

In support of the Sierra Club proposals for EV charging readiness- REC-R1104.2.21, EC-405.10-21 and EC-C405.11.1-21.

Automobile manufacturers are rapidly moving their product lines to run on electricity. Most owners of electric vehicles want to charge the vehicles at home. Utilities are creating “time of use” programs for households to encourage charging at night. Charging at home is convenient and saves money.

Installing EV charging infrastructure after the drywall is up is difficult or even prohibitive. It’s important to include a chase or conduit and have space on the electric panel in the new construction of single homes, multifamily and commercial buildings.

There are 3 proposals for EV charging. I urge you to at least pass “EV capable” and “EV Ready.” “EV capable” which provides a chase or conduit and space on the electric panel. “EV ready “which would include the wiring to the parking space.

I know from personal experience that it is expensive to add this type of electrification. Wallboard needs to be punched, wire run, wallboard replaced and painted. There’s little cost to the builder to add some level of EV readiness to a home under construction before the drywall is closed.

EV’s will be the dominant vehicle of choice because of the savings in fuel and maintenance costs and because they are so much fun to drive! Electric vehicles are an advancement that will reduce local air pollution that harms our health. EV’s are also part of the tool kit for fighting climate change. We’re all seeing the damage being caused by the heating of our oceans and atmosphere due to the burning of fossil fuels. The BHCD should include EV charging facilities to the VA building code and adopt the 2021 IECC.



Publiccomment_codedevelopment, rr
<publiccomment_codedevelopment@dhcd.virginia.gov>

Available for questions on affordable housing code reform

Lyle Solla-Yates <lyle.sollayates@gmail.com>
To: publiccomment_codedevelopment@dhcd.virginia.gov

Sun, Oct 2, 2022 at 10:26 PM

Hello,

Please approve the changes proposed in B1006.3.4-21 to allow safer, more affordable, and more diverse infill housing near jobs and services where high quality water and fire service are already in place. As Governor Youngkin says, "The cost to rent or buy a home is too expensive" and "We must tackle root causes behind this supply and demand mismatch". Our current building code does not allow single staircase residential construction beyond three stories, raising costs, making more affordable missing middle infill development impossible on many urban sites, pushing Virginians further out from where they wish to live, instead forcing them into overcrowded, outdated structures without modern safety equipment and materials, far from reliable water supplies and high quality fire service.

A recent analysis by Virginia architect Joshua Batman found that these government mandates raise the costs for each six story residential building by over \$380,000 not including land costs.

Typical Cost of 2hr Fire Rated Multi-family Stair Tower - 6 flights					
Division	Cost	Inflation Add 20%	GC Markup	Total Cost	
03 Concrete	18160		5448	23608	
04 Masonry	78500	15700	23550	117750	
05 Metals	132000		39500	171600	
08 Openings	12000		3500	15600	
09 Finishes	8640		2592	11232	* Only paint, no furring or drywall included.
21 Fire Suppression	6000		1300	7800	
23 HVAC				0	
26 Electrical	25000		7500	32500	
Total Cost				380090	
Cost Per Flight				63348.3333	

The specific code language here is borrowed from time tested practice in Seattle, which gives design flexibility in exchange for more stringent safety standards. Only the parcel restrictions are removed which are not safety related and are redundant with local zoning at the recommendation of Seattle code expert Matt Hutchins. A line is added ensuring smoke control for outdoor staircases also taken from Seattle building code from 1006.3.3. Single Exits recommended by single stair code expert Conrad Speckert.

When these building codes were adopted a century ago, we did not have the materials and technology in place to house people in cities as safely and affordably as we can today, so used these costly mandates instead. We have come a long way thankfully and it is time for our building code to allow us to benefit from those improvements and reduce our cost of living near jobs and services.

Thank you,

Lyle Solla-Yates
Charlottesville, VA

[Quoted text hidden]



Publiccomment_codedevelopment, rr
<publiccomment_codedevelopment@dhcd.virginia.gov>

Fairfax County Public Comment in support of stronger Energy Codes in Virginia

Riat, Jay <Jay.Riat@fairfaxcounty.gov>

Mon, Oct 3, 2022 at 9:00 AM

To: "publiccomment_codedevelopment@dhcd.virginia.gov" <publiccomment_codedevelopment@dhcd.virginia.gov>

To the Board of Housing and Community Development,

Fairfax County is home to nearly 1.2 million of the 8.5 million residents in the Commonwealth of Virginia: approximately 14%. It is safe to say that Fairfax County plays a major role in the outcome of any decision at the state level.

Recognizing that we are at a crucial point in the fight against climate change and global warming, the Fairfax County Board of Supervisors supports actions that would require increased energy efficient construction with a goal of being net zero by 2035.

One of the actions for achieving this goal is through stronger energy conservation codes and regulations that are developed through the consensus process. Codes and regulations at the national level have recognized that requiring higher insulation R values and more energy efficient heating and cooling equipment directly correlates to reduced carbon emissions. Many jurisdictions around the country are even leading the way through actions such as banning the installation of natural gas burning appliances which have been found to significantly increase carbon emissions. This begs the question of why the consensus process allows Virginia to remain behind by allowing the weakening amendments found in the Virginia Codes.

Allowing for weakening amendments to the nationally developed codes to continue to show up in our Virginia adopted codes is in direct conflict with our goal of building safe and sustainable communities for generations to come. We strive to develop codes effectively through a consensus process that has proven effective in all other areas of the code. Fairfax County recognizes that if the Virginia energy codes continue to be weakened through the consensus process, then we may be headed to a place where actions to require more stringent energy requirements will be legislated for us.

HB2227 (<https://lis.virginia.gov/cgi-bin/legp604.exe?211+ful+HB2227H1directive>) is a directive that states: *"the Board of Housing and Community Development (the Board) shall consider adopting amendments to the Uniform Statewide Building Code (Building Code) to address changes in the IECC relating to energy efficiency and conservation. In doing so, the Board shall consider adopting Building Code standards that are at least as stringent as those contained in the new version of the IECC."*

For these reasons, Fairfax County is highly supportive of eliminating the weakening amendments to the Virginia Energy Conservation Code and allowing the adoption of the International Energy Conservation codes through the consensus process so that Virginia can play a significant role in reversing the effects of climate change.

Thank you.

Jay S. Riat, P.E., PMP, CBO

Chief Building Official

Director, Building Division

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[Fairfax, Virginia 22035](#)

fairfaxcounty.gov/buildingpermits

📞 703-324-1017 📱 703-609-0856

ATTENTION: Release 4 of PLUS is scheduled for **October 31, 2022**. During the transition, all online application and review systems, including PLUS and the legacy systems (such as FIDO, ProjectDox and PAWS) will be **unavailable between October 21 and October 31**. PLUS will replace all legacy systems beginning October 31, 2022, for a more efficient and modernized permitting and review system. For more information go to [What is PLUS?](#)





Publiccomment_codedevelopment, rr
<publiccomment_codedevelopment@dhcd.virginia.gov>

Supporting Single-Staircase Apartment Buildings, VA.R. Doc. R22-7022

Brian Bills <brian.w.bills@gmail.com>
To: publiccomment_codedevelopment@dhcd.virginia.gov

Wed, Oct 5, 2022 at 8:23 PM

To whom it may concern at DHCD,

I support the legalization of single-staircase building in Virginia. This will make housing more affordable, while still permitting thoughtful fire safety (e.g., external fire escapes could be required as a backup method of egress). Fire safety standards and technology has improved dramatically since 2nd staircases were required, and it's time to revisit the rules. Thank you for your consideration.

Sincerely,
Brian Bills
[2703 Kensington Ave #2, Richmond, VA 23220](#)
brian.w.bills@gmail.com



THE APARTMENT AND OFFICE BUILDING ASSOCIATION
OF METROPOLITAN WASHINGTON

THE VIRGINIA APARTMENT MANAGEMENT
ASSOCIATION



Friday, December 2, 2022

Mr. Brett Meringoff, Chairman
Virginia Board of Housing and Community Development
600 East Main Street, Suite 300
Richmond, Virginia 23219

Chairman Meringoff,

My name is Steven Shapiro and I'm submitting the below comments on behalf of the Apartment and Office Building Association (AOBA) of Metropolitan Washington and the Virginia Apartment and Management Association (VAMA), who together represent the owners and managers of roughly 172 Million square feet of commercial office space and 630,000 residential rental units throughout the Commonwealth.

I appeared at your Oct. 3, 2022 meeting and testified on a number of proposals that were very important to our membership. My reason for writing today is to request the reaffirmation of the regulations as originally approved by the Board on Oct.3, 2022. We feel that the Board struck the appropriate balance between regulation and development for the betterment of the citizens of the Commonwealth.

Thank you for your consideration of our comments and please don't hesitate to contact me with any questions.

Sincerely,


Steven Shapiro, MPA

cc: Board of Housing and Community Development
Cindy Davis, Division of Building and Fire Regulations, Department of Housing and Community Development

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December 7, 2022

To: The Board of Housing and Community Development
From: William Penniman
Re: Proposals to be considered December 12, 2022

The Board of Housing and Community Development should modify its proposed code updates to make Virginia's building code at least as stringent as the 2021 International Energy Conservation Code, including incorporating proposals that I and others submitted to increase building energy efficiency.

As directed at the Board's October 3 meeting, the pending draft code proposal would fail to meet or exceed the stringency of the 2021 IECC despite numerous code proposals submitted by me and others that would clearly benefit residents and the public. As spelled out in our submissions, our proposals would carry out Virginia law, including H.2227, by saving residents money, improving health, resiliency and air quality and reducing accelerating climate harms. Updating standards to current IECC standards for wall insulation and air leakage standards is supported by DOE findings that full compliance with the 2021 IECC would reduce energy costs, usage and pollution by an average of 9%. Leaving residential envelope standards at 2009 levels is not supported by evidence or analysis. Our proposals for new construction to include readiness for EVs, solar and future electric appliances would entail very low construction costs (mainly conduits) while saving residents money over time and reducing pollution and climate damage. Requiring heat pumps when air conditioning is going to be installed would also save money for residents while greatly reducing energy use, energy bills and pollution. Failing to adopt these proposals will harm Virginians for the 70+ year lifetimes of newly constructed homes and other buildings. During those years, energy prices will continue to rise and pollution-driven health impacts and climate change will wreak havoc on Virginia, potentially forcing far more costly retrofits on residents and the public. Increasing energy efficiency is the first line of defense against those harms.

To make matters even worse, the Board's proposal would move energy efficiency standards backwards to 2006 levels for three broad categories of commercial buildings, which cover more than 120 types of buildings. There was neither a work-group consensus nor evidence to support such a radical change. Moving backward on building efficiency would do the opposite of Virginia's laws require.

The American Council for an Energy Efficient Economy (ACEEE) just published its 2022 state rankings for energy efficiency. <https://www.aceee.org/research-report/u2206> With respect to building energy efficiency, Virginia gets 3.5 out of 12 possible points. It gets 1 of 2 possible points for its residential building code; 3.5 out of 6.5 points for new construction; and no points for existing building energy efficiency. It is in the bottom half for residential energy code stringency and at the midpoint for commercial code stringency. If it pursues the proposals emanating from the Board's October 3 meeting, Virginia can expect to drop further in statewide rankings.

In short, the proposals emanating from the October 3 meeting are inconsistent with applicable legal standards, the record supporting the efficiency proposals that I and others submitted in the work group process, and the near and long-term interests of residents and the public. The public health, safety and welfare would not be served by the October 3 proposals. The Board should revise its proposals to make Virginia's code at least as stringent as the IECC before they are published in a proposed final rule.



National Electrical Manufacturers Association

The Association of Electrical Equipment
and Medical Imaging Manufacturers
www.nema.org

December 7, 2022

To: Virginia Board of Housing and Community Development
Cindy Davis – Deputy Director, Division of Building and Fire Regulations
Kyle Flanders – Senior Policy Analyst

Subject: Public Comment to the Proposed Regulations for the BHCD Meeting on December 12, 2022

NEMA has been an active participant in the 2021 Code Development Cycle and appreciates the opportunity to share our public comment on the Proposed Regulations. We first would like congratulate Ms. Davis and her team on a job well done. NEMA participates in code adoption activity in every state of the nation and two US territories. The process in Virginia is among the most inclusive, transparent, and efficient. We also continue to appreciate the use, functionality, and information provided on the cdpVA portal.

In general, NEMA supports all the workgroup recommendations and voting outcomes during the previous meeting on October 3, 2022 with the exceptions identified, as follows:

Book 4, Page 98, Item R.116. and Page 148, Item B.3.

These two amendments delete sections E3902.17 of the IRC and 210.8(F) of the NEC related to GFCI protection of outdoor outlets for dwellings. The substantiation provided by the proponent to these amendments has subsequently been addressed by the NFPA code development process. [Tentative Interim Amendment \(TIA\) 20-19](#) has added a new exception to this rule that NEMA is asking the Board to consider in lieu of deleting the entire section. This exception states: “*Exception No. 2: Ground-fault circuit-interrupter protection shall not be required for listed HVAC equipment. This exception shall expire September 1, 2026.*” In short, this exception would maintain the lifesaving GFCI requirements for all other outdoor outlets while eliminating the occurrence of unwanted tripping associated with listed HVAC equipment. Acceptance of this exception as an amendment to E3902.17 and 210.8(F) would resolve the concerns of the proponent and keeps the Virginia code aligned with the national consensus standard.

Book 4, Page 99, Item R.116.

NEMA urges the Board to delete this exception that implies that GFCI protection required by the IRC and the NEC somehow mitigates the hazard of arcing-faults on those branch circuits. This is a technical fallacy. GFCI protection can only mitigate unintended ground-faults that could result in shock or electrocution. AFCI protection detects arcing-faults on the branch circuit that could result in fire. There is no technical correlation between the two life and property safety technologies. By deleting this exception, the AFCI protection requirements in the Virginia code will be restored to the national consensus standard.

Book 4, Page 195, Section 102.2.2, Exception 3 and Page 199, Section 302.3

NEMA urges the Board to delete the term “repair” and the sentence “Battery-only powered devices shall be powered by a 10-year sealed battery” in both sections. Smoke alarms are not intended to be “repaired,” but designed to be replaced after ten years from the date of manufacture. The requirement

for sealed, ten-year devices may preclude important safety features, such as wireless interconnection and low frequency notification. In addition, research shows that sealed products may not actually last 10 years. According to a 2015 NFPA Study titled "Smoke Alarms in US Home Fires" 47% of the 10-year battery smoke alarms installed in 427 homes had dead batteries. A [study](#) of smoke alarms installed in Georgia found the mean survival time of sealed ten year devices was just over six years. Also, the ICC membership disapproved proposal EB80-19 for the 2021 edition of the International Existing Building Code. This proposal was seeking to permit battery operated smoke alarms (sealed ten-year) to replace existing AC/DC single-station smoke alarms in sleeping units of Group I and R occupancies. The ICC Fire Code Action Committee, UL and NEMA all testified in opposition to EB80-19.

NEMA sincerely appreciates the opportunity to participate in the Virginia code development process. Thank you again for your time and consideration of our public comment. Please take care and be safe.

Regards,

Bryan P. Holland

Bryan P. Holland, MCP, CStd.
Managing Director, Technical Field Representatives
NEMA Codes and Standards



Flanders, Kyle <kyle.flanders@dhcd.virginia.gov>

Public Comment for Inclusion in Record of December 12 BHCD Meeting

Joy Loving <jal_1998@yahoo.com>

Wed, Dec 7, 2022 at 5:24 PM

To: Kyle Flanders <kyle.flanders@dhcd.virginia.gov>

The Climate Action Alliance of the Valley endorses the December 7 comments from William Penniman.

In addition, we wish to emphasize that EV readiness is a real need for new housing. The EV market is expanding rapidly. It makes no sense not to establish the appropriate charging capability for housing whose residents will be driving EVs for much of most new houses' useful life.

Initial cost of doing so is minimal when compared with cost of retrofit. My son's brand new house, build in 2022 in North Carolina, includes charging infrastructure with no significant increase in total cost.

BHCD needs to address the realities that the building sector must step up and address the climate change impacts that mean we need fewer greenhouse gas emissions, and buildings that facilitate both adaptation and resilience for their occupants.

Thank you.

Joy Loving
Steering Committee Member
Climate Action Alliance of the Valley

MEMORANDUM

TO: Board of Housing and Community Development

CC: Cindy Davis, Deputy Secretary, Division of Building and Fire Regulations

FROM: Gregory P. Wilson, FEMA Building Science

RE: FEMA Comments on 2021 Code Development Cycle

DATE: December 9, 2022

We have reviewed the proposed changes for flood provision in the 2021 Virginia Uniform State Building Code and offer the following recommendations. Because of the limited time for public comments, we will not speak at the December 12 meeting.

Please contact me at Gregory.Wilson2@fema.dhs.gov and (202) 679-5934 or Rebecca Quinn at rcquinn@earthlink.net and (434) 296-1349.

CONSENSUS – NOTES and RECOMMENDED COMMENTS

R202-21. Modify five flood terms defined in the IBC.

Comments: For many years, FEMA has deemed the flood provisions of the I-Codes, including the provisions in the 2021 IBC, to meet or exceed the minimum requirements of the NFIP. While the proposed definitions do not materially change the requirements for buildings in flood hazard areas, there is no compelling justification for the changes. Although asserted by the proponent to “better correlate” with the NFIP, in fact the proposed changes deviate from the terms as defined and used by the NFIP. In addition, similar changes are not proposed for the International Residential Code, where flood terms are “defined” where used in Section 322 (as opposed to Section 202 Definitions). We note:

1. **Base flood elevation.** BFEs are obtain from flood profiles and coastal data tables contained in Flood Insurance Studies. No recommendation.
2. **Coastal high-hazard area.** The IBC term is based on how FEMA determines the landward boundary of these areas (also called Zone V). FEMA refers to “primary frontal dune.” FEMA does not use Virginia’s definition of “coastal primary sand dune” to determine the landward boundary of coastal high hazard areas (verified with Chris Jones, coastal mapping consultant to PTS contractors). Recommend **NOT** accepting this proposal; it gives the mistaken impression that the landward boundary of the coastal high hazard area (Zone V) coincides with the inland limit of the State-defined dune.
3. **Flood hazard area.** The existing definition for “flood hazard area” already allows communities to adopt different maps, which means a change is not necessary. No recommendation.
4. **Flood or flooding.** While the added items do appear in the NFIP definition (44 CFR § 59.1), they are not used by FEMA to delineate flood hazard areas and have no bearing

on application of flood requirements in those areas. They do have meaning with respect to how the NFIP handles some claims for erosion-related flood damage and mudflow-related flood damage. The same changes are not proposed for the residential code. No recommendation.

5. **Special flood hazard area.** “Areas” are not “shown” in Flood Insurance Studies. No recommendation.

RB202-21 – New definition and modify some provisions in Section R322.

Comments: For many years, FEMA has deemed the flood provisions of the I-Codes, including the provisions in the 2021 IRC, to meet or exceed the minimum requirements of the NFIP. We note:

- **Flood hazard area.** Add a new definition. This term is defined in Sec. R322.1 which refers to flood hazard areas established in Table R301.2 (which is where FIS are identified and adopted). The notable change from the same definition in the IBC is the expansion of areas designated on a community’s flood hazard map to include “areas added to account for future flooding conditions based on the locally adopted sea level rise projected to occur by 2070.” The existing definition for “flood hazard area” already allows communities to adopt different maps. No recommendation.
- **R322.1.5 is the IRC definition of “lowest floor.”** The proposal adds specificity to “limited storage.” No recommendation.
- **R322.1.8 Flood-resistant materials.** Requiring that materials conform to both Technical Bulletin 2 and ASCE 24 could mean some applicants will have to obtain ASCE 24 to be able to develop plans that conform to both. No recommendation.
- **R322.2 is the IRC provisions that apply in zones other than coastal high hazard areas (Zone V) and Coastal A Zones (if LiMWA delineated).** The changes are wordsmithing with no substantive result except to create wording deviations from the I-Codes and the NFIP. Note also that the correlating changes to use the same phrasing were NOT proposed for R322.3 which is the IRC section for Zone V and Coastal A Zones. Recommend NOT accepting this change. However, if this proposal is accepted, correlating changes should be made to R322.3.
- **R322.3.1 is where the NFIP requirement at 44 CFR § 60.3(e)(7) that alteration of sand dunes and mangrove standards is prohibited if such alteration would “increase potential flood damage.”** The section already requires submission of engineering analyses. The proposals would use FEMA’s CLOMR process to determine whether such analyses are acceptable, but that is not the purpose of the CLOMR process. The CLOMR process only evaluates whether a requested change in SFHA boundary, BFE, or flood zones is appropriate under the map engineering rules, which is not the same as determining the effect of a dune alteration on adjacent properties. Recommend NOT accepting this change. However, if the proposal is accepted, the correct citation should be used; modify to “and a Conditional Letter of Map Revision (CLOMR) issued by FEMA.”

- **R322.3.6 enclosures below required elevation.** FEMA encourages states and communities to consider more restrictive provisions for development in flood hazard areas. This proposal has two parts:
 - The main purpose of the proposal is to prohibit enclosures below elevated dwellings in coastal high hazard areas (Zone V) and Coastal A Zones. No recommendation for this part of the change.
 - We understand there is confusion between “design flood elevation” and the “elevation required in Sec. R322.3.2” which is where the minimum elevation of the lowest horizontal structural member is called out. This part of the proposed change will cause a disconnect with the NFIP and the rest of R322, where “required elevation” is used (see R322.2.2 for enclosures below required elevation that apply in flood zones other than Zone V and CAZ). FEMA deliberately changed to “required elevation” in the 2018 IRC (and Virginia picked up those changes in its 2018 edition). Recommend NOT accepting this part of change.
- **R322.3.10.** FEMA encourages states and communities to consider more restrictive provisions for development in flood hazard areas. The first part of this change is more restrictive in that it prohibits underground tanks in Zone V and Coastal A Zones. See previous comment on R322.3.6 for the explanation as to why the appropriate elevation is that required in R322.3.2, which is the elevation of the bottom of the lowest horizontal structural member of the lowest floor. Citing “design flood” could mean a tank is lower than the dwelling it serves. Recommend NOT accepting the addition of “design flood.”
- **Virginia Residential Code. R322.2.1 Elevation requirements.** R322.1.8 already requires flood damage-resistant materials. No recommendation; however, if this proposal is accepted the correct term is “flood damage-resistant materials.”

EB103.9-21 – Construction documents.

Comments: Design professionals must function within the bounds of their respective professions established by each state. Citing specific professions in a code (or on the FEMA Elevation Certificate) does not override what those professionals are authorized to do by the states in which they are licensed or registered. The proposal adds to the Virginia Existing Building code a requirement that elevation certificates be prepared by “certified land surveyor or registered professional civil engineer licensed in Virginia.” e same is not proposed for the Building and Residential codes, nor does similar phrasing appear in IBC Sec. 107.2.6, 110.3.3, 110.3.12.1, or 1603.1.7. Section 1612.4 does require documentation to be prepared and sealed by registered design professionals – who are constrained by statute to what they can and cannot perform under their licenses. The same does not appear in IRC Sec. 106.1.4, but R322.1.10 does require documentation of elevations to be prepared and sealed by registered design professionals. How are users to interpret the addition only to the Virginia Existing Building Code, and not the other codes? Recommend, if this proposal is accepted, add similar phrasing in the appropriate places in Chapter 1 Administration and in the codes where elevation documentation/certification is required.

NON-CONSENSUS – NOTES and RECOMMENDED COMMENTS

B105.1.1. Qualifications of building official/technical assistants.

Comments: No Recommendation.

B113.3. Minimum inspections. Virginia does not use Chapter 1 of the I-Codes. The proposal calls for two additional inspections, which is not the same as how this is handed in the I-Codes, which requires submission of documentation as part of inspections. We note that 13 VAC 5-63-130, Section 113 Inspections, H. and I., already require submission of certification of elevations.

Comments: Because the Virginia USBC uses the same administrative procedures to administer all codes, we recommend parity with the IBC and IRC (Sec. R109.1.3 and R109.1.6.1), by referencing both Section 1612 (IBC flood) and Section R322 (IRC flood), as applicable. Recommend **adding** changes to Section 113 H. and I., as follows (shown using double underline):

H. 113.3.2 Lowest floor elevation. In flood hazard areas, upon placement of the lowest floor, including the basement, and prior to further vertical construction, the elevation certification required in Section ~~1612.5~~ 1612.4, or Section R322, as applicable, shall be submitted to the building official.

I. 113.3.3 Flood hazard documentation. If located in a flood hazard area, documentation of the elevation of the lowest floor as required in Section ~~1612.5~~ 1612.4, or Section R322, as applicable, shall be submitted to the building official prior to the final inspection.

GPW/rcq

December 9, 2022

To: The Board of Housing and Community Development

From: Sharon Shutler, Leadership Team, Climate & Clean Energy Working Group, Virginia Grassroots Coalition; Ret. Attorney, U.S. Department of Justice

Re: Proposals Under Consideration at December 12, 2022 Meeting

The Board of Housing and Community Development (BHCD) should update the Virginia building code to be at least as stringent as the International Energy Conservation Code (IECC). This would conform with Virginia law, codified in 2021 (HB2227), directing the BHCD to consider adopting energy efficiency provisions of the building code to be at least as stringent as the latest IECC. In conducting its review, the BHCD “shall assess the public health, safety, and welfare benefits of adopting standards that are at least as stringent as those contained in the IECC, including potential energy savings and air quality benefits over time compared to the cost of initial construction.”¹ As demonstrated by DOE reports², conformance with the IECC will save residents money from rising energy costs.

Without reviewing evidence, let alone making findings, the BHCD, at its October 3, 2022, meeting failed to adopt, or even seriously consider numerous proposals submitted by organizations that would conform with Virginia law by saving residents money, reducing greenhouse gas emissions and harm to the climate, and improving health and air quality. Worse, the BHCD’s proposal would roll back energy efficiency requirement for warehouses, factories, and utility buildings to 2006 IECC levels.

Given the climate crisis facing Virginians, especially those in coastal communities subjected to flooding from sea level rise³, the proposal by the BHCD rejecting updates to the building code to bring it more in conformance to the 2021 IECC, and in some cases rolling back the existing code, is disturbing. The BHCD’s proposal ignores the gravity of the climate crisis and refuses to acknowledge that every sector must participate in solutions to the crisis.

Accordingly, I urge the BHCD to reconsider the following cost-effective proposals:

1. **Wall Insulation.** Update 2009 standards to 2021 IECC standards. The IECC permits compliance to these standards in several ways and is being implemented in neighboring Maryland.
2. **Tighten Air Leakage Standards.** Limit air leakage to 3 air changes per hour (by requiring caulk, tape etc. before closing walls) which will not only save residents money but make buildings more comfortable.
3. **Make New Construction EV Ready.** Demand for EVs are rising and an increasing number of auto manufacturers have committed to produce only EVs by 2035. As 80% of EV charging occurs at home, it is critical to make parking garages and outside areas EV ready during initial construction.

¹ See HB2227 at <https://lis.virginia.gov/cgi-bin/legp604.exe?212+ful+CHAP0425+pdf>

² For DOE determinations and technical analysis, see <https://www.energycodes.gov/determinations> and https://www.energycodes.gov/sites/default/files/2021-07/Standard_90.1-2019_Final_Determination_TSD.pdf

³ See e.g. Global and Regional Sea Level Rise Scenarios for the United States February 2022 report by NOAA, U.S. EPA, NASA, U.S. DOD, U.S. Army Corps of Engineers et. al. <https://aambpublicoceanservice.blob.core.windows.net/oceanserviceprod/hazards/sealevelrise/noaa-nos-techrpt01-global-regional-SLR-scenarios-US.pdf>

4. **Install Heat Pumps in New Dwellings.** Heat pumps are 300% more efficient than resistance or combustion heating. They save residents money, reduce energy use, and cut greenhouse gas emissions.

Thank you for your consideration.