

General Stakeholder Workgroup Meeting – VCC Proposals
June 7, 2022 - 9:00 a.m. – 3:07 p.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*

Paul Messplay: *Code and Regulation Specialist, SBCO*

Florin Moldovan: *Code and Regulation Specialist, SBCO*

Thomas King: *Code and Regulation Specialist, SBCO*

Chad Lambert: *Southwest 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:

Al Clark

Allison Cook: *Arlington County, VA*

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

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

Chuck Vernon

Conrad Speckert

Craig Toalson: *HBAV*

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

Dannie

David Beahm: *Warren County*

E Wells

Edwin Ward

Emad Elmagraby

Gregg A. Karl

Jacob R. Newton: *Virginia, Maryland & Delaware Association of Electric Cooperatives VMDAEC*

Jason Laws: *Chesterfield County and VBCOA*

Jimmy Moss: *VBCOA*

John Armstrong: *Dominion Energy Services*

John Russell

Joseph C. Ransone

Lankika Perera

Linda Baskerville: *Arlington County Energy Plan Review*

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

Lyle Solla-Yates: *Representing himself*

Mary Koban: *Air Conditioning Heating and Refrigeration Institute (AHRI)*

Matt Smolsky: *PWC*

Matthew Cobb

Michelle Congdon

Paula Eubank: *FEMA*

Rebecca Quinn: *RC Quinn Consulting for FEMA*

Richard Gordon: *Hanover County and VBCOA*

Richard Grace: *Fairfax County and Virginia Plumbing and Mechanical Inspectors Association (VPMIA)*

Ron Clements: *Chesterfield County Building Official*

Rory Stolzenberg: *Charlottesville Planning Commission*

Sarah Cosby: *Dominion Energy*

Sean Farrell: *Prince William County and VBCOA*

Shahriar Amiri: *Arlington County*

Snider: *ACFD*

Steve Orłowski

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

Taylor

Tod Connors: *Arlington County*

Tom H

Troy Knapp

William Abrahamson

William (Bill) Penniman: *Sierra Club, Virginia Chapter*

Welcome and Introductions

Jeff Brown: Welcomed participants. Let them know there would be a five-minute break each hour and an hour lunch break at noon. There's a full agenda with over 40 proposals, so the meeting may run until 5:00 p.m.

Paul Messplay: Gave a brief tutorial of Adobe Connect features.

Jeff: Gave an overview of the 2021 Code Development Cycle, using a slideshow presentation attached as part of the meeting documents. Discussion covered the following points:

- 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, carry over, and withdrawn.
- May 1st 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.

Jeff: Due to time constraints, participants did not introduce themselves, and who they were representing at the beginning of the meeting. Jeff asked them to introduce themselves and who they represent the first time that they speak, and if they are representing another group in a later proposal. The proposals provided on screen and in the files pod should be the most current version. There should not have been any modifications since May 1st, unless there is a floor modification. Some proposals with VCC changes may also be discussed in other General Workgroup meetings this week and next week, if they apply to more than one code.

B105.1.1-21

Jeff: This proposal was developed by the Resiliency Sub-workgroup. It adds additional qualifications for the Building Official and Technical Assistants related to knowledge of floodplain and high-velocity wind construction.

David Beahm: Is concerned about making an extensive list of things which are already covered under sound engineering practices.

Jason Laws: Chesterfield County. The requirement is ok for the Building Official but is not necessary for others.

Steve Shapiro: As a member of the Resiliency Sub-workgroup, the sub-workgroup thought it was necessary to highlight flood plain and high-velocity wind construction. To Jason's point, it only asks for "general knowledge". It's important for resiliency.

Andrew Clark: HBAV and Resiliency Sub-workgroup. Jason has a good point. How is general knowledge assessed and who assesses it? He may be inclined to change his opinion from what it was in the Sub-workgroup. It makes sense for the Building Official to have knowledge, but maybe not for others.

Steve S: The term "general knowledge" was already in the code, it isn't new with this proposal.

Shahriar Amiri: Building Official, Arlington County. He's neutral about this. General knowledge is a general term, not specifically defined.

Andrew Milliken: Agrees with Jason. Needing Technical Assistants to have flood plain and high velocity training is overreach. He opposes this proposal.

Allison Cook: Typed in the chat box:

Allison Cook - Arlington: Arlington VA speaking in opposition to B105.1.1-21 for the inclusion of the requirement that technical assistants need to have flood plain and high velocity wind construction

Jeff: Since it came from the Resiliency Sub-workgroup, there won't be a floor amendment, but the conversation will be captured.

Shahriar: Doesn't think it's appropriate having requirements for Technical Assistants in this.

Steve S: Thinks the proposal is ok as it is worded now.

Jeff: The Sub-workgroup members could be polled after the meeting and include results in the summary to the

BHCD if it looks like there's consensus in this Workgroup for a particular change.

Allison: Arlington. This isn't really a laundry list of things required for Technical Assistants, it is just asking for knowledge in one of those areas at a minimum. However, for all Technical Assistants to have general knowledge of flood plain and high velocity doesn't seem right. Perhaps it could be in the list as an option.

Jeff: The Resiliency Sub-workgroup will look at the resiliency impact analysis of proposals before they go to the BHCD, so this proposal can also be added to their agenda.

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

B118-21

Ron Clements: The original language in this Section was cut and pasted from the Maintenance Code. This proposal updates the wording to construction-type language, more consistent with in the VCC. The definition of unsafe structure was removed. If a building or structure becomes unsafe during construction, as per the code in Section 118, there's a remedy (correction notice) in Section 118.2 and notice of violation in 118.3. Vacating an unsafe structure or posting a placard was removed, since that is maintenance language. Unsafe terminology was deleted from emergency repairs provisions.

Shahriar: Is concerned about removing the wording about vacating the structure, since a part of the building can become unsafe during alteration or revision, which would be the responsibility of the Building Official.

David: In Section 118.1, "immediate threat" on the fourth line should be moved to the third line, so it covers everything.

Ron: Asked if Shahriar is ok with the proposal if Sections 118.5 and 118.6 are not deleted.

Shahriar: Yes, if those are kept, it alleviates his concern.

Jeff: Asked for changes to be typed in chat box.

Ron: Keeping 118.4.1, 118.5 and 118.6.

Typed in chat box:

Ron Clements Chesterfield BI: Keep 118.4.1, 118.5, 118.6, 118.1; second line of 118.1 add "immediate" between "a" and "threat"

Jason Laws: ... determined by the Building Official to be an immediate threat to public safety due to faulty construction, deterioration, damage, structural instability, or another condition.

Jason Laws: need to remove another condition as well

Jason Laws: ...determined by the Building Official to be an immediate threat to public safety due to faulty construction, deterioration, damage, structural instability.

Jeff: This will include the floor amendment. Hearing no further discussion, this proposal will be marked Consensus for Approval as Modified.

B107.1-21

Jeff: This proposal was submitted by the DHCD staff. A sentence was added about fees levied, which is related to requirements in the State Law.

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

{BREAK: 9:57 – 10:02}

B108.2-21

Jeff: The proponent was not on the call, so the floor was opened for discussion.

Steve S: Agrees with the proposal. The math supports it.

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

B108.3-21

Allison: This proposal allows for online permitting where available. It doesn't prevent in-office permitting.

Andrew C: HBAV. Asked if it could be more difficult for people who are not able to do it online. But, he doesn't have any problem with the proposal as it is written.

Paula Eubank: Typed in the chat box:

Paula Eubank: B108.3-21 please clarify "unless applicant voluntarily chooses otherwise". Does this intend that they may still submit via mail?

Allison: It will not prevent in-person delivery of the application. People would still have that choice

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

B109.4.1-21

Jeff: The proponent was not available to present the proposal. He opened floor to discussion.

Linda Hale: Has a concern about DHCD staff resources being available for certifying third party reviewers, which is based on performance.

Jeff: DHCD is limited in the types of certifications offered. Certifications are offered to third parties, however, Linda's question is a good one.

David: Objects to this proposal. It requires another written policy from the Building Official.

Sean Farrell: Would this be retroactive to third party approvals in all jurisdictions?

Jimmy: There's already a system in place. This would be putting the burden on Building Official. He's opposed to this as written.

Jeff: Hearing no further discussion, he asked if there was any support for this proposal. With no support, this proposal will be marked as Consensus for Disapproval.

B113.3-21

Jeff: This proposal came from the Resiliency Sub-workgroup. He opened the floor for discussion.

Rebecca Quinn: typed in chat

Rebecca Quinn: I just wanted to point out that the same inspections are in the I-Codes -- two times submitting elevations in SFHAs.

David: Building Officials may not be qualified to do elevation inspections, so he is concerned about not having provisions for a third-party inspector approval process.

Rebecca: RC Quinn Consulting. Working with FEMA as they transition some personnel in region 3. The I Codes require submission of elevation documentation as part of inspection during construction. This should say "as part of the foundation inspection, submission of elevation documentation is required" so that there's no judgement needed by the inspector, just submission of documents. Documentation gets reviewed back in the office. Also, submission of elevation documents are needed prior to final inspection.

Paula: The field inspection is a verification of the elevation certificate and the floor elevation by use of documentation submitted.

David: Objects to this proposal as it is written, as well as where it is located.

Shahriar: Typed in the chat box:

Shahriar Amiri, Arlington County: I agree with the last commenter.

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

B115.2-21

Jeff: The proponent was not on the call, so the floor was opened for discussion.

David: Thinks the language is not written correctly. It names other parties that don't need to be involved. He doesn't agree with or support this proposal.

Jimmy Moss: Agrees with David. He is in opposition to this proposal as it is written.

Sean: Agrees that the language as written doesn't work. It would prevent the permit applicant from being responsible for work that they were not licensed to perform.

Jeff: Asked the group if there was any support for the proposal. Hearing none, this proposal will be marked as Consensus for Disapproval.

B202-21

Jeff: This is a Resiliency Sub-workgroup proposal.

Paul Messplay: This proposal correlates definitions from the National Flood Insurance Program.

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

B202(2)-21

Jeff: The proponent was not on the call, so the floor was opened for discussion.

Sean: It removes responsibility from the permit-holder. He objects to this proposal.

Jeff: Asked the group if there was any support of the proposal. Seeing none, this proposal will be marked as Consensus for Disapproval.

B407.4-21

Dan Wilham: Fairfax County. This Section references a Section in Chapter 10, which Virginia deleted. The proposal is to clean up language and to fix a broken link. There were comments in another meeting, so the floor amendment seen on the screen is to address those comments. The fire code provides for the authority or requirement for fire safety plans. The amendment gives two options. One is to point to the fire code and clarify the fire safety construction procedures. The second choice is to delete the reference to fire safety evacuation plans.

Jeff: Asked for discussion about options and if there was support or not.

Andrew M: Asked what would change in the current code for option 2.

Dan: It deletes a reference to a Section in Chapter 10 which doesn't exist.

Steve S: Likes option 2.

David: Likes option 1, but he is ok either way.

Typed in the chat box: Shahriar and Richard Gordon like option 2.

Jeff: Hearing no further discussion, this proposal will be marked as Consensus for Approval as Modified using option 2.

B432(2)-21

Shahriar: This proposal aims to mitigate hazards of lithium ion battery storage systems and EV charging stations. This is in Chapter 12 of the existing International Fire Code. This new section brings installation requirements from Chapter 12 of the IFC to the 2021 VCC. It also requires additional inspection for newly installed systems. Stakeholders from several localities and industries met outside of the official code development meetings to discuss this at length. Equipment is not regulated, but the building is, where the equipment is located.

Jeff: There's a similar proposal, FP1207, from the SFPC Sub-workgroup. Most of it is maintenance, but a part of it does the same thing as this one. That proposal will be discussed on June 10.

Shahriar: In Virginia, there's been jurisdiction issues about who enforces what. This brings construction-related ESS provisions into the VCC instead of deciding if it pertains to construction or maintenance.

Sarah Cosby: Dominion Energy. They have potential amendments for the group to consider. They would like language from the IFC pulled in (as the other proposal to be heard on June 10th does). It would be straight-forward and clear. The other option would be to pull in language from NFPA provision 855, which includes exemption language for Nickel Cadmium or Lead Acid batteries. Either of those would make the proposal acceptable, and they would support it.

Shahriar: Has no objection to bringing in NFPA 855.

Bill: Speaking for himself, he asked how this applies to a residential customer who wants to put in an off-the-shelf Tesla battery pack on their own.

Shahriar: This doesn't apply to residential. IRC has its own section that addresses his question.

Bill: He asked why only lithium ion batteries would be specified, and not the other battery types.

Shahriar: Runaway. It takes 6-8 hours to put out a fire, using 30,000 gallons of water. The runoff is highly acidic and hazardous, which requires a neutralizer. Nickel Cadmium and Lead Acid batteries do not have the same hazards.

Shahriar: typed in the chat to amend according to the Dominion Energy request:

Shahriar Amiri, Arlington County: Lead-acid and nickel-cadmium battery systems that are designed in accordance with IEEE C2, used for DC power for control of substations and control or safe shutdown of generating stations under the exclusive control of the electric utility, and locations outdoors or in building spaces used exclusively for such installations shall not be required to comply with this Chapter.

Sarah: Typed in the chat box:

Sarah Cosby: The language shared by Mr. Amiri at Dominion's request is sourced from NFPA 855. Thank you Richard Gordon: Hanover County. He supports anything that would go through on this issue. A new section, a pointer to the IFCC provisions for ESS or otherwise.

Jacob Newton: Virginia Electric Cooperative. In support of either amendment.

Shahriar: Because of the thermal runaway, a special inspector should be used and a pointer to the IFC would not make that clear, while this proposal adds specific requirements for special inspections of ESS.

Andrew C: HBAV. Asked Shahriar to point out the language that says that this doesn't apply to residential.

Shahriar: That is in the VCC administration section, and there's also a section in the 2021 IRC dealing with Energy Storage Units. However, he can add a caveat to say that it doesn't apply to residential one and two family dwellings at the beginning of this section.

Florin Moldovan: typed in the chat box:

Florin Moldovan - DHCD: See VCC Section 310.6 and 2021 IRC 328.

Andrew C: However, it would apply to multi-family dwellings. He asked if anyone on the call knew if this would conflict with any of the Energy proposals that are being proposed.

Allison: Doesn't think this conflicts with other EV proposals. She thinks it adds an additional layer of safety.

Andrew C: Agrees with Allison. Conflict may not have been the right word. He was thinking that this proposal should be reviewed in conjunction with other EV proposals. He would still appreciate a note in this section that it doesn't apply to one and two family residential units.

Bill: Wanted to clarify that this proposal applies to stationary battery storage systems, but doesn't preclude parking EV cars, or charging them.

Shahriar: This doesn't preclude EV cars from charging anywhere. It deals with mobile mega packs.

Andrew C: To clarify, it does not deal with motor vehicles or single family, but it does address multi-family dwellings with structured parking and designated spaces?

Shahriar: Not this proposal. This is a stand-alone proposal for stationary Energy Storage Systems.

Jeff: Asked if anyone supports proposal as amended by Dominion Energy. Several individuals voted yes. He asked if anyone objects to the proposal as amended by Dominion Energy. There were no votes in opposition. He reminded the group that a similar proposal is going to be heard in the Workgroup meeting on Friday.

Andrew C: Did anyone in the commercial industry look at this?

Shahriar: Yes.

Jacob: Is this something that will be compared with the proposal on Friday?

Jeff: They are heard individually. If both are consensus for approval from the Workgroups, it will be up to the BHCD to decide which one will be the accepted code change. Either way, notes on all Workgroup discussions do go to the BHCD to assist them with the decision making process.

Sarah: Votes in support as amended. She will also be in the Workgroup meeting on Friday.

Jeff: This proposal will be marked as Consensus for Approval as Modified. The language Shahriar typed in the text box will be Exception #2, after ESS groups R3 and R4.

Jeff: Noted after the break to Change to the modification for B432(2):

Where it reads "shall not be required to comply with this Chapter", change "Chapter" to "Section".

Shahriar: Agreed.

Jeff: The proposal remains Consensus for Approval as Modified using "Section" instead of "Chapter".

{BREAK: 11:17 – 11:22}

B433-21

Shahriar: This proposal is for EV charging stations. There's a direct correlation between thermal runaway and fire from a vehicle under charge. Most of the requirements applies to EV charging stations inside of enclosed parking structures, and proximity to means of egress. It would not apply to open parking lots located away from buildings. It also helps to limit fire risk for buildings that have several parking stories underground. It would not prevent EV cars from parking anywhere, but it does address the locations where the vehicles would be charged.

Matthew Cobb: The water and personnel required to extinguish an EV lithium ion battery fire with thermal runaway is immense. The biggest threat to safety is underground charging stations.

Bill: For multi-family dwellings, is the possibility of charging precluded from any parking level? It sounds extreme. He also thought it was only a problem if the vehicle was more than 80% charged.

Shahriar: EV Chargers should not be located where the floor is more than 75 feet above the lowest level of fire department vehicle or more than 1 level below the lowest level of exit discharge. This would allow parking in the B1 or G1 level, but not lower. The 80% charge is not standard, levels differ by manufacturer. There's a national effort going forward to have the car give a warning when the level gets to the point of concern.

Matt Smolsky: PWC. Typed in the chat box:

Matt Smolsky - PWC: The charging locations must be in a manageable location and one that is readily accessible.

Bill: His understanding is that ICC is moving towards EV charging availability for every dwelling unit. He has proposals in now to allow charging stations at all levels.

Shahriar: This would prevent your proposal from going forward, being that it would preclude lower levels from having charging stations. He wouldn't want to throw the entire proposal out, because it has safety provisions for ventilation, access to the exits, alarms and decontamination of runoff. If there's a thermal runaway on a G4 level, it would probably render the building inoperable for some time. Limiting the charging station locations was also done in order to give fire personnel adequate access to fight fires.

Bill: Many buildings have above ground structured parking with good ventilation. How would this apply to that kind of parking?

Shahriar: The proposal addresses open parking structures. The exception is outside of level G1 and 75 ft. high. Open and ventilated structures are allowed.

Richard Gordon: What would spill control and neutralization measures be specifically?

Shahriar: There's a specific requirement to reduce the pH level in the water runoff to less than 30, and there are two ways to do that with specific guidance. One would be to contain the runoff with plastic or waterproof barriers. The other method is to use a neutralizer before entering a drainage system.

Andrew C: HBVA will oppose this. What was the workgroup that Shahriar referred to?

Shahriar: It was an unofficial group with a wider scope and varied stakeholders. It was beyond the DHCD scope.

Andrew C: Is working on some other proposals besides this one. He thinks this proposal is not correlating with those other proposals around charging stations.

Shahriar: Agrees. There's also a disconnect between EV charging stations and accessible parking spaces.

Andrew C: More correlation is needed.

Shahriar: Agreed. Virginia is behind and there needs to be at least situational awareness for fire personnel who need full hazmat preparedness.

Steve S: AOBA and VAMA are against this proposal. They have been working with Bill about how many EV ready, EV capable and EV installed stations to have, and this proposal would be opposed to that.

Gregg Karl: The extent of hazardous runoff from a lithium ion battery fire is enormous. Fire workers need respirators to engage with it. Again, a fire could take 8, 10 or 12 hours to put out. There's a small window from when the fire starts, getting it somewhat under control, and getting the vehicle removed before there's another flare-up. This can be done if the car is readily accessible. If the car is located on a lower level, that may not be possible, and residents would not be allowed to enter the parking area until it is extinguished.

Bill: He does not support this proposal. He thinks there needs to be more discussion on this, given the conflict with the national initiative to move towards EV.

Andrew C: typed in the chat box that he agrees with Bill.

Matthew C: Technology shouldn't be pushed beyond the safety of residents and first responders and also structural safety.

Andrew C: Thinks there should be a Study Group in the next Code Change Cycle.

Jeff: Hearing some support and some opposition, this proposal will be marked Non Consensus.

B706.1-21

This proposal was inadvertently added to this agenda. It was already voted on and marked as Consensus for Approval in the April Workgroup meeting.

B706.1.1-21

Shahriar: This proposal would eliminate the exception for having a party wall or fire wall between buildings. Two separate buildings with unprotected openings could cause a problem for both buildings. Fire separation distance is not even addressed.

Dan: Agrees with Shahriar. There should be planned agreements as well, not allowing an owner to make a decision when they are so close to another building.

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

{BREAK: 12:00-12:30}

B903.2.3-21

David: There was a new item added to the 2018 ICC and there's been some confusion around it. Item 1 in the VCC is 20k and it is 12k in the IBC. The proposal wouldn't effect remote public schools, it would affect private schools. There was a proposed change in previous code change cycles to drop 20k to 12k and private schools were opposed to it.

Andrew M: Speaking on behalf of himself. There could be a gymnasium with 20k sq. ft. without sprinklers. The load of 300 is standard and should remain.

David: He doesn't want to cause a safety concern, but he is hoping to maintain the niche for private schools.

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

B903.4.2-21

Jeff: The proponent was not on the call, so the floor was opened for discussion.

Andrew M: Speaking on behalf of himself. This would set up a situation where there's no audible or visual alarm system, and notification would solely rely on the monitoring company.

Jeff: Andrew spoke in opposition and hearing no further discussion, this will be marked as Consensus for Disapproval.

B907.5.2.3.2-21

Jeff: This is a DHCD staff proposal to address an apparent oversight in the model code. The section deals with sleeping or dwelling units, but the table only addressed sleeping units. Dwelling units were added for consistency.

Dan: This should also be fixed in the 2024 IBC, so it should be supported.

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

B918.1-21

Andrew M: This proposal was discussed in the In-Building Emergency Communication (IBEC) Study Group, but it was non consensus. It brings in language about how to accept and install systems and places responsibility back on the owner.

Jeff: There were a few similar proposals discussed in the IBEC Study Group. Some members were in favor of this one and some were not.

Steve S: AOBA and VAMA are in opposition to this proposal. The owner should not be responsible to provide all aspects of the system. The owner is ok with providing the cabling and referencing the Fire Code Sections 510.4 and 510.5 for installation. However, it should be the locality that's responsible to install the systems.

Jeff: If there is no further support, this will be marked as Consensus for Disapproval.

Andrew M: There were some Study Group members that were in support of this. Does that count for this decision?

Allison: Supports this proposal. This has been happening at the national level, and in Arlington and other Virginia localities.

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

B918.1(2)-21

Jeff: The DHCD staff prepared this proposal on behalf of some stakeholders in the IBEC Study Group. It brings in

the Fire Code as a technical reference, without making changes to who's responsible to install the systems. Wiring would be the responsibility of the building owner and the rest of the system would be installed by the locality.

Steve S: AOBA and VAMA are in support of this proposal.

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

B918.1.1-21

Jeff: The DHCD staff prepared this proposal on behalf of some stakeholders in the IBEC study group. It eliminates some outdated language in an old Virginia amendment. Radiating cable is an outdated term.

Steve S: AOBA and VAMA are in support of this. Radiating cable technology actually defeats the purpose.

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

B1010.2.8-21

Jeff: 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: He was in the Study Group and there was a thorough discussion. He supports this proposal.

Andrew M: Representing the VFSB – Codes and Standards Committee, stated that they discussed the proposal and the group supports the proposal.

Andrew M: 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.

B1020.1-21

Jeff: The proponent was not on the call. This proposal changes ratings for I-1 and I-3 occupancies, which seems to have been incorrectly labeled in the VCC. This change brings the table back in line with the I-Code.

Dan: Chair of the VBCOA Building Code Committee. In support of this proposal.

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

B1006.3.4-21

Lyle Solla-Yates: Speaking on behalf of himself. This proposal is driven by middle sized structures. It would allow residential buildings up to 20 homes with up to 5 stories to have a single staircase. This is a floor modification which is presented on the screen. This language is copied from Seattle codes. It reduces costs, is a better design, and makes things easier for fire personnel. This permits interior or exterior stairs with smoke control. He received an architect estimate, and it would cost about \$380k per building for a second stairway.

Lyle: Gave some additional information in the chat box regarding this proposal:

Lyle Solla-Yates: This is an additional resource for item 22 <https://www.larchlab.com/city-of-vancouver-report-on-point-access-blocks/> We also got an estimate for the cost of mandating a second staircase in Virginia, which came to \$360,000 per building for six flights, assuming land, furring, and drywall are free. The estimate was \$380,000, you can review the numbers at this link <https://drive.google.com/file/d/1nG5bXXVvjHiGrEMTulr1cEO6fPIUhnfE/view?usp=sharing>

Florin: Typed in the chat box:

Florin Moldovan - DHCD: The floor modification is available for download in the FILES pod at the left of screen.

Steve S: Speaking for himself. He thinks this is bigger than just Virginia and should be proposed on a national level. The code in Seattle has about 14 limitations and this does not. He is opposed to this.

Allison: Is also in opposition. One exit sounds unsafe. It should be debated at the national level.

Dan: Fairfax County. He is in opposition to this proposal. The Seattle code has many limitations and exceptions, which this does not. For example, the number of units on each floor and the size of the floorplans. He also thinks this should be debated at the national level.

David: Agrees that it should be done on a national level. He hasn't looked at the floor modification.

Andrew M: Virginia Fire Services Board, Codes and Standards Committee. The Committee reviewed the original proposal and is opposed to it. The Committee did not have a chance to review the floor modification shared today by the proponent.

Andrew M: Speaking for himself. Is opposed to the proposal. Exterior stairway has no ventilation, interior stairway pressure is discussed, but there is no requirement to use the interior stairway. There's a lot of different landscape in Virginia and one area is not like another, such as is the case in Seattle and New York City.

Andrew C: Is in support of the proposal, which reduces building costs. Many proposals increase costs. Waiting for discussion at the national level won't be productive. He would like to see a Study Group on this.

Allison: Thinks this is a national-level issue, but a workgroup next year in an off-year would be good.

Andrew C: Housing challenges in many localities may prohibit Virginia participation at the national level. Yet, he would support any movement at any level. He would like to see Virginia lead the way in reducing housing costs.

Rory: Thinks an incremental approach would be good. Instead of 5-story, it could start with 4-story buildings. It could also have limits like not allowing exterior stairs, etc. Some of the limitations in the Seattle code are redundant.

Lyle: There are some redundancies in the Seattle code, such as caps on units per floor and the per-parcel restriction. These have been removed in this proposal.

Additional discussion in the chat box:

Al Clark: Maybe just limit it to where there's ISO-1 fire service?

Rory Stolzenberg: Table 1006.3.2(1) has a limitation of 4 dwelling units per floor for any height building with a single stair

Lyle Solla-Yates, Charlottesville PC, speaking on own behalf: Mr. Stolzenberg is correct, redundant language was removed

Dannie: I am strongly in favor of that proposal

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

B1022.2.3-21

Jeff: This proposal was prepared by the DHCD staff in response to a letter from Delegate Reid and Senator Boysko to consider requiring automatic door openers in all ingress and egress paths.

David: Is in opposition to this due to additional expense as well as a lack of clarity in the exterior door definition.

Dan: Fairfax County and VBCOA Building Code Committee. The Code Committee was not in support of this. He is also in opposition to this proposal.

Jeff: Asked if there was any support for this proposal. Hearing none, this proposal will be marked as Consensus for Disapproval.

B1103.2.15-21

Dan: This is a proposal to change language. It is administrative.

Allison: Supports this proposal.

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

B1112.1-21

Dan: This proposal is a cleanup of language. It removes an exception.

Jeff: All accessible spaces have to have signage. This exception was removed since it was in conflict with the state law.

Steve S: Supports this proposal.

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

B1602-21

Jeff: Asked Paul Messplay to introduce the proposal.

Paul: This proposal comes from the proposed changes to the 2024 IBC. It was developed by FEMA and had full support from HBAV at the ICC Committee Action Hearings in Rochester. It adds design considerations for tornado

loads. The Resiliency Sub-workgroup supported it.

Steve S: Approves of this proposal. It did go through the ICC hearings in Rochester, but there are still two more steps before final acceptance.

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

B2403.6-21

Bill: This proposal is for bird-friendly design and construction. Glass or shiny materials can cause birds to crash and die. There are several different materials available as options for compliance. Many U.S. jurisdictions have adopted this already.

Steve S: AOBA and VAMA do not support this proposal.

Andrew C: HBAV doesn't support this proposal. This was researched and there was a significant increase in cost and lead time in obtaining products.

Bill: This is for commercial buildings, not small residential buildings.

Richard Potts: Jeff had to step away for another meeting. Does anyone else support this besides the proponent? Hearing no further discussion, this proposal will be marked as Consensus for Disapproval.

{BREAK: 1:53-2:00}

BF202-21

Mary Koban: This proposal was submitted to the ICC by the Fire Code Action Committee and seeks to align the definition for flammable gas with the Globally Harmonized Flammable classification system, which may be approved this year. It classifies flammable gasses to class A and class B. She typed in the chat box:

Mary Koban-AHRI: Approved changes to the IBC and IFC include: Differentiation of lower flammability refrigerants from other higher flammability gases in storage by using the classifications and labeling provisions of the 7th edition of the Globally Harmonized System of Classification and Labelling of Chemicals, and for correlation with the IMC

Mary Koban-AHRI: <https://www.iccsafe.org/building-safety-journal/bsj-technical/code-changes-on-a2l-refrigerants/>

Mary Koban-AHRI: <https://www.ahrinet.org/saferefrigerant>

Mary Koban-AHRI: AHRI Public Webinar Series: <https://www.ahrinet.org/news-events/webinars/ahri-refrigerant-webinar-series>

Andrew M: Is the intent to change the IFC that's referenced by the construction code, or the SFPC?

Mary: She's not sure. She's looking at what needs to be done in all of the states.

Andrew M: Virginia doesn't have an IFC. Where would this change go if approved?

Florin: This proposal would go into the VCC in Chapter 3 if approved. Also, if approved for inclusion in the 2021 VCC, the 2021 SFPC would require buildings to comply with the applicable building code, which would include these provisions.

Richard: Asked if there was any support for this proposal.

Mary: Asked for feedback as to why there seemed to be no support at this time.

Andrew M: The first opposition is that it would create two different definitions between the SFPC and the building code. Also, Virginia has never made a change to the IFC, which is the reference standard. Lastly, if there are future changes to the IFC or the IBC, those changes would come through for discussion automatically.

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

BF608.9-21

Mary: This proposal updates references to ammonia.

Richard: Asked if there was support for this proposal. Hearing none, this proposal will be marked as Consensus for Disapproval.

BF608.17-21

Mary: Ammonia will be coming out of the code, so exceptions for machinery rooms will also come out with that.

Richard: Asked if there was support for this proposal. Hearing none, this proposal will be marked as Consensus for Disapproval.

BF608.17(2)-21

Mary: Removes the exception for machinery rooms

Richard: Asked if there was support for this proposal. Hearing none, this proposal will be marked as Consensus for Disapproval.

BF911.1-21

Mary: GHS will split the flammable gasses. This table shows explosion control requirements and an exception for Class B.

Richard: Asked if there was any support for this proposal. Hearing none, this proposal will be marked as Consensus for Disapproval.

BF5003.1.1(1)-21

Mary: This proposal makes some changes to the MAQ table in accordance with the GHS.

Richard: Asked if there was any support for this proposal. Hearing none, this proposal will be marked as Consensus for Disapproval.

Mary: Asked about the change process in Virginia. Especially given that the refrigerant storage will be down by 40% by January 2024.

Richard: Described the code change process in Virginia. He noted that the Board also reviews public comments.

B3005.4-21

Richard: The proponent was not on the call, so the floor was opened for discussion.

Dan: VBCOA Building Code Committee. This section was amended in the VCC. When it was changed in the IBC, that change wasn't carried forward. This adds in IBC language for exceptions. He supports this proposal.

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

B3006.1-21

Dan: This proposal is to fix a broken link that was created when a change was made in Chapter 1. The charging statement language was brought back into the code without making a requirement.

Andrew M: Supports this proposal.

Richard: Asked if there was any opposition. Hearing none, this proposal will be marked as Consensus for Approval.

B3007.6-21

Dan: This change would not be necessary if B3006.1-21 passes.

Richard: Asked if he wants to withdraw now, or wait for the Board to review.

Dan: They can let the Board know it's not required if the other one is approved.

Richard: He asked if there was any support for this proposal. Hearing none, this proposal will be marked as Consensus for Disapproval.

B3008.1-21

Richard: This proposal only deletes the word "all".

Florin: There's an existing Virginia amendment which requires all those elevators to comply with the provisions of this section. The 2018 IBC was changed to provide a method of calculating the minimum number of elevators required to comply with this section. That created a conflict between the existing Virginia amendment and the 2021 IBC changes. Deleting the word "all", eliminates the conflict between the existing Virginia amendment and the 2018 IBC provisions.

Richard: Asked if there was any support for this proposal.

Dan: Supports this proposal.

Richard: Asked if there was any opposition for this proposal. Hearing none, this proposal will be marked as Consensus for Approval.

B3302.4-21

Andrew M: This proposal is to Chapter 33 of the VCC related to fire prevention during construction. There was construction language removed from the SFPC, so it was put here. There's also an editorial change about completion before occupancy. Finally, it looks at the 2021 IBC water supply for fire protection. It moves the water supply requirements from the VCC to the SFPC.

Allison: Supports this proposal.

Florin: This proposal was supported by the SFPC Sub-Workgroup.

Richard: Asked if there was any opposition? Hearing none, this proposal will be marked as Consensus for Approval.

AD75-21

Richard: This proposal adds a footnote that references compliance with Chapter 45 of Title 59.1 of "The Amusement Device Rider Safety Act."

David: Thinks this would be impossible to enforce, unless the code official is present constantly while the ride is in use. He doesn't think it's a good code change.

Dan: Agrees with David.

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

IB120-21

Richard: This proposal is from the DHCD staff.

Thomas King: Changed #2 from the building code official "may" approve to "shall" approve.

David: Wants to be clear that item #2 says "shall" and not "may".

Richard: This proposal will say "shall."

David: Was looking at a document that was included with the agenda and still said "may". He asked if the Building Official "shall" approve or if the Building Official "shall" approve in accordance with the USBC.

Florin: The original intent was to allow the Building Official two choices. Originally, when the word "may" was used, "shall" was suggested at the Workgroup in April, because "may" is not enforceable language. What is on the screen now is a change from the original, but it's not actually a floor modification. Florin typed in the chat box:

Florin Moldovan - DHCD: Current IBSR language: https://codes.iccsafe.org/content/VRGC2018P1/virginia-industrialized-building-safety-regulations#VRGC2018P1_Pt03_c012

David: Is in opposition to this proposal with the word "shall".

Steve S: Wants to go forward with Consensus for Approval using "shall". He was the one who requested the word change at the prior meeting.

Allison: Likes "may" approve. "shall" approve is a problem for her. Shall "review" might be better.

Jeff: DHCD thought "may" was good but the concern was that it gives 2 paths. One is only applicable if the Building Official approves it. However, staff is ok with keeping "may".

Steve S: Agrees with Jeff, the problem was if option 2 was taken, "shall" would be required.

David: The first part of the charging language requires something. In the next part, "shall" is ok then.

Jeff: The option is up to the Building Official. They can go back to option 1, which puts it back on the building owner to hire the CAA to review the building.

Dan: Has the same concerns. It sounds like it ties the hands of the Building Official. However, looking at the charging statement again, he gets it. Yet, he does see Building Officials getting upset over the word "shall".

Jeff: what if option #2 says Building Official "approves" in accordance with USBC instead of "shall" approve?

Dan: That's better.

Jimmy: Thinks that is a good suggestion.

Jeff: typed in chat box:

Jeff Brown - DHCD: 2. The Building Official approves the unregistered.....

Steve S: Doesn't see the difference between Building Official approves or Building Official shall approve.

Jeff: It's not different, but the word shall is removed, so that it doesn't bother anyone.

Paula: typed in the chat box:

Paula Eubank: 2. ...or the unregistered building shall be approved by the Building Official in accordance with the USBC.

Jimmy: The charging statement does give options, and when one is chosen, that shall be done. It seems fine like it is. He doesn't care either way, as long as it goes through.

Linda: Typed in the chat box:

L Hale, VFPA, Arup: The building is found to be in compliance with the USBC and the Building Official approves the unregistered building....

Paula: Typed in the chat box:

Paula Eubank: leading with the unregistered building is more consistent with the language.

Jeff: Asked the group what they were thinking.

Dave: The original is good. It's correct when seen in light of the charging statement.

Steve S: Is ok with the original change to "shall" as proposed.

Jeff: Asked if there was any opposition to "shall" as written.

Allison: Is ok with it because of the charging statement. It only gets to "shall" if that option is used.

Dan: Is ok with it saying "shall".

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

Next Steps:

Jeff: Thanked everyone for their participation. The meeting summary will be sent out as soon as it is ready, the recommendations will be updated on cdpVA and the summary report with the proposals will be sent to BHCD in September.

General Stakeholder Workgroup Meeting – VEBC Proposals
June 8, 2022 - 9:00 a.m. – 11:00 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*

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:

Allison Cook: *Virginia Building and Code Officials Association (VBCOA)*

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

Andrew Grigsby: *Viridiant*

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

Ben Rabe: *New Buildings Institute (NBI)*

Christina Jackson

Daniel Willham: *Fairfax County; Chair of VBCOA Building Code Committee*

David Beahm: *Warren County*

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

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

John Armstrong: *Dominion Energy*

Justin Perry: *Dominion Energy*

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

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

Paula Eubank: *FEMA*

Rebecca Quinn: *FEMA*

Richard Grace: *Fairfax County Land Development Services; Chairman of Virginia Plumbing & Mechanical Inspectors Association (VPMIA)*

Sarah Thomas: *Virginia Association for Commercial Real Estate*

Scott Lang: *Honeywell Fire*

Shahriar Amiri: *Arlington County*

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

William (Bill) Penniman: *Sierra Club*

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 stay muted unless speaking, and to let the group know who they represent as they speak to a proposal.

Paul Messplay: 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, carry over, and withdrawn.
- May 1st 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.

EB604-21

Shahriar Amiri: This is a continuation of a proposal that was approved in yesterday's General Workgroup (VCC) meeting. It addresses potential hazards associated with lithium ion energy storage systems (ESS). It is from the 2021 IFC Section 1207, and two proposals were broken out into the VCC and the VEBC. The VCC proposal was heard yesterday. There was a modification in yesterday's approved proposal. He typed it in the chat box to add it as an exception to this proposal via floor modification:

Shahriar Amiri, Arlington County: Lead-acid and nickel-cadmium battery systems that are designed in accordance with IEEE C2, used for DC power for control of substations and control or safe shutdown of generating stations under the exclusive control of the electric utility, and locations outdoors or in building spaces used exclusively for such installations shall not be required to comply with this Section.

Steve Shapiro: AOBA and VAMA are in opposition to this proposal.

John Armstrong: Dominion Energy. Supports this proposal with the floor modification.

Sarah Thomas: Virginia Association for Commercial Real Estate. In opposition to this proposal.

Bill Penniman: This is mostly a permitting requirement. He asked Shahriar if this proposal would apply to single family or townhouse homes.

Shahriar: It is not meant to apply to single family dwellings. He's confused about objections to this proposal, since yesterday's proposal was approved.

Allison Cook: Supports this proposal.

Linda Hale: VFPA also supports this proposal.

Andrew Grigsby: Also wonders why there was objection to this proposal.

Shahriar: This doesn't require retrofitting, only to maintain ESS installed according to the proposal approved yesterday.

Jeff: Confirmed that this does not apply to one- or two-family residential dwellings.

Bill: Proposal 1102 has an exception for one- or two-family dwellings. He would like to add that to this proposal as well.

Shahriar: Typed an exception into the chat box to exclude one and two family dwellings:

Shahriar Amiri, Arlington County: This Section does not apply one and two-family dwellings.

William Penniman: Exception: Detached one- and two-family dwellings and townhouses.

David Beahm: Representing himself. There should not be an exception for residential because it might set a precedent that would cause exceptions to all proposals. It should also be removed from proposal 1102.

Andrew Clark: If he could change his vote from yesterday, he would vote no. He votes no on today's proposal because he does think this should be based on state-wide areas, since jurisdictions are not all like Northern Virginia and Maryland.

Shahriar: Said it was based on various Virginia jurisdictions.

Andrew C: Can't identify any people from the construction industry or builders from any jurisdictions who were involved in this.

Bill: Still concerned about exemption for residential single family homes and one- and two-family townhomes.

Jeff: Chapter 1 outlines that the code is not applicable to residential.

Bill: Still has the same concern that it should be specified in this proposal. If he were to put in a Tesla wall battery in his garage, for example, it would be in conflict with this.

Dan Willham: Suggested adding something to the reason statement, saying that it doesn't apply to residential.

Florin and Richard: Typed in the chat box:

Florin Moldovan - DHCD: VEBC scoping provisions as they relate to R-5: <https://codes.iccsafe.org/content/VEBC2018P2/chapter-1-administration>

Richard Potts: 102.2.2 Reconstruction, alteration, or repair in Group R-5 occupancies. Compliance with this section shall be an acceptable alternative to compliance with this code at the discretion of the owner or owner's agent. The VCC may be used for the reconstruction, alteration, or repair of Group R-5 buildings or structures subject to the following criteria: 1. Any reconstruction, alteration or repair shall not adversely affect the performance of the building or structure, or cause the building or structure to become unsafe or lower existing levels of health and safety. 2. Parts of the building or structure not being reconstructed, altered, or repaired shall not be required to comply with the requirements of the VCC applicable to newly constructed buildings or structures. 3. The installation of material or equipment, or both, that is neither required nor prohibited shall only be required to comply with the provisions of the VCC relating to the safe installation of such material or equipment. 4. Material or equipment

Jeff: The DHCD staff also had some questions about processing this proposal, which were already sent to Shahriar.

Shahriar: He's still working through the questions, but he defers to the DHCD staff to work out the issues related to the section numbering.

Jeff: The DHCD staff will review the proposal for changes needed, if any, before the BHCD reviews the proposal.

Jeff: Richard posted information from Chapter 1 related to residential occupancies and Shahriar posted the exception about utility substations. Asked Shahriar if there are any other modifications.

Bill: Wants it to be clear that residential is excluded.

Shahriar: Will include that as an exception.

Justin Perry: Dominion Energy. Doesn't want the utility exception placed under #5, since it doesn't only apply to 604.1.

Shahriar: Since 604.1 is a charging statement, it would apply to the rest of 604.

Jeff: Likes it placed after #5, but not "under" #5. It would be in line with the main charging statement.

Jeff: Hearing no further discussion, this proposal will be marked as Non Consensus. Shahriar will include the two floor modifications.

EB202-21

Jason Laws: Chesterfield. This is a proposal for an editorial change to remove the word "accessibility".

Jeff: Asked for opposition or support.

Dan: Speaking for himself, it looks like a good cleanup. He supports this proposal.

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

EB404.3-21

Jason: This proposal is for an editorial change, which was approved at the national level. It cleans up the language to clarify the requirements.

Allison: VBCOA supports this proposal.

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

EB102.2.2(2)-21

Jeff: The proponents were not on the call. The floor was opened for discussion.

Allison: Wonders if #3 is really an exception. It doesn't sound like it is.

Jeff: This proposal undoes another proposal that was voted as Consensus for Approval from the April Workgroup meeting, requiring 10 year battery smoke alarms.

David: Is opposed to this proposal.

Linda: It sounds like the 10 year battery in the smoke alarm could be replaced, which is not true. She opposes this proposal.

Jeff: Asked if there was any support for this proposal. Hearing none, this proposal will be marked as Consensus for Disapproval.

EB103.9-21

Paula: Speaking on behalf of RC Quinn Consulting and FEMA and representing the Resiliency Sub-Workgroup. This is a companion proposal to 103.4 in the VCC. Her notes show that they requested information from the DHCD staff if a registered design professional (RDP) or engineer could perform land surveys or give elevation certificates.

Jeff: Is not aware of any such follow up. It can be looked into before the proposal goes to the BHCD. Would the USBC have authority in this, or is it outside of the scope?

Paula: That's needed. The VCC language retained the RDP language. This proposal identifies a land surveyor, RDP or civil engineer.

Jeff: Asked if there was discussion about, support for or opposition to this proposal.

Paula: Asked if this will be correlated with the 103.4 proposal in the VCC, which wasn't on yesterday's schedule.

Jeff: DHCD staff will look into it.

David: Is opposed to this due to the specific language. He thinks noting an RDP is good enough.

Steve: Speaking for himself, as a member of the Sub-Workgroup, the big discussion was if an architect can do the certificate. He's not sure where that landed.

Jeff: DHCD staff goes through the proposals before they go to the BHCD to discover and discuss any legal concerns with the AG.

Paula: She isn't opposed to a friendly modification of the language. She didn't see any prohibition for an architect in any of the applicable codes. It would still be good for DHCD to look into it further.

Jeff: DHCD staff will look into any conflicts or issues raised.

David: If DHCD verifies the language and what is permitted or prohibited, he would be more comfortable. He removes his objection based on DHCD's assurances of looking into this further.

Jeff: There was not an official proposal submitted for 103.4 in the VCC.

Paula: Will check back through her notes.

Paul: The Sub-Workgroup discussed a proposal to 103.4 in the VCC, the final decision was non consensus, so it did not move forward as an official proposal. He typed a link to the meeting summary in the chat box:

[https://www.dhcd.virginia.gov/sites/default/files/Docx/code-development/resiliency-sub-workgroup-meeting-summary-04-27-22%20\(1\).pdf](https://www.dhcd.virginia.gov/sites/default/files/Docx/code-development/resiliency-sub-workgroup-meeting-summary-04-27-22%20(1).pdf)

Jeff: The result of a vote in support or opposition resulted in only thumbs up. With no opposition, this proposal will be marked as Consensus for Approval, providing DHCD contacts the AG to verify that there is no legal conflict.

EB304.3.1-21

Allison: This proposal is editorial in nature, providing the correct pointer to the VRC.

Steve: Supports this proposal.

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

{BREAK: 10:17 – 10:22}

L Hale, VFPA, Arup: Typed in the chat box:

For EB304.3.1-21 is there an R310.4.4 in the 2021 VRC? I am seeing a R310.4 in the 2018 as the section

Paul Messplay: Responded in kind: Linda - Yes. R310.4.4 exists in the '21 residential code

EB805.2-21

Ben Rabe: This proposal requires that existing duct work serving new equipment in additions or alterations is tested. This proposal was supported by the Energy Sub-Workgroup.

Steve: AOBA and VAMA are opposed to this.

Jeff: The DHCD staff found that Section 601.4.7 in the VEBC limits testing in ducts that are not extended more than 40 feet. Chapter 8 and Chapter 6 may be in conflict since this has no exception to less than 40 feet of extended ducts. There may need to be a reference in this Section.

Richard Potts: Typed in the chat box:

601.4.7 Ducts. In R-5 occupancies, where ducts from an existing heating and cooling system are extended, such duct systems with less than 40 linear feet (12.19 m) in unconditioned spaces shall not be required to be tested in accordance with Section R403.3.3 of the VECC.

Ben: He is fine with the DCHD staff correlating the Chapters as needed.

Andrew Grigsby: He sees new heat pumps being installed and people are still not comfortable, because there is a problem in the duct work. Anything that addresses ductwork is beneficial. He is in full support of this.

Bill: Representing the Sierra club. He supports this proposal.

Allison: Is in opposition to this proposal. Duct leakage is a concern, but it puts too much work and expense on the owner to find leaks. If they want to, that's one thing, but should not be a requirement.

Andrew Clark: agrees with Allison. It should be the consumers' choice. He is opposed to this proposal.

Richard Grace: VPMIA. He agrees with Allison, and he opposes this proposal.

Andrew Grigsby: Reducing duct leakage doesn't always mean a lot of time, effort and expense. Some fixes are simple and inexpensive.

Mike O'Connor: Typed in the chat box: The problem is that heat pumps do not provide sufficient heat in cold weather locations. Virginia Petroleum and Convenience marketers and Virginia Propane Gas Associations opposed.

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

EB805.3-21

Ben: Similar to the prior proposal, this proposal would require additions to meet the requirements of lighting, mechanical and water heating required by base code.

Steve: AOBA and VAMA are opposed to this.

Allison: Is opposed to this proposal.

Bill: Supports this proposal.

Richard Grace: VPMIA opposes this proposal.

Andrew Grigsby: Supports this proposal.

Allison: This proposal increases costs of construction, as stated in the Cost Impact statement.

Andrew Grigsby: The increased cost of construction is recovered several times over in time.

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

EB805.3(2)-21

Ben: This was written as an energy proposal to update the existing building section of the energy code, which Virginia doesn't adopt. This proposal requires the same testing for alterations as additions (in the prior proposal). This is a cost-effective way to check on duct efficacy.

Steve: AOBA and VAMA are in opposition to this proposal.

Allison Cook: Speaking for herself, she is opposed to this. Forced energy efficiency upgrades should not prohibit people from making upgrades for life safety reasons.

Richard Grace: For VPMIA. He agrees with Allison and is opposed to this proposal.

Bill: Sierra Club supports this proposal.

Mike O'Connor: Typed in chat: Virginia Petroleum and Convenience marketers and Virginia Propane Gas Associations opposed.

Richard Potts: Wanted to let the group know that there will be additional Energy proposals from Ben reviewed in tomorrow's Workgroup meeting. Those proposals were submitted later than the ones heard today, and they do have floor modifications.

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

EB1102-21

Scott Lang: This proposal comes from the 2024 IFC. It doesn't belong in the Virginia fire code, so it's being proposed to the VEBC. It would require people to look back at older systems (installed pre-2018) to ensure that they are safe.

Jeff: The SFPC Sub-Workgroup did not support this proposal when it was presented in that meeting.

Steve: Is opposed to this proposal, especially the retroactive requirement.

David: Is opposed to this proposal. The language is not appropriate for Virginia.

Justin: Dominion Energy. He doesn't like the word "early". He could support it without the word "early" in 1102.1.1, but not otherwise.

Scott: Doesn't have any objection to removing the word "early".

Andrew Grigsby: Supports this proposal.

Jeff: Asked Scott if he wanted to amend the proposal and remove the word "early".

Scott: Agrees to remove the word "early" from 1102.1.1 as a floor modification.

Jeff: Typed in the chat box: Modification to remove 2 instances of the word "early" from section 1102.1.1

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

EB1201.7-21

Jeff: This proposal is a DHCD staff cleanup of language. A sentence that's not applicable was removed.

Steve: Supports this proposal.

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

EB1209.1-21

Andrew Milliken: This proposal correlates water supply requirements for fire prevention during construction across the codes and provides separation between construction areas as applicable.

Linda: Supports this proposal.

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

Next Steps:

Jeff: Thanked everyone for their participation. There will be more Workgroup meetings this week and next week. All are welcome to join, yet there may be some overlap. The DHCD staff will submit the proposals with a summary to the BHCD in September for their decisions.

General Stakeholder Workgroup Meeting – Energy Proposals
June 9, 2022 - 9:00 a.m. – 2:00 p.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*

Paul Messplay: *Code and Regulation Specialist, 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 Clark: *Home Builders Association of Virginia (HBAV)*

Andrew McKinley: *American Institute of Architects (AIA)*

Andrew Klein: *Self Storage Association*

Ben Rabe: *New Buildings Institute (NBI)*

Brett Vassey: *Virginia Manufacturers Association*

Chelsea Harnish: *Virginia Energy Efficiency Council (VAEEC)*

Christina Jackson

Christopher Fox: *Van Metre*

Daniel (Dan) Willham: *Fairfax County, Chair of VBCOA Building Code Committee*

David Beahm: *Warren County*

Eric Lacey: *Responsible Energy Codes Alliance Chairman (RECA)*

Jack Avis: *Avis Construction*

Jeff Mang: *PIMA*

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

John Olivieri: *HBAV, Virginia Beach*

KC Bleile: *Viridiant*

Laura Baker: *Responsible Energy Codes Alliance (RECA)*

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

Matt Benka: *Virginia Contractor Procurement Alliance (VCPA) and MDB Strategies*

Mike Hamilton: *Arlington County*

Neil Palmer: *Century Construction*

Paige Werner

Paula Eubank: *FEMA*

Rebecca Quinn: *RC Quinn Consulting for FEMA*

Richard Grace: *Culpeper County; Chairman of Virginia Plumbing & Mechanical Inspectors Association (VPMIA)*

Ross Shearer: *Vienna, Virginia resident*

Sarah Thomas: *Virginia Association for Commercial Real Estate*

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

William (Bill) Penniman: *Sierra Club Virginia chapter*

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.

Paul Messplay: 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, carry over, and withdrawn.
- May 1st 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.

EC-C401.2(2)-21

This proposal was withdrawn.

EC-C403.7.7-21

Richard Grace: This proposal is to cleanup and clarify existing requirements. The language “shall not be required” was changed to say “shall not be installed”.

David Beahm: Supports this proposal.

Dan Willham: Supports this proposal.

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

EC-C405.13(2)-21

Jeff: This is a DHCD staff proposal, which was drafted in response to a letter from Delegates Reid and Bulova. They asked for discussion and consideration regarding EV space requirements.

Steve: AOBA and VAMA are in opposition to this proposal and all the other EV proposals. There has been a lot of discussion around these EV proposals with no agreement as of yet. Also, after hearing from Shahriar Amiri in yesterday’s Workgroup meeting, there are additional concerns around fire safety that still need to be addressed and integrated with the other EV proposals.

Andrew Clark: Agrees with Steve’s comments. Even though EV may be the way to go in the future, more discussion is needed to ensure that the codes address all concerns. HBAV is opposed to this proposal.

KC Bleile: Spoke with utilities suppliers regarding load letters for projects already in process. They agreed to not change the load letters in those situations. She would like to see the EV proposals all state that exception.

Andrew Clark: Utility load letters for projects in process was one of the builders’ concerns as well as overall site planning.

David: Is in opposition to this proposal. He also agrees with Steve and Andrew about unanswered concerns, including accessible parking.

Sarah Thomas: Virginia Association for Commercial Real Estate is opposed to this proposal. She’s also in agreement with what the other group members just said.

Ben: NBI. He supports this proposal as well as the other EV proposals.

Bill: There are several EV proposals, and concerning the ones he put forth, he amended those to include EV ready, capable and installed spaces as a way to compromise. He supports this proposal as well. He thinks something should go forward around EV spaces.

Dan Willham: Fairfax County. Supports the concept in general. However, the 2021 ICC appeals board ruled this out of scope since it was not actually energy conservation. If this does go forward, they would have to determine

where to put it, considering that it isn't an energy-conservation measure.

Bill: To Dan's point, if this doesn't go into code somewhere, localities are free to do whatever they want.

Eric Lacey: Speaking for himself, as a Virginia resident, he doesn't think it is a good idea to wait 3 more years to implement EV readiness. The ICC appeal was more of a technicality. Electric Vehicles are not just the future, they are here now. It will be harder to address as more time goes by.

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

EC-C405.10-21

Bill Penniman: This proposal is for EV readiness in multi-family residential dwellings. There would be 15% EV installed spaces, 15% EV ready spaces, and the rest EV capable spaces. He is willing to be flexible on the numbers if something can be agreed on. However, in light of the prior discussion regarding proposal EC-C405.13(2)-21, he knows this will be marked as non-consensus, so he will yield the floor.

Steve: Obviously, AOBA and VAMA are opposed to this proposal as well. He was working closely with Bill to come to an agreement, and thought it was only about numbers, until he heard Shahriar Amiri present the dangerous situations that could arise from using these EV charging stations in yesterday's Workgroup meeting. Fires taking several hours to extinguish, using thousands of gallons of water and creating hazardous runaway. He thinks that there is a lot more work to be done before coming to a decision.

Bill: He did hear about the concerns raised by Shahriar. He understood them to be mostly in underground parking. He hopes there can be a quicker resolution pertaining to outdoor, open and unattached parking areas.

David: Still wants to raise the issue of accessible parking. That should not be left out of the discussion.

Bill: Agrees with David and that will be taken into account.

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

EC-C405.11.1-21

Bill: This proposal is directed at larger commercial parking venues such as office buildings and schools. There should be some kind of proposal going forward, even if there are only incremental steps towards EV readiness. He thinks that without something in the codes, localities are free to do whatever they want. He will also consider this to be Non Consensus, the same as the other EV proposals.

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

EC-C405.13(3)-21

Ben: This EV readiness proposal is going through the 2024 ICC process. They would like to continue to make progress so that at least one EV readiness proposal goes forward.

David: Reiterated that accessible parking should be considered.

Steve: AOBA and VAMA are opposed to this proposal.

Andrew Clark: HBAV is also opposed to this proposal.

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

EC-C407.6-21

Bill: This is a proposal that would activate the appendix for zero energy construction requirements if the builder declares that the building is zero energy. Eric Lacey provided a modification to propose alternative language.

Eric: This language pre-approves appendix RC and appendix CC for compliance when making buildings zero energy.

David: Is opposed to this proposal. He doesn't think a code official could enforce this. How the builder advertises the dwelling would be considered a buyer beware situation.

Steve: Is opposed to this proposal. He asked Eric if the language he suggested confirmed the residential section and added compliance with appendix CC as another option.

Eric: Yes. Appendix CC also includes the base code compliance.

Steve: There are exceptions, but the language shown doesn't include those exceptions.

Eric: Appendix CC would be more stringent, since it applies to zero energy buildings. He asked Steve what kind of exceptions he was concerned about.

Steve: Alterations and Additions.

Eric: This is only for new buildings.

Andrew Clark: HBAV is opposed to this, and considers it to be a truth in advertising issue.

Bill: Understands the opposition around the truth in advertising issue. He asked if those with that opinion would also be opposed to the language Eric suggested, which really only activates the appendices.

David: Asked Bill to clarify the question. There's no provision in the VCC to designate a building as anything anywhere. A builder could say its net zero, but it won't be recorded on the certificate of occupancy and won't be enforceable by the Building Official.

Bill: He understands the objection. He asked again to consider the language Eric proposed instead of what he originally proposed, which is different language.

Eric and Linda: typed in the chat box:

Eric Lacey: David, it seems that your concerns are mostly about the original proposal -- Do you have specific concerns about the revised proposal on the screen? Would appreciate the feedback.

L Hale, VFPA, Arup: The alternative is not mandatory and allows for options as industry elects to accept energy efficiency. I am in support

Eric: Looking at R401.2, there are 3 compliance paths; 401.2.1, 401.2.2 and 401.2.3. Instead of adding a fourth Section with another compliance path he added an exception to point to the appendix. It does give another option if someone wants to use it. It doesn't address truth in advertising.

David: Is in opposition to both the original and the change submitted by Eric. He thinks the change submitted by Eric is completely different than what Bill submitted, and it should not be accepted as a floor modification. He asked if the code would allow the builder to build something according to the requirements in the appendix, without making the proposed original change or the modified change.

Eric: When the 2021 IECC goes through, the appendix will be there. This proposal gives a shortened pathway.

David: The Building Official is still not required to list compliance on the Certificate of Occupancy and only inspects for minimum requirements in the code. This would be something done in addition to that. He asked if someone could build these types of buildings without having any oversight from the Building Official.

Eric: He would have to defer to a Building Official. However, he doesn't think it is any different than when a builder seeks a permit to build via the prescriptive or performance path.

David: Is still in opposition to the proposal and the suggested change.

Ben: Typed in the chat box:

Ben Rabe | NBI: I am having connectivity issues, but wanted to state NBI's support for this proposal.

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

EC-C502.3-21

Ben: This proposal applies the credit section to additions. It was supported by the Energy Sub-Workgroup.

Steve: Was there a floor modification on this?

Richard: There was a modification to correlate the language better with the existing building code.

Steve: Is in opposition to this proposal.

Bill: Supports this proposal.

Eric: RECA supports this proposal. He's disappointed with the lack of support. When they make proposals to the new building code they get told that the existing buildings are more in need of energy updates. This proposal doesn't make significant changes, it only asks for some changes with many options available when making additions or alterations.

Steve: Doesn't think that this proposal is in line with the purpose of the existing building code. Additions and alterations should not have to comply with anything additional than what is already there. If the owner wants to do more, that should be their choice.

Andrew Clark: Asked if the floor modification was what they were looking at on the screen.

Jeff: Yes, the modification to this proposal consisted of relocating the proposed changes from the energy code to the VEBC.

Andrew Clark: Agrees with Steve, it seems to go against incentivizing existing building rehabilitation.

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

{BREAK: 10:19-10:25}

EC-C503.3.2-21

Ben: This proposal would apply the commercial sizing guidelines to alterations and prevents oversizing of HVAC systems to save energy.

Jeff: This proposal was supported by the Energy Sub-workgroup. The modification is to move it from the energy code to the VEBC.

Eric: This clarifies that the system should be appropriately sized, which will help with performance and endurance.

Steve: Supports this proposal. It looks like it would provide for a cost savings.

Bill: Sierra club supports this proposal.

Andrew Clark and KC: Typed in the chat box that they support this proposal.

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

EC-C1301.1.1-21

This proposal was put on the agenda in error. It has been withdrawn by the proponent.

EC-C1301.1.1(2)-21

Jeff: This is a DHCD staff proposal stemming from legislation requiring the BHCD to consider energy requirement exemptions for buildings with occupancy classifications of Groups F, S and U.

Eric: Is opposed to this proposal, which creates very broad exceptions for buildings.

Bill: Also opposes this proposal. It doesn't make sense. There is no energy efficiency or cost savings.

Matt Benka: Supports this proposal to see it move forward to the BHCD for their consideration.

Brett Vassey: Supports this proposal. He asked what the procedure is for the Board to vote on proposals.

Jeff: The Board could look at consensus and non-consensus proposals, but would usually vote on consensus proposals in blocks.

Jack Avis: Also supports the proposal to keep it moving forward.

Ben, KC, Chelsea and Paula: All typed in the chat box that they are opposed to this proposal.

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

EC-Appendix CB-21

Jack Avis: This proposal addresses building envelopes in F, S and U Occupancies, which are adding undue cost to developers and building owners. It makes Virginia less competitive with North Carolina, which doesn't have the same requirement. There have been concessions in working with the stakeholders, they have tightened up some requirements and they have come closer to consensus.

Eric: Is opposed to this proposal. There are alternatives in the code already that should address many of the concerns being raised. There are two other scenarios allowed in the IECC for low energy buildings and for buildings that aren't conditioned. ASHRAE 90.1 also has an exception to Section 5.1.2.3 for semi-heated spaces, which can be used. He thinks this code change is unnecessary. North Carolina is the only state that has made exemptions of this type.

Chelsea: Typed in the chat box:

Chelsea Harnish: VAEEC is opposed to EC-Appendix CB-21 for all of the reasons stated by Eric Lacey. We do appreciate the proponents meeting with us and would be happy to continue the conversation.

Brett: Is in support of this proposal. This provides more options and flexibility in factory spaces and allows Virginia to be more competitive. There is also some economic development flexibility.

Bill: Is in opposition to this proposal. Agrees with Eric and thinks it will bring the code back 3 decades for these building types. He doesn't think it would help economic development and it would hurt individuals working in the buildings.

Matt: Virginia Contractor Procurement Alliance. Virginia is less competitive in this space. It costs Virginia more to put in things that are not required in North Carolina.

Ben: Agrees with Bill and Eric. He is opposed to this proposal.

Andrew Klein: Self Storage Association. Supports this proposal. The options Eric spoke to are not good ones, as

they have minimum insulation requirements.

Andrew Clark: He often hears about the negative impacts of proposals on things like safety and well-being. He asked if there were some reported instances of harm since North Carolina made a change.

Eric: Doesn't know about people at risk in North Carolina. Thinks that North Carolina is the only state that has done this. He does think that if buildings are less energy efficient, that there is an overall health risk. Responding to Andrew Klein, he noted that there are no mandatory envelope requirements that have to be met if the low-energy building or semi-heated building provisions are followed

Bill: The long-standing legal standard is that if the code is modified to save money, it should remain consistent with the international codes.

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

EC-C1301.1.1.1(2)-21

Bill: This is a proposal to adopt the 2021 IECC in full and is focused on new construction.

Steve: AOBA and VAMA are opposed to this proposal.

Andrew Clark: HBAV is opposed to this proposal. It would add a significant cost to housing for the consumer. He also thinks this may be more aspirational than practical. Virginia has an almost perfect score on residential and commercial energy efficiency in the ACEEE report.

Eric: Is in support of this proposal. Virginia is capable of meeting the requirements of the model energy code. He disagrees with Andrew. Virginia doesn't get an almost perfect score on the ACEEE report, and Virginia is specifically behind in the residential category.

Ben: Supports this proposal.

Andrew Clark: When the ACEEE report is broken down, utility programs and transportation policy brings the Virginia score down. The score is better for building and energy codes.

Bill: The DOE report supplied by Andrew in cdpVA does show that consumers are energy cost burdened, even higher income residents and buyers of new construction.

Andrew Clark: The DOE data shows that most cost burden is found under 30% AMI. Adding up-front costs are not going to help anyone over the next few decades, when they can't afford to purchase the home.

Jimmy Moss: Speaking for himself. He oversees affordable housing for people at 80% AMI and below in South West Virginia. They do attempt to provide energy efficiency, but they are very limited due to the costs. He opposes this proposal.

Brett: Typed in the chat box:

Brett Vassey (Virginia Manufacturers Association): Virginia's per capita BTU energy use has dropped since 2005 - <https://vaenergyconsumer.com/wp-content/uploads/2021/12/2021-Virginia-Natural-Resources-Scorecard.pdf>. Virginia ranks #20 in the US. BTU's per GDP also fell and Virginia ranks #17 in the US.

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

REC-R402.1.2 (1)-21

Laura Baker: This proposal would bring the Virginia code up to the 2021 IECC standards. There have been no updates to this Section in Virginia since 2012.

Andrew Clark: HBAV is in opposition to this proposal. It seems to be more aspirational than establishing a baseline.

Christopher Fox: Van Metre. There would be over 48 lumber products that would need to be changed, including the design plans. Changing from 2x4 to 2x6 lumber would be difficult because the lumber not readily available, and is more costly. It would cost about \$10k more per house to comply with this proposal.

John Olivieri: HBAV Virginia Beach. He has been building affordable housing for many years. His costs could be between \$10-18k more per house because of this proposal. Some of the upgrades needed would never allow for recuperating the costs. There are diminishing returns. Also, some of the things required are extremely difficult to get today.

Bill: Supports this proposal. There has been an attempt to bring this change for many cycles, and the home builders consistently oppose. He likes the idea of phasing things in, which is what the IECC has done, and Virginia has fallen behind. This doesn't require 2X6 lumber and HVAC is not even addressed here. Maryland has been

doing this and they make affordable housing.

Dan: Fairfax County. Supports this proposal.

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

REC-R402.1.2 (2)-21

Bill: This proposal is essentially the same as the previous one (REC-R402.1.1.2 (1) from Laura Baker.

Andrew Clark: HBAV is opposed to this proposal.

Laura: Supports this proposal.

Dan: Fairfax County. Supports this proposal.

Chelsea Harnish: Typed in the chat that VAEEC supports wall insulation proposals.

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

{LUNCH 11:46am – 12:45pm}

REC-R402.4-21

Bill: This is a proposal to bring the Virginia code up to the 2012 IECC with respect to air leakage. It would delete some exceptions and bring the requirement down from 5 ACH to 3 ACH. Air changes are important because 25% of heating and cooling energy costs are due to the number of air changes. Tighter seals also help with insect intrusion. The primary objection is not cost of construction, it's closing the walls before testing occurs and having to open them up again.

Laura: RECA. This proposal is similar to her own, REC-R402.4.1.2, which is next on the agenda. It eases compliance where builders found it more difficult. The 2021 IECC sets the prescriptive requirement to 3 ACH, but the backstop requirement to 5 ACH, which allows builders to trade-off air tightness and have improved performance. There's also an alternate ACH calculation for small and attached homes, which eases some compliance concerns. While this would tighten up the prescriptive requirements, and it would also create exceptions to help with compliance.

Chris: The VRC 2018, which takes effect 7/1/22, adds a blower test for single family homes to see if they can get to 5 ACH. There are costs associated with tightening up the house. Also, if the envelope is too tight, it could be unhealthy. Foam insulation helps get to 5 ACH, but it is more expensive to use.

Andrew Clark: HBAV is opposed to this proposal. Blower door tests and 5 ACH was reached last year. He agrees with Chris. He doesn't agree with Bill that tighter homes are healthier. Carbon Monoxide poisoning is associated with houses that are too tight.

KC: Not speaking in support or opposition. Fresh air is a better strategy than envelope tightening. Hundreds of projects are now achieving this ACH level without using spray foam insulation. Looking at air sealing helps.

Ben: Using traditional building methods, foam insulation is not needed. 3 ACH has been the norm in lower temperature areas for a while. Attention to air ceiling does help to achieve this.

Bill: There does need to be controlled mechanical venting. The National Association of Home Builders (NAHB) says that tighter houses leads to improved air quality and removal of moisture in enclosures.

Dan: Supports this proposal.

Andrew Clark: Some tightness is good. Too much is not good. NAHB has pushed to maintain the requirements at 5 ACH.

David: Is opposed to this proposal. He thinks that higher air changes are happening regularly due to windows and doors opening frequently. It doesn't have to happen prescriptively.

Bill: The tech note in the NAHB discussion of building strategy specifically states how to get to 3 ACH.

Ben and Laura: Typed in the chat box that NBI and RECA respectively support this proposal.

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

REC-R402.4.1.2-21

Laura Baker: This proposal is substantially similar to Bill's, which was just presented.

Andrew Clark: HBAV is opposed to this proposal.

Bill: Supports this proposal.

Andrew Clark: Asked Laura why original testing language was stricken and replaced with "shall be conducted by

an approved third party”.

Laura: Negotiated that language in a previous discussion, but she is ok with going back to the original language.

Dan: Fairfax County. Supports this proposal.

David: Is opposed to this proposal.

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

REC-R403.1.2-21

Bill: This proposal says that electric resistance heat shall not be used as the primary heat source in both new construction and with heating source replacement in existing buildings if a heat pump can be used instead.

Andrew Clark: HBAV supports this proposal.

David: Speaking for himself. There doesn't seem to be a way to enforce this.

Bill: The way to enforce this is to install a heat pump which has electric resistance built into the unit, which would trigger during defrost or emergency heat modes.

David: Is willing to remove his objection and support this proposal after hearing Bill's description, and seeing a note to that effect in the last sentence of the proposal.

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

REC-R403.1.4-21

Bill: This proposal says that onsite combustion of fossil fuel shall not be used as a primary heat source in new residential construction.

David: You mentioned that this correlates with heat pumps. Does this say that fossil fuels cannot be used as heat source in new construction?

Bill: It would only be prohibited as the primary heat source. The alternative primary sources are electric resistance or heat pump.

David: Opposes this proposal

Andrew Clark: HBAV is opposed to this proposal.

Ben: NBI supports this proposal.

Jeff: The DHCD staff will review this and some of the other fossil fuel vs. electric proposals with the AG prior to the BHCD meeting in September.

Bill: That is fine with him. He noted that there is a provision in the code that specifically empowers the BHCD to regulate HVAC systems.

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

REC-R403.1.4(2)-21

Bill: This proposal says that an electric heat pump shall be the primary system for both heating and cooling when a central ducted air conditioning system is installed. A ductless heat pump would be installed when there is a ductless heating or cooling system. It doesn't prohibit other sources as backup systems and it doesn't apply to cooking.

David: Is opposed to this proposal because it doesn't give builders or consumers a choice.

Ben: Supports this proposal.

Andrew Clark: HBAV is opposed to this proposal. It does seem to be more aspirational than standard.

Bill: Shifting to heat pumps is one of the major approaches to limit climate change progression.

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

REC-R403.3.3-21

Laura: This proposal would change the current duct testing requirements in conditioned space to meet the 2021 IECC standards. Eric made a modification to say in 1103.3.5 that building cavities would comply with the mechanical Section 1601.1.1 of the residential code. Currently, the energy code doesn't mention building cavities used as ducts or plenums, so this modification would give guidance on that issue. It also removes an exception for duct testing within the building thermal envelope.

Andrew Clark: HBAV supports this proposal. He asked if the modification was already discussed with HBAV.

Laura: Yes, this is the one that was discussed. It eases restrictions and points to the existing residential code for guidance.

Bill: Supports this proposal.

David: Supports this proposal.

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

REC-R404-21

Bill: This proposal calls for raceways to accommodate electric in the future if combustible appliances are installed.

David: Is opposed to this proposal. It adds costs for something that may never be used.

Ben: Supports this proposal. Readiness is more cost effective than tearing out walls to install something later.

Andrew Clark: HBAV is opposed to this proposal.

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

Typed in the chat box:

William Penniman: By the way, I believe that the EV for multifamily and office were not the latest proposal that I submitted. It won't change the outcomes of non-consensus, but I would like the correct versions to be included in the package.

Richard Potts - DHCD: Bill, we will follow up with you to verify. Thanks

REC-R404.2-21

Bill: This is a proposal for solar readiness. It would require homes with roofs of 600 square feet or more, or those oriented to the south, to comply with appendix RA solar-ready provisions by putting in a conduit or raceway.

Andrew Clark: HBAV is opposed to this proposal. Something that may never be used should not be mandated. It should be up to the consumer if they want that as an option, or to buy a home that is already equipped.

Bill: If there's any question, roofs are strong enough to support solar panels today.

Ben: NBI Supports this proposal and is willing to work with HBAV to reach consensus.

Andrew Clark: Wants to know how the second exception would work for buildings that are shaded for more than 70 percent of the daylight hours. The calculation seems difficult.

Bill: It's primarily to allow flexibility for houses built in shady areas or near tall buildings. There are shade studies to calculate the measurement, and it would not come up often.

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

REC-R404.4-21

Ben: This is NBI's proposal to create solar-ready residential homes. This is going through the 2024 ICC process.

Bill: Supports this proposal.

Andrew Clark: HBAV is opposed.

Jimmy: Speaking on behalf of himself, he is opposed to this proposal.

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

REC-R503.1.2-21

Ben: This proposal was supported by the Energy Sub-Workgroup, and has a floor modification. It would prevent heating and cooling system oversizing.

Jeff: The modification was to bring it into the VEBC with the same intent as it had when proposed to the VECC.

Bill: Is in support of this proposal.

Laura: RECA Supports this proposal.

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

REC-R503.1.2.1-21

Ben: This proposal applies the same HVAC control requirements applicable to new construction, to large scale alterations.

Andrew Clark: Asked what the scope of compliance is for what must be done in R403.1 and R403.2.

Laura: R403.1 says that there must be a thermostat for each heating and cooling system, and there must be a programmable thermostat in the dwelling unit. Heat pumps must have controls that prevent supplementary electric resistance heat when the regular heating unit is in control. R403.2 says that the water heater must have a reset button or have water temperature sensing.

Florin: Typed in the chat box:

Florin Moldovan - DHCD: https://codes.iccsafe.org/content/IECC2021P2/chapter-4-re-residential-energy-efficiency#IECC2021P2_RE_Ch04_SecR403.1

Andrew Clark: Does not support this proposal. This requirement might be a disincentive for someone doing renovations.

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

REC-R1104.2-21

Bill: This proposal involves EV readiness for 1- and 2-family houses and townhouses. If parking is provided, there would be a branch circuit installed. It is inexpensive and easy to install the conduit for EV charging stations.

Andrew Clark: Currently opposes this proposal, but does think that this one has the best chance of agreement. They will continue to discuss it up until the time of the BHCD meeting in September.

David: Is opposed to this proposal due to the possibility of parking spaces being large distances from the building and wiring would be costly. Also, there is potential danger in parking in a garage and using a charging station there.

KC: Supports this proposal.

Bill: Is willing to keep working on this and hopes for a compromise before it is heard by the BHCD.

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

Next Steps:

Jeff: Thanked everyone for their participation. The proposal voting results will be updated in cdpVA. The remaining General Workgroup meetings will continue for the next few days. The BHCD meeting to decide on all proposals put forth is scheduled for September.

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 1st 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.

General Stakeholder Workgroup Meeting – VRC Proposals
June 14, 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:

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*

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

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

Group Participants:

Abigail Thompson

Andrew Clark: *Home Builders Association of Virginia*

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

Anthony Clatterbuck: *Home builder in Culpeper Virginia*

Claudia Cotton

Craig Toalson

Daniel Willham: *Fairfax County*

David Beahm: *Warren County*

Glenn Dean

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

Jeffrey Shapiro

Jimmy Moss: *VBCOA*

John Ainslie

KC Bleile: *Viridiant*

Paula Eubank: *FEMA*

Richard Grace: *Culpeper County Building Department*

Ross Shearer

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

Susan Stillman:

William (Bill) Penniman: *Sierra Club, Virginia Chapter*

Zach LeMaster

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RB113.1-21

KC Bleile: This proposal is about minimum inspections prior to concealment and is intended to align with the energy code. There was an amendment to the language. KC typed in the chat box:

KC Bleile, Viridiant: “113.3(6) Inspection of energy conservation materials, equipment, and systems.”

David Beahm: Representing himself. He is neither for nor against the language or the proposal itself. The final inspections have to be done before concealment, so the language may be unnecessary.

Andrew Clark: Agrees with David that the language may be unnecessary or overkill.

Paula Eubank: Agrees with David and Andrew that the language is unnecessary. She does like the modification in the chat better than the original sentence.

David: He is opposed to the language in the chat.

KC: Asked David how he would feel about the language if “prior to concealment” was added back in to the modified language.

David: Is opposed to adding unnecessary language in general.

KC: This currently doesn’t align with the Energy Code minimum inspections prior to concealment

David: What is in the chat, he might support if it was prior to concealment, but he doesn’t think equipment needs to be inspected before concealment.

Andrew C: Asked if the amended language is what KC typed in the chat.

KC: Yes it was, but she changed it again to read:

KC Bleile, Viridiant: 113.3(6) Inspection of energy conservation materials, equipment, and systems prior to concealment

Andrew C: This still seems too open ended and adds ambiguity to the minimum inspections. He thinks it is the discretion of Building Official to go above and beyond minimum inspection requirements.

Anthony Clatterbuck: Builder in Culpeper, Virginia. His concern is that he would have to install a complete system before concealment. It needs to be clear what needs to be inspected and what doesn’t before concealment.

KC: Typed in the chat box:

KC Bleile, Viridiant: Per the 2021 IBC:

“Energy Inspection: Inspections shall be made to determine compliance with Chapter 13 and shall include, not be limited to, inspections for: envelope insulation R- and U-values, fenestration U-value, duct systems R-value and HVAC and water-heating equipment efficiency.”

Richard Grace: Culpepper County Building Department. He doesn’t agree with this change. It would be applicable to VCC as well as the VRC.

Jeff B: Agrees with Richard. There’s not a separate administrative chapter for the VRC, so, it would be in

Chapter 1 of the USBC.

Richard: Doesn't like it in the VRC, it should be included in the VCC as well for more people to review.

David: Agrees with Richard, and is opposed to this change.

Bill Penniman: Typed in the chat box that he thinks the proposal makes sense.

Jeff: Hearing no further discussion, this proposal will be marked as Non Consensus, with the most recent version amended in the chat: "113.3(6) Inspection of energy conservation materials, equipment, and systems prior to concealment".

RB116.1-21 – Withdrawn after the discussion:

Andrew Clark: This is a proposal to change the time for a Building Official to issue a Certificate of Occupancy from five working days to two.

David: Representing Warren County. He is opposed to this proposal. The change would put a burden on staff to get it done. The part of the sentence that says any pertinent laws or ordinances includes things that could take extra time. Building Officials do try to get the certificates done as quickly as possible.

Richard: Culpeper County. Agrees with David. He thinks it is unreasonable and puts too much burden on the Building Officials.

Paula: Agrees with David and Richard that it's an unnecessary burden on Building Official.

Dan Willham: Is opposed to this proposal. If it's left at five days, it doesn't mean that the certificate can't be issued sooner if possible.

Andrew C: Asked if there was any willingness to find middle ground between two and five days.

Anthony: In order to receive a final occupancy permit, the builder has to go through the Health Department, which takes another 5 days. With so much delay, owners are losing their mortgages. Any shortening would be helpful. He supports this proposal.

David: The Building Officials also have to get approval from the Virginia Department of Transportation. The certificates are still held up by other things the Building Official doesn't control. He doesn't see any movement down from five days.

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

Andrew: Spoke with some stakeholders, and has decided to withdraw proposal RB116.1-21.

RB202-21

Paul Messplay: This is a Resiliency Sub-Workgroup proposal. It changes the Flood Hazard Area definition, which was correlated with the National Flood Insurance Program and the VCC. It also limits storage on the lowest floor to 200 feet or less, which correlates with FEMA documents. References to ASCE 24 and Coastal V Zones were added. There were also location and site preparation requirements added for the Building Official to receive a satisfactory Conditional Letter of Map Revision (CLOMR) from FEMA.

David: Supports this proposal, but he wanted to note that he is disappointed in having to comply with another number requirement; i.e. 200 square feet or less for the lowest floor storage.

Paula: There is no such thing as a FEMA "comment document" as cited in 322.3.1 item 2. The CLOMR is considered to be a comment document in itself. She doesn't support that language. It should be changed to reference only the CLOMR.

Steve Shapiro: Asked in the Resiliency Sub-Workgroup if there was such a thing as a FEMA comment document, and he was reassured that there was such a thing.

Paula: Paraphrased from the FEMA website: Building permits can't be issued on the basis of a CLOMR, because a CLOMR doesn't change the NFIP map. After the project is completed, the community must request a change to the NFIP map. She would prefer to see removal of the comment document. The reference to the CLOMR is inclusive and accurate. She asked Steve if he had any comment about the design flood elevation terminology change.

Steve: It is more consistent with other areas.

Jeff: With no further discussion, a vote showed only thumbs up and no thumbs down. This proposal will be marked as Consensus for Approval

{BREAK: 10:08-10:15}

RB302.13-21

Andrew Milliken: This proposal is to protect floor assemblies by bringing in the language of the 2021 IRC. The section was originally deleted from the VRC in 2012. There have been many developments since 2012 which should be considered.

Steve: Speaking for himself, not in support or opposition of the proposal. Item 3 should say “where complying with both of the following”.

Andrew M: That language is ok with him.

Anthony: Requiring drywall on the underside of a basement or crawlspace doesn’t make sense on many levels. It would be costly, require more intense labor and could cause mold, especially in unconditioned spaces. Something like spraying floor beams with a fire-resistant substance would make more sense. He is opposed to this proposal.

Jeff Shapiro: Speaking on behalf of himself. This is simply getting back to the model code and what other states are doing with this. This section tends to be adopted throughout jurisdictions. This change was a collaboration between the NAHB and fire services to address fire fighter safety. There are a variety of ways to achieve compliance without installing drywall. It’s not nearly as controversial as sprinklers.

Anthony: Would be more inclined to support the proposal if the drywall component wasn’t required. He is not aware of other approved assemblies.

Jeff S: The home building industry prefers a lot of options for compliance in codes. Drywall would always be used in a finished basement. There are exceptions listed as well.

Jeff B: Hearing no further discussion, he asked Andrew if he wanted to change language as proposed by Steve. Andrew declined. This proposal will be marked as Non Consensus as presented.

RB308.7-21

Bill: This is a proposal for bird-friendly construction in residential dwellings. There are up to a billion birds killed by flying into clear or reflective structures. About 44% of them are lost in residential dwellings. The proposal was supported by the Audubon Society of Northern Virginia.

Andrew C: Reached out to several window manufacturers and many of them were not familiar with bird-friendly glass. Others who knew of the product were extremely costly and there would be a delay to get the product. He is opposed to this proposal.

Bill: Other options besides windows are screens or film. These are inexpensive and available. There are links in the reason statement of the proposal to find those other options.

Andrew C: The proposal does allow for some flexibility and less expensive remedies. There would still be added inspection requirements for Building Officials. It should be the consumer’s choice, not mandated in code.

Jeff: Asked if there was any support for the proposal.

Bill: Asked if the Audubon Society support would count.

Jeff: No. The vote is limited to members present.

Bill: Wanted a note to the BHCD in the comments that the Audubon Society supported the proposal.

Jeff: There is no DHCD staff summary for Non Consensus items, but written comments in cdpVA are included.

David: Consensus for Disapproval.

Jason Laws: Window films void warranties. He thinks it doesn’t meet the purpose of protecting safety of residents, and is a stretch for minimum code requirements.

Bill: Preservation of natural resource is protection.

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

RB310.2.1-21

Jeff: The proponents were not on the call. This proposal removes the state amendment for emergency escape and rescue opening size. The floor was opened for discussion.

Anthony: Is opposed to this. It’s not necessary. The sash is removed for egress windows.

Jeff: Asked if there was any support for the proposal. Hearing no further discussion, this proposal will be marked as Consensus for Disapproval.

RB313.1-21

Andrew M: This brings back a proposal initially approved by the BHCD, requiring sprinklers for townhouses. There is a Floor Modification to remove NFPA 13 and 13R references.

Andrew C: Submitted comments in cdpVA. This would add too much cost to building new homes. Meters and water connection fees, especially those requiring a 1" meter are very expensive.

Jeff S: Sprinklers can run on water flow and a 1" meter isn't required. He clarified that there is never a case where a 1" meter is needed under the IRC. There are also incentives that could reduce costs. A typical house uses the same range for minimum water flow and pressure rate that a sprinkler system can be designed to use. Maryland and Pennsylvania can make townhouse sprinklers work more affordably when including incentives. There can actually be a cost decrease. He prefers proposal RB313.1(3), which has a more incremental approach.

Andrew M: Hopes to have a compromise in the future and he's glad that the BHCD will see the Study Group report with all of the conversation around this issue.

Andrew C: Asked what will be in the staff summary to the BHCD.

Jeff B: Everything related to a proposal is attached to it. The summary document to the BHCD will be new this cycle. There will definitely be a notation of who supported the proposals and who did not.

David: Asked if there is a headcount of who is for and who is against each of the proposals. He also asked if the Sprinkler Study Group agreed on any proposals. He's against all of the RB313.1 code change proposals.

Jeff B: The summary will show who was in support and who was opposed and how the recommendation for or against came about. The Study Group didn't vote for or against any proposals.

Paula: Speaking for herself, she opposes RB313.1.

Jeff S: The IRC is a minimum standard, but requirements can be exceeded. NFPA 13 or 13R goes further than the minimum P2904 or 13D system.

Bill: Speaking for himself. Supports this proposal and the next 2, so that they will go forward as Non Consensus instead of Consensus for Disapproval.

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

RB313.1(2)-21

Glenn Dean: On page 5 of the Residential Sprinkler Study Group report, there was a good, concise summary of smoke alarms and sprinkler systems. On page 11, it says that homes built now are safer than those built decades ago; he would like to know in what way? Because of construction materials and items placed in the houses, fires and toxicity are faster and worse than they were in the past. Smoke detectors do give an early warning, but not soon enough because of the more flammable materials. Sprinklers would help with safety. Page 12 says that there is "no demand" for sprinklers. He thinks it's because people aren't aware of the need. Conclusions and acknowledgements say that Virginia is in alignment with majority of states that remove the IRC requirements for sprinklers in townhouses. He thinks that won't last and that Virginia can lead or follow.

Andrew C: There should be a requirement for all localities in Virginia to send fire data to the Fire Programs, so that the data can be used correctly for analysis. The Workgroup last cycle was specific to townhomes. This proposal goes beyond that scope.

Glenn: Virginia Fire Incident Reporting System (VFIRS) has many data points and it's hard to get down to more specific data. Even with all of those data points, the system itself is underutilized.

Andrew C: Agrees. He looked into that himself, and he had those same results. He thought there could possibly be a legislative push, or some collective effort to help the department to make that data more user friendly.

Anthony: Thinks that the most beneficial reports would be developed on a state-wide basis. Each locality has different things that they report on.

Andrew C: Typed in the chat box:

Andrew Clark: Agreed that a state level effort is needed. Sorry if I wasn't clear - when I referred to "the Department", I was referring to Dept of Fire Programs - not local fire departments.

Bill: Speaking for himself. Supports this proposal to ensure that it goes forward as Non Consensus.

Steve: Not speaking in favor or opposition, the first sentence should say An automatic residential fire sprinkler "system" instead of "systems".

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

RB313.1(3)-21

Jeff S: This is only for townhouses, and offers a path for builders to build them without fire sprinklers required. Townhouses with less than 3 units, would not require sprinklers. It would also be an opportunity to gather Virginia data. He says that there are only 4 states listed in the Study Group report, and he listed 13 states that have adopted the IRC requirement for sprinklers in townhouses.

Andrew C: Land development incentives would probably make for good discussions in the future and might be what moves the needle. Especially road widths. There's nothing in the proposals that would ensure that those incentives are granted. He is in opposition to this proposal today.

Jeff B: There is a Floor Modification on the screen to match the RB313.1.1 with what is in the IRC. If Jeff is in agreement, the proposal will move forward with it.

Jeff S: Agrees with the modification. He is willing to work with the home builders to ensure that they get incentives.

Steve: Asked Jeff about the exception: could there be 3 units with firewalls, then 3 more?

Jeff S: The IRC doesn't recognize fire walls like the IBC does. They would have to be separate buildings. 3 unit buildings separated from other 3 unit buildings would not require sprinklers.

Bill: Speaking for himself, he supports this proposal.

Dan: Supports this proposal.

David: Warren County. He is opposed to this proposal.

Andrew M: The VFSB Committee approves of this proposal.

Paula: Speaking for herself, she is against this proposal.

Jeff B: Hearing no further discussion, this proposal will be marked as Non Consensus with the Floor Modification.

RB315.3-21

Bill: This proposal would require carbon monoxide detectors with alarms in rooms where combustible fuel is located. He has had personal experiences with gas leaks and carbon monoxide.

Ross Shearer: Typed in the chat box:

Ross Shearer: I am unable to open my mike or raise a hand to speak. I support this proposal, RB315.3-21, for carbon monoxide alarms in rooms where there is open flame appliances as stated clearly in the proposal.

Anthony: On behalf of home builders, this proposal is overkill, as it would put carbon monoxide detectors in several rooms. He has found the most need for this in garages with generators. If inside the house, one is reasonable. He is opposed to this proposal.

Andrew C: HBAV. There have been some discussions this cycle about making the home more tightly sealed, which could lead to more carbon monoxide buildup. The IRC language seemed adequate. There was an NFPA study a few years ago that said that analyses of hazards should be done before new device suggestions were made. He asked if there were any studies done before this proposal was put together, and if the language in R331 came from the IRC.

Bill: The issues of fuel gas leaks and carbon monoxide buildup are real. The detectors are inexpensive and give an early warning if they are placed where the leaks would occur.

Susan Stillman: Typed in the chat box:

Susan Stillman: Speaking for myself, Susan Stillman, I am in favor of RB315.3-21. I had a bad experience with the gas company putting in a second regulator on my gas line. It caused my furnace to be compromised and fortunately my CO detector, next to the furnace, went off. This needs to be the case in every home.

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

RB326-21

Jason: VBCOA. This is a proposal to revert back to the national definition of Habitable Attic, and to move the additional language out of the definition itself and into the code section.

Jeff S: Jason is correct in relation to the previous model code, but not the code being adopted. In Section 326.3 item #4 was stricken, but it is in the current model code. A habitable attic above the 3rd story is an additional floor, or a 4th story. This was created as a loophole to work around the 3 story limit of the IRC and get taller

buildings approved under the IRC without having to go to the IBC and install a sprinkler system. It's not safe for fire fighters to use a 40 foot ground ladder or for a person to egress from a window that high.

Glenn: Topography could also be an issue and it's possible a 50+ foot ladder would be needed.

Bill: Supports this proposal.

Andrew C: HBAV. Asked Jason if this would change how habitable attics would be enforced in Virginia.

Jason: The intent was to keep it the same as the 2018 cycle.

Jeff S: There is nothing in reason statement that says why this is being stricken from the model code. If this goes through, it would be difficult to change it in another code cycle. The discussion needs to happen now.

Jason: Is not opposed to keeping #4 in as a Floor Modification. They were not looking at the 2021 code, so they didn't want to make a change from the 2018 code.

Andrew C: This was discussed at length in the last cycle. It was not adopted in the 2018 cycle.

Jeff S: He tried then to amend the 2018 code. Now it's different, because it would be striking something that is in the 2021 model code.

Jeff B: Asked Jason if he wanted to accept a Floor Modification. Jason said he will move forward with the original proposal. A vote resulted in David and Andrew C. showing thumbs up, Jeff S., Dan and Paula had thumbs down. This proposal will be marked as Non Consensus.

RB330.1-21

Jason: This is a proposal to include accessory dwelling units as an exception to the sound transmission requirement.

David: Supports this proposal.

Andrew C: Supports this proposal.

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

Next Steps:

Jeff: Thanked everyone for their participation. Tomorrow will be the last General Workgroup meeting on Trades. The DHCD staff will update cdpVA as soon as possible. Then, packages will be put together for the BHCD meeting in September.

General Stakeholder Workgroup Meeting – Trades Proposals
June 15, 2022 - 9:00 a.m. – 11:22 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*
Florin Moldovan: *Code and Regulation Specialist, SBCO*
Travis Luter: *Code and Regulation Specialist, SBCO*
Brian Hilderbrand: *Construction Regulation Administrator, SBCO*
Jeanette Campbell: *Administrative Assistant, Building and Fire Regulations (BFR)*

Group Participants:

Andrew Clark: *Home Builders Association of Virginia (HBAV)*
Bill Chapin
Dan Buuck: *National Association of Home Builders (NAHB)*
Daniel Willham: *Virginia Building and Code Officials Association (VBCOA), Fairfax County*
David Beahm:
David Hewitt
Jimmy Moss: *VBCOA*
John Ainslie: *HBAV*
Jonathan Sargeant: *Omegaflex*
Lisa Reiheld: *ICC PMG*
Mary Koban: *Air-Conditioning, Heating, and Refrigeration Institute (AHRI)*
Paula Eubank: *FEMA*
Richard Grace: *Virginia Plumbing and Mechanical Inspectors Association (VPMIA) and VBCOA*
Robert Glass: *Daikin Comfort Technologies*
Stephen Spletzer: *Chemours*
Yi-ting Chiu
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 stay muted unless speaking, and to let the group know who they represent as they speak to a proposal.

Paul Messplay: 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 1st 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.

RE2701.1.1-21

Dan Buuk: NAHB. This proposal deletes Section 210.8(F) from the NEC which requires GFCI coverage on HVAC condenser units. The code says “outdoor outlets” (any point that connects to the circuit, including hardwires). It doesn’t delete the requirement for receptacles, requiring GFCI coverage. The Section was not coordinated with product standards. Listed HVAC equipment has a leakage current above what would trip Class A GFCI. The touch current is well below levels that would hurt anyone. It could cause the air conditioning to trip the GFCI, which causes a risk of heat-related death.

Mary Koban: AHRI. Supports this proposal. There is an incompatibility between HVAC equipment and GFCI outlets. In testing, many were tripped. The Section should be deleted until the issue is resolved.

Robert Glass: Daikin Comfort Technologies. Agrees with Dan and Mary and he supports this proposal. There have already been 9 states to delete this Section, 5 states have edited the Section and 10 more states have delayed its implementation.

Andrew Clark: HBAV. Supports this proposal.

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

RE3902.16-21

Jeff: The proponent was not on the call. The floor was opened for discussion.

Dan B: NAHB data doesn’t support expanding AFCIs into areas where GFCIs are installed. An NFPA study says that there’s uncertainty around AFCI. If electricians install both AFCI and GFCI breakers and the AFCI causes nuisance tripping, the homeowner may replace it with a regular outlet and the GFCI safety would be lost. More and more states (22 now) are reducing AFCI coverage.

John Ainslie: Typed in the chat box:

John Ainslie: HBAV is opposed to this proposal

Jeff: Asked if there was any support for this proposal. Hearing none and with no further discussion offered, this proposal will be marked as Consensus for Disapproval.

RE3902.17-21

Dan B: NAHB. His comments for this proposal are the same as they were for RE2701.1.1-21 above.

Mary: Is in support of this proposal.

Robert: Is in support of this proposal, due to the incompatibility issue.

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

RM1404.1-21

Mary: AHRI. This proposal is to update an old reference to the ULCSA 2012 edition to the 2019 edition. ANCE and grade standard are also both outdated.

Robert: Daikin Comfort Technologies. Supports this proposal. These changes have already been approved for the 2024 codes by the ICC.

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

RM1411-21

Mary: AHRI. This proposal is to add new requirements using A2L refrigerants and UL 60335-2-40-2019. The AIM act was signed in Dec 2020, mandating that HFC's begin phasing down production. The phase down started Jan 1 2022 and manufacturers who are making HVAC equipment will need to transition to the new A2L classification. The UL 60335-2-40-2019 considers changes required to incorporate these new refrigerants. The AIM act document is in the Adobe file pod #6 and is available to download.

David Beahm: Representing himself. The reason statement in the prior proposal (RM1404.1-21) said it was adopted by the ICC in the 2024 code. He asked if this proposal was also adopted in the 2024 code. He is in support of this proposal.

Mary: She did miss including that note in this proposal. It is part of the 2024 codes adopted by the ICC.

Stephen Spletzer: Chemours. This is consistent with changes to the model codes and the updates in the industry. He is in support of this proposal.

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

RM1601.4.11-21

Jeff: This proposal was submitted by the DHCD staff in response to a letter from a legislator, regarding floor registers in toilet and bathing spaces.

Robert: Daikin Comfort Technologies. If ductwork is in a crawlspace or basement and all registers are in the floor, how would registers be added to a bathroom in a place other than the floor? The cost impact statement says that it would not increase cost of construction, but it sounds like it would. If the ductwork and registers are in the attic, there's no conflict. He suggested saying instead that they shouldn't be within xx feet of a toilet or tub.

John: Typed in the chat box:

John Ainslie: is there any data on how problematic the current code is?

John Ainslie: this will increase cost of construction

John Ainslie: I am in opposition to this proposal

Jeff: Based on Robert's comment and John's text, it could increase the cost of construction. The proposal can be updated to reflect that potential cost increase.

Richard Grace: Not speaking in favor or against. If there's an HVAC in the attic, ductwork can drop down. If it is below the bathroom, ductwork can come up into the wall through a register.

Jeff: Asked if there was any support for the proposal.

Andrew: HBAV. He did speak with the legislator on this and thinks it should go through as Non Consensus so it can be further discussed.

Dan Willham: Speaking for himself, he supports this proposal.

Jeff: Noted that the language used was pulled in from the Virginia Mechanical Code. Hearing some support and some opposition, this proposal will be marked as Non Consensus.

M403.3.1.1-21

Richard: VPMIA and VBCOA. This proposal is to correct a change made in the last code cycle. The correction is to footnote i. The intent was to allow dentist offices and doctor offices that are not really ambulatory care to not have to comply with ASHRAE 170. Ventilation requirements were put in the footnote, but incorrectly. It is an editorial change to correct the original proposal.

Jeff: Asked if there was any discussion or opposition to this proposal. Hearing no further discussion, this proposal will be marked as Consensus for Approval.

M1101.2-21

Mary: AHRI. This proposal is for administrative purposes. It takes out refrigeration fittings from the table and places it in Section 1107.5, which is more applicable.

Robert: Daikin Comfort Technologies. In support of this proposal. The item is misplaced and should be relocated.

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

M1101.2(2)-21

Mary: AHRI. Additional listed and labeled factory-built refrigeration equipment and appliances were added to the table. UL60335-2-89 was just completed and published in October, 2021, so it was too late to include in the I-Code. However, lower GWP equipment in the new UL is going to be standard.

Stephen: Chemours. He worked on updating the UL60335-2-89 with this lower GWP equipment. He is in support of this proposal.

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

{BREAK: 10:06-10:15}

M1101.2.1-21

Mary: AHRI. This proposal is to add high-probability equipment using Group A2L, A2, A3 or B1 refrigerants as per the new UL 2-40 and 2-89, and will align with ASHRAE 15. Most of this was accepted in the 2024 I-Codes, except for the UL 2-89, which was only approved in October, 2021 as already discussed.

Stephen: Chemours. Supports this proposal. It is critical for the industry to allow these refrigerants.

Robert: Daikin Comfort Technologies. He supports this proposal, as it uses the most current standard.

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

M1101.7-21

Mary: AHRI. This proposal discusses changing refrigerant in an existing system with refrigerant in the new classification. Language from ASHRAE 15 and the NAHB is included.

Stephen: Supports this proposal. This is consistent with ASHRAE 15 and is important when changes are made to the refrigerant system.

Robert: Daikin Comfort Technologies. Supports this proposal.

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

M1103.1-21

Mary: AHRI. This proposal was accepted in the 2024 I-Codes. There will be new refrigerants with ASHRAE classifications. The table provides new information for installers.

Robert: Supports this proposal. It is in alignment with ASHRAE 24 and will be in the 2024 IMC. It adds information that will be used by installers and authorities having jurisdiction.

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

M1104.3.1-21

Mary: AHRI. This proposal is to allow high-probability systems to use group A2 and A2L refrigerants. There are some exceptions for group A3 and B3 refrigerants. It also adds more information for self-contained systems to allow 150 gram charge for A3 refrigerants.

Stephen: Supports this proposal. It aligns with what's been approved in the 2024 I-Codes.

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

M1104.3.1(2)-21

Mary: AHRI. This proposal was split out from the others because there's information added in accordance with UL 2-89. Item #3 was changed, and #5 and #6 were added. Also, some extraneous information was deleted. This aligns with ASHRAE 15.

Robert: Daikin Comfort Technologies. Is in support of this proposal. The rewording in Sections 1104.3.1 and 1104.3.2 is in accordance with the 2024 IMC.

Stephen: Chemours. Supports this proposal.

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

M1106.3-21

Mary: AHRI. This proposal removes the word “flammable” and replaces with specific refrigerant classes to align better with ASHRAE 34 and ASHRAE 15.

Stephen: Chemours. Supports this proposal. He is a voting member of ASHRAE 15 and this proposal is consistent with that standard.

Robert: Daikin Comfort Technologies. Supports this proposal. This will also be part of the 2024 IMC.

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

M1106.4-21 Part I

Mary: AHRI. This Section has been edited to reflect ASHRAE 15 group refrigerants A2L and B2L. This also reflects what will be in the 2024 I-Codes.

David: Supports this proposal.

Stephen: Chemours. Supports this proposal.

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

M1106.4-21 Part II

Mary: AHRI. This proposal deletes a ventilation requirement that is old and outdated. It was accepted in the 2024 I-Codes.

Stephen: Chemours. Supports this proposal.

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

M-Chapter 15-21

Mary: AHRI. Updates this Section to reference the UL 2-89 2021 version, and give an update to the title. It is not yet updated in the I-Codes, since UL 2-89 was just published in October, 2021 after the 2024 I-Code changes.

Stephen: Chemours. Supports this proposal.

Robert: Daikin Comfort Technologies. Supports this proposal.

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

M-FG Chapter 8-21 – (Reference Standard) Consensus for Disapproval

M-FG403.5-21 – (plastic pipe, tubing and fittings) Withdrawn

M-FG404.6-21 – (more comprehensive code change for composite piping) Consensus for Disapproval

Jeff: The 3 FG proposals will be grouped for discussion, as they are all related.

Bill Chapin: These proposals introduce technology for gas systems using PEX-AL-PEX tubing, which has been used in Europe for 20 years. The ASTM standard is referenced and the ISO standard is also referenced. A new Section was created and separated based on the material – aluminum or plastic. Otherwise, there would have to be exemptions each time. However, the M-FG403.5-21 proposal can be withdrawn because the language is already included in the comprehensive code change proposal M-FG404.6-21.

Jeff: If M-FG404.6-21 is approved, the reference standard in M-FG Chapter 8-21 would also be incorporated into the approved proposal.

Bill: That works for him. If 404.6 isn't approved, there is no point for the other one anyway.

Richard: VPMIA and VBCOA. This plastic product isn't tested or approved for gas piping systems. The ASTM F1281 standard talks a lot about water. Gas is only mentioned once, but it doesn't say what type of gas is compatible for use. Fuel gas is not mentioned. PMG 1588 also doesn't say that the product is approved for use with gas fuel. He has done a lot of research into this. He submitted a code interpretation request to the State Technical Review Board asking if PEX-AL-PEX pipe listed under ICC-ES product certificate PMG 1588 and proposed for use as gas piping within or under a building is at least equivalent in safety and suitability to other pipes listed for such use in

the Virginia Fuel Gas Code and the Virginia Residential Code. The Review Board Interpretation 1-2022 said the answer was that PEX-AL-PEX is not suitable for fuel gas systems. VPMIA and VBCOA are in opposition to this proposal as well as the other two.

Jonathan Sargeant: Omegaflex. Opposes these proposals. Similar proposals were submitted to the ICC for inclusion in the 2024 IFGC, and they suggested that the proponent submit the proposals to NFPA 54. The NFPA 54 committee heard these proposals and decided to not include them in the NFPA 54 code because the material was more plastic than metal. The Fuel Gas Code limits plastic pipe to below grade outdoors only. Plastic doesn't perform well in a building fire. Fuel Gas piping should also be electrically continuous and the fitting in the PEX-AL-PEX pipe is insulated, so that is a code violation. This pipe would also not meet the 1,000 degree flammability test. For these and other reasons, he recommends Consensus for Disapproval.

Paula Eubank: Speaking on behalf of herself. She opposes these proposals and agrees with Richard's statements.

Bill: There is no such requirement for any fittings in the code to meet a 1,000 degree flammability test. The TRB answer was not satisfactory because there was no evidence to support it. The product has been used for 20 years around the world. This change is completely different than the one proposed to the NFPA. The ISO standard testing is equivalent to the ASTM F 1281.

David: Warren County. Suggests that the proponent gets NFPA approval first. The TRB is the ultimate authority for interpretation in Virginia and their final determination stands.

Richard: Agrees with David.

Dan W: Fairfax County. For safety reasons, it's pretty obvious; plastic melts in fire.

Jeff: Hearing no further discussion, both remaining proposals M-FG404.6 and M-FG Chapter 8 will be marked as Consensus for Disapproval.

P401.4-21

Paula: Speaking on behalf of herself. This proposal would require automatic or touchless controls on faucets and anything else that would otherwise require touch operation in public restrooms for sanitary purposes. They would also be equipped with emergency shut off provisions for maintenance personnel.

David: Speaking for himself, he is opposed to this proposal as written. The burden of providing automatic plumbing fixtures is over excessive and the cost implication, maintenance and usability issues are also concerning.

John: Typed in the chat box:

John Ainslie: I agree with David, I oppose

Andrew: Speaking on behalf of Steve Shapiro, AOBA and VAMA are opposed to this proposal. This should be the choice of the individual developer and not mandated.

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

P405.3.1-21

Paula: Speaking on behalf of herself. This proposal addresses that the space between inward swinging doors in bathroom stalls is too small. This is mostly an issue in the Ladies' rooms. The proposal would be to either swing the door outward or establish a minimum space between the fixture and the door as it opens.

David: Supports this proposal. He would prefer to not have the door swing outward however.

Andrew: Speaking for Steve Shapiro, AOBA and VAMA does not support this proposal. Adding additional inches drives up the cost for something that may not necessarily be an issue.

Paula: This wouldn't affect an accessible stall. There are no existing requirements for this. This issue has never been addressed. It would not add a lot of space.

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

P605.15.2-21

Jeff: The proponent was not on the call. The proposal is to add another color to solvent cement. The floor was opened for discussion.

Jeff: Asked for discussion or opposition. Hearing none, this proposal will be marked as Consensus for Approval.

Next Steps:

Jeff: Thanked the participants. This was the last of the General Workgroup meetings. The DHCD staff will put together packages for the BHCD to review in September. Public comments can still be made in cdpVA before the packages are submitted.

David: Asked if there could be a spreadsheet provided listing the status of all the proposals in one place, instead of having to look at each proposal separately.

Jeff: The proposals are listed in cdpVA with the statuses in a section called Workgroup Actions. The DHCD staff is working on getting all of the statuses updated.

Mary: Asked if there was a date set for the BHCD meeting, and if it was available for anyone to attend.

Jeff: The meeting date is September 19th and it is open to public attendance. Brief public comments can be made at the beginning of the meeting, then the Board members discuss among themselves.

Mary: Asked when the approved regulations would go into effect.

Jeff: The DHCD staff puts the regulations together and re-submits to the Board for final approval in about December 2022. There are other things that happen behind the scenes, such as additional comment periods, publishing, putting code change training together, etc. The earliest that the regulations would probably become effective some time in or around the summer of 2023. There will be a notification posted with the effective date in advance.

Jeff: Thanked everyone again for their participation and closed the meeting.