle. Thank you very much.

18  
19 MR. FRIEDMAN: Thank you.

20  
21 MR. FLANDERS: Next we have Andrew  
22 Clark.

23  
24 MR. CLARK: Hey, good morning. Can you  
25 hear me all right?

1 MR. FRIEDMAN: Yes.

2  
3 MR. CLARK: Thank you. Andrew Clark on  
4 behalf of the Homebuilders Association of  
5 Virginia. First, I'd just like to thank all of  
6 you for serving on this critically important  
7 regulatory body that really makes decisions that  
8 impacts every Virginian.

9 And there will be plenty of  
10 opportunities to talk about specific proposals.  
11 But today, I really wanted to focus on what this  
12 Board does to -- and how the Board's decisions  
13 factor into housing affordability and where we're  
14 at now.

15 In December, the Virginia Joint  
16 Legislative Audit Review Commission, JLARC,  
17 released a 200-page report -- which I know  
18 everybody's going to go home and read.

19 But it really focused on the dire  
20 need to expand access to housing for individuals  
21 across the income spectrum. And to just  
22 highlight a few of the data points that they  
23 found -- statewide, median home sales prices rose  
24 between -- rose 15% between 2020 and 2021. In  
25 Hampton Roads, that number is 41% along with a



1 37% increase in far southwest Virginia, 32%  
2 increase in southside, 18% in the Valley, 16% in  
3 Central Virginia. And you kind of get it from  
4 there.

5 Secondly, the report found that  
6 every region of the Commonwealth between 22% and  
7 34% of households are cost-burdened, meaning  
8 they're spending more -- more than 30% of their  
9 income on housing costs.

10 Which is widely accepted as the --  
11 the threshold where your housing costs start to  
12 negatively constrain the household budget, making  
13 it difficult to afford medical bills and other  
14 necessities and increasing the likelihood of  
15 eviction.

16 And then finally, this is -- I think  
17 --- the most relevant number. JLAR found that in  
18 the rental market alone, Virginia is short about  
19 200,000 affordable units for folks at the lower  
20 end of the income spectrum.

21 And that shortage ranges from 6,000  
22 units in far southwest to 60,000 units in  
23 Northern Virginia. And so, you know, why am I  
24 talking about this? I say as we go through this  
25 process, it's important to remember that the

1 building code is a baseline standard of quality,  
2 safety and efficiency in new homes. And that --

3  
4 MR. FRIEDMAN: Mr. Clark.

5  
6 MR. CLARK: -- consumers always have the  
7 ability to purchase or build a home that's built  
8 to a higher standard if that's something they  
9 want or can afford. But what we're looking at  
10 doing is setting a baseline standard and --

11  
12 MR. FRIEDMAN: I have to interrupt you.

13  
14 MR. CLARK: -- I think it's important  
15 that we don't set that standard so high that, you  
16 know, small annual savings in energy costs really  
17 don't cut the mustard with a mortgage or actually  
18 the -- the upfront costs of getting into a home.

19 So I got a little feedback there.  
20 I'm not sure what you all meant. But I just  
21 encourage the Board to --

22  
23 MR. FRIEDMAN: You've gone over your two  
24 minutes.

1 MR. CLARK: -- to really understand and  
2 dive into the impact that each code proposal has  
3 on ability for folks to -- to move into a home or  
4 to rent an apartment. Thank you all.

5  
6 MR. FRIEDMAN: Thank you. Okay.

7  
8 MR. FLANDERS: Is Allan Larson? Eric  
9 Dopplerue? Michael Topperman said he's not going  
10 to speak. Angie Hickamo [sp]? Erin Potter.  
11 Okay. That concludes the rest of the speakers on  
12 the Code.

13  
14 MR. FRIEDMAN: Thank you, Kyle. Are  
15 there any other persons wishing to speak  
16 regarding the issues for which this hearing is  
17 convened? Hearing none, the hearing is now  
18 concluded.

19 All of the comments you all made  
20 will be taken under advisement by the Board. I  
21 would also like to emphasize that any written  
22 statements received will be considered by the  
23 Board. Thank you very much.

24  
25 (The hybrid public hearing concluded at

1 10:37 a.m.)

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

CERTIFIED COPY

CERTIFICATE OF THE COURT REPORTER

I, Debroah Carter, hereby certify that I was the Court Reporter at the HYBRID PUBLIC HEARING regarding UNIFORMED STATEWIDE BUILDING CODE , heard in Glen Allen, Virginia, on March 21st, 2022, at the time of the hybrid public hearing herein.

I further certify that the foregoing transcript is a true and accurate record of the testimony and other incidents of the hybrid public hearing herein.

Given under my hand this 28th of March, 2022.



Debroah Carter, CMRS, CCR  
Virginia Certified  
Court Reporter

My certification expires June 30, 2022.

20