

**WORKGROUP 3 & 4**  
**June 5, 2019**  
**CHESTERFIELD COMMUNITY DEVELOPMENT BUILDING**

**VIRGINIA RESIDENTIAL CODE**

**RB403.1.6**

**Proponents:** Larry Brock, Chesterfield County ([brockl@chesterfield.gov](mailto:brockl@chesterfield.gov))

**Reason Statement:** The IRC language did not require steel bolts, nor did it require embedment into concrete or masonry. This change uses the language out of IBC section 2308.3.1, which addresses requiring steel bolts to be embedded not just extended into concrete or masonry. This change makes the IRC section consistent with the IBC section addressing sill plate anchorage.

**Comments:**

Mr. Brock gave an overview of proposal

Mr. Beahm expressed concern with the use of bolt instead of anchorage

**CONSENSUS APPROVED**

**RB408**

**Proponents:** Ronald Clements Jr, VBCOA ([clementsro@chesterfield.gov](mailto:clementsro@chesterfield.gov))

**Reason Statement:** Section R408 was the subject of numerous code changes which resulted in R408.1 and R408.2 being essentially the same code section. R408.1 provides for the 1/1500 vent area provision in the body of the code section and R408.2 provides it in an exception. R408.2 provides for the screening of the openings and R408.1 does not. The provisions in the two sections should be combined into one section. This change accomplishes that and better formats the section for the two methods of treating under-floor spaces: vented and vent less. The code change also addresses some confusion with regards to placement of the vents. R408.1 states to place the vents 3 feet from building corners. The exception to R408.2 allows the vents to be placed to provide cross ventilation, not 3 feet from each corner, when the vapor retarder is used, which was the intent per code change G107.99.

**Comments:**

No response, everyone approves proposal

**CONSENSUS APPROVED**

#### **RE401.2**

**Proponents:** Eric Lacey, Responsible Energy Codes Alliance ([eric@reca-codes.com](mailto:eric@reca-codes.com))

**Reason Statement:** This proposal does two things: First, it updates the reference to U.S. DOE's REScheck from the 2015 IECC to the 2018 IECC, consistent with the intent to base the Uniform Code on the 2018 IECC; Second, it eliminates a modification to the Uniform Code's REScheck compliance option that will be unnecessary if Virginia adopts the 2018 IECC with no weakening amendments. When Virginia adopted the 2012 and 2015 editions of the IECC, several weakening amendments were incorporated which caused conflicts between the code and the U.S. Department of Energy's free compliance software, REScheck. This software was developed to provide homebuilders with a very easy means of using the IECC's trade-off capabilities, while still maintaining the overall efficiency of the code. It is specifically called out as a compliance option in many states.

#### **Comments:**

Ms. Wynn spoke on Mr. Lacey behalf and pointed out that she would like to table the energy proposals until after the July 18<sup>th</sup> subworkgroup meeting when they will have completed they're work.

**TABLED**

#### **RE401.3**

**Proponents:** Eric Lacey, Responsible Energy Codes Alliance ([eric@reca-codes.com](mailto:eric@reca-codes.com))

**Reason Statement:** The purpose of this proposal is to restore the IECC's requirement that a certificate listing key building efficiency information be posted in a permanent location. This requirement has been in the IECC for several editions, and it provides useful information to current and future owners of residential buildings. The information included in the certificate is readily available at construction, and can be recorded on a certificate for no additional cost. In fact, compliance programs such as U.S. DOE's REScheck can automatically generate a certificate with much of this information already recorded. However, this type of information would be difficult or impossible to re-create several years into the building's useful life.

#### **Comments:**

Ms. Wynn spoke on Mr. Lacey behalf and pointed out that she would like to table the energy proposals until after the July 18<sup>th</sup> subworkgroup meeting when they will have completed they're work.

**TABLED**

#### **RE402.1.2**

**Proponents:** Eric Lacey, Responsible Energy Codes Alliance ([eric@reca-codes.com](mailto:eric@reca-codes.com))

**Reason Statement:** The purpose of this proposal is to improve energy savings and increase homeowner comfort by adopting the ceiling and wall insulation requirements of the 2018 IECC. Improving ceiling insulation from R-38 to R-49 and wall insulation from R-15 or 13+1 to R-20 or 13+5 will make Virginia's energy code consistent with insulation requirements that have been part of the 2012, 2015, and 2018 IECC.

**Comments:**

Ms. Wynn spoke on Mr. Lacey behalf and pointed out that she would like to table the energy proposals until after the July 18<sup>th</sup> subworkgroup meeting when they will have completed they're work.

**TABLED**

**RE402.4.1.2**

**Proponents:** Eric Lacey, Responsible Energy Codes Alliance ([eric@reca-codes.com](mailto:eric@reca-codes.com))

**Reason Statement:** The purpose of this proposal is to restore the 2018 IECC requirement that all new homes be tested for air leakage with an air leakage rate no higher than 3 ACH50. This will also eliminate Virginia's "visual inspection" option, which is not a reliable or safe means of testing the air leakage or air quality of a building.

**Comments:**

Ms. Wynn spoke on Mr. Lacey behalf and pointed out that she would like to table the energy proposals until after the July 18<sup>th</sup> subworkgroup meeting when they will have completed they're work.

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**RE403.3.1**

**Proponents:** Richard Grace, representing VPMIA/VBCOA ([richard.grace@fairfaxcounty.gov](mailto:richard.grace@fairfaxcounty.gov))

**Reason Statement:** "Supply and return ducts" excludes exhaust ducts. Exhaust ducts must be insulated as well when outside the thermal envelope.

**Comments:**

Ms. Wynn spoke on Mr. Lacey behalf and pointed out that she would like to table the energy proposals until after the July 18<sup>th</sup> subworkgroup meeting when they will have completed they're work.

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### **RE403.3.5**

**Proponents:** Ronald Clements Jr ([clementsro@chesterfield.gov](mailto:clementsro@chesterfield.gov))

**Reason Statement:** This is a code correlation issue. The problem is that IRC N1103.3.5 (IECC R303.3.5) prohibits all framing cavities from being used as air ducts or plenums in residential construction, but five chapters later in M1601.1.1 #7 the IRC permits cavities to be used as air plenums under five conditions. This is a direct conflict within the IRC. IECC C403.11.2 states that ductwork shall be constructed and erected in accordance with the IMC. So there is no conflict in commercial as the IMC has the same language as the IRC, permitting the use of framing cavities as air ducts or plenums per the same five conditions. So, three out of four code sections permit limited use of framing cavities as air plenums and one does not. This code change proposal eliminates the one out of four that is inconsistent so we can be consistent in Virginia.

#### **Comments:**

Ms. Wynn spoke on Mr. Lacey behalf and pointed out that she would like to table the energy proposals until after the July 18<sup>th</sup> subworkgroup meeting when they will have completed they're work.

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### **RE503.1.1.1**

**Proponents:** Eric Lacey, Responsible Energy Codes Alliance ([eric@reca-codes.com](mailto:eric@reca-codes.com))

**Reason Statement:** This proposal improves efficiency by clarifying that replacement fenestration must meet the same level of efficiency as fenestration used in new construction. This code requirement has been in the IECC for over a decade, and for good reason – about 3/4 of all windows installed in buildings every year are replacement windows in existing buildings. This is a rare opportunity to impact the efficiency of existing buildings – which represent 98-99% of buildings in any given year – by a substantial amount. Code-compliant fenestration is widely available and clearly cost effective, and there is no reason why Virginia homeowners should not have all the benefits of efficient replacement windows and doors.

#### **Comments:**

Ms. Wynn spoke on Mr. Lacey behalf and pointed out that she would like to table the energy proposals until after the July 18<sup>th</sup> subworkgroup meeting when they will have completed they're work.

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### **RTP3011**

**Proponents:** Richard Grace, representing VPMIA/VBCOA ([richard.grace@fairfaxcounty.gov](mailto:richard.grace@fairfaxcounty.gov))

**Reason Statement:** To date there has been limited to no code reference for all the technologies currently available to the relined piping systems. Many localities across the state, and country, are accepting it as an alternate material and method with no code guidance. This proposal is not an endorsement of any particular method or process. It does not promote or require relining. It simply provides installation and acceptance criteria when the application is

encountered. This language will provide consistent application for all materials and technologies for the industry, including the code official and installers alike. Pipe relining technology has been successfully used for many years. It began with larger utility piping systems and has progressed into smaller piping systems that are privately owned and fall within the purview of the plumbing code. The process reduces the impact of open trench excavation's and thereby reduces repair cost according to industry data.

**Comments:**

Mr. Grace gave an overview of proposal. It needed to be addressed because they had people that needed to install. It will show up in the 2021 code.

**CONSENSUS APPROVED**

**RTE3902- Arc Fault Change**

**Proponents:** Haywood Kines, [hkines@pwcgov.org](mailto:hkines@pwcgov.org)

**Comments:**

Mr. Kines gave an overview of proposal.

Mr. Kines pointed out that the product is 20 years old and the price is coming down drastically. It needs to be adopted now.

Will discuss at next workgroup meeting because it was not published in time.

**TABLED**

**VIRGINIA MECHANICAL CODE**

**TM506.5.6**

**Proponents:** Richard Grace, representing VPMIA/VBCOA ([richard.grace@fairfaxcounty.gov](mailto:richard.grace@fairfaxcounty.gov))

**Reason Statement:** The biggest change here is the addition of UL 8782-17. UL 1978 does not contain all the requirements necessary for listing PCUs. UL 8782 contains both construction and performance requirements to address various issues not covered by UL 1978. The other proposed changes, more than anything else, are clarifiers.

**Comments:**

Mr. Grace gave an overview of proposal.

**CONSENSUS APPROVED**

## VIRGINIA PLUMBING CODE

### TP202- Definition for Servicing

**Proponents:** Lee Clark, [lee.craft@fairfaxcounty.gov](mailto:lee.craft@fairfaxcounty.gov)

**Comments:**

Mr. Craft gave an overview of proposal, get asked from contractors often about service sinks.

Mr. Beahm pointed out that he didn't believe a definition needed to be added. He's never heard of any complaints outside of Mr. Craft. He would discuss with Mr. Grace

Mr. Grace stated he did have a Consensus approved

Mr. Witt questioned if there was a definition for kitchen sink

Will discuss at next workgroup meeting

### TABLED

### TP-LC-1

**Proponents:** Jonathan Sargeant ([jonathan.sargeant@omegaflex.com](mailto:jonathan.sargeant@omegaflex.com))

**Reason Statement:** To update the product standard for CSST to make it consistent with the installation requirements of the 2018 IRC and IFGC.

**Comments:**

Mr. Sargeant gave an overview of proposal

### CONSENSUS APPROVED

### TP410.4

**Proponents:** Richard Grace, representing VPMIA/VBCOA ([richard.grace@fairfaxcounty.gov](mailto:richard.grace@fairfaxcounty.gov))

**Reason Statement:** This section is often times misinterpreted. It is believed where calculations indicate that two drinking fountains are required, half of that can be substituted with water dispensers. This is not so. The intent of Section 410 is to provide a drinking fountain specifically for people who use a wheel chair and another one specifically for standing persons. Neither of these can be substituted. Even where calculations conclude that only one drinking fountain is required, two must be provided per 410-3, and cannot be substituted. The additional language in this proposal is an attempt to clear this misunderstanding up.

**Comments:**

Mr. Grace gave an overview of proposal. However in situations that only have 3 drinking fountains this change will not recognize 3<sup>rd</sup> fountain.

Not everyone agreed on this language.

Mr. Craft suggested 410.3 is first before you substitute.

Ms. Wynn stated that “notwithstanding” is saying the opposite.

Ms. Davis pointed out that they need to work on language.

## **TABLED**

### **TP423.1**

**Proponents:** Richard Grace, representing VPMIA/VBCOA ([richard.grace@fairfaxcounty.gov](mailto:richard.grace@fairfaxcounty.gov))

**Reason Statement:** Pedicure baths and footbaths have become increasingly more popular. The code has not yet recognized the danger to the water supply these units pose. This change will address that by requiring backflow prevention for these unit. This change does not specify the specific type of backflow device, it simply requires that one be provided per Section 608.

#### **Comments:**

Mr. Grace gave an overview of proposal

Ms. Davis questioned if this was taken to national level.

Mr. Grace stated that it was not taken to the national level but was hoping it will.

## **CONSENSUS APPROVED**

### **TP605.2.1**

**Proponents:** Richard Grace, representing VPMIA/VBCOA ([richard.grace@fairfaxcounty.gov](mailto:richard.grace@fairfaxcounty.gov))

**Reason Statement:** This language is not necessary in the code and not verifiable from an enforcement stance. This language is contained in the NSF 372 Standard and verified during the testing process to meet the standard.

#### **Comments:**

Mr. Grace gave an overview of proposal.

## **CONSENSUS APPROVED**

### **TP608.13**

**Proponents:** Paul Hickman ([paul.hickman@fairfaxcounty.gov](mailto:paul.hickman@fairfaxcounty.gov)); Richard Grace ([richard.grace@fairfaxcounty.gov](mailto:richard.grace@fairfaxcounty.gov))

**Reason Statement:** This is what we are trying to avoid. This installation places the Plumbing Fixture’s built-in ASSE 1001 Atmospheric-type Vacuum Breaker under “Continuous Pressure”. Which is not consistent with 608.13.6 which states “... These devices [ASSE 1001] shall operate under normal atmospheric pressure...” The proposed addition to Section 608.13.6 will make an extremely common violation more clear.

**Comments:**

Mr. Hickman gave an overview of proposal

Mr. Beahm mentioned that he doesn't think it's a construction code, it's a maintenance code.

Mr. Grace pointed out that there is a section in chapter 3 that doesn't belong in chapter 3 that requires annual inspection of back flow preventative devices that we address now or address when we do our annual inspections that will still need to be addressed.

Mr. Beahm stated that it's not an approved device already, it's prohibited already by the code. The enforcement is a different situation.

Ms. Davis pointed out that the intent of this is to clarify that it is prohibited.

Mr. Witt stated that there is confusion with the language and it's beginning to sound like maintenance instead of construction.

Mr. Beahm pointed out that the issue is after the fact. It's whose putting it on the device. He believes the code already addresses it, it's just adding language. He opposes it. This is not a permanent construction item it's an after.

Mr. Craft mentioned that if you saw this in normal inspection you would fail it.

Mr. Hickman responded that is correct.

There was committee consensus to this.

**NONCONSENSUS****TP608.16.7**

**Proponents:** Paul Hickman ([paul.hickman@fairfaxcounty.gov](mailto:paul.hickman@fairfaxcounty.gov)); Richard Grace ([richard.grace@fairfaxcounty.gov](mailto:richard.grace@fairfaxcounty.gov))

**Reason Statement:** This is what we are trying to avoid. This installation places the Plumbing Fixture's built-in ASSE 1001 Atmospheric-type Vacuum Breaker under "Continuous Pressure". Which is not consistent with 608.13.6 which states "...These devices [ASSE 1001] shall operate under normal atmospheric pressure..." The proposed addition to Section 608.16.7 will make an extremely common violation more clear.



**Comments:**

Mr. Hickman gave an overview of proposal

Mr. Beahm stated that he raised opposition to the chemical dispenser as it being indicated on that particular item, it's a maintenance item it's not intended to be a permanent fixture. He can site code that states it's not allowed.

**NONCONSENSUS****TP705.11.2**

**Proponents:** Richard Grace, representing VPMIA/VBCOA ([richard.grace@fairfaxcounty.gov](mailto:richard.grace@fairfaxcounty.gov))

**Reason Statement:** The addition of this exception into the code has caused a direct conflict between what the code allows and what many pipe manufacturers require. We currently have two sections in the Virginia Plumbing Code to address conflicts, 112.3.1 and 301.7 (the Virginia Residential Code has only one, 112.3.1). Both of these sections require that the most restrictive provision apply. In the case of primer use on PVC pipe and fittings, the most restrictive is the use of primer on the joints. I have been unable to locate a piping manufacturer's *installation instructions* that does not require the use of primer on a PVC joint.

**Comments:**

Mr. Grace gave an overview of proposal

**CONSENSUS APPROVED****TP717**

**Proponents:** Richard Grace, representing VPMIA/VBCOA ([richard.grace@fairfaxcounty.gov](mailto:richard.grace@fairfaxcounty.gov))

**Reason Statement:** To date there has been limited to no code reference for all the technologies currently available to the relined piping systems. Many localities across the state, and country, are accepting it as an alternate material and method with no code guidance. This proposal is not an endorsement of any particular method or process. It does not promote or require relining. It simply provides installation and acceptance criteria when the application is encountered. This language will provide consistent application for all materials and technologies for the industry, including the code official and installers alike. Pipe relining technology has been successfully used for many years. It began with larger utility piping systems and has progressed into smaller piping systems that are privately owned and fall within the purview of the plumbing code. The process reduces the impact of open trench excavation's and thereby reduces repair cost according to industry data.

**Comments:**

This proposal goes with RTP3011 and was discussed during that proposal.

**CONSENSUS APPROVED**

**TP1101.7**

**Proponents:** Richard Grace, representing VPMIA/VBCOA ([richard.grace@fairfaxcounty.gov](mailto:richard.grace@fairfaxcounty.gov))

**Reason Statement:** The 2015 IPC introduced a different methodology for sizing conductors, leaders and storm drains using the flow rate through the roof drain. When Virginia adopted the 2015 IPC, we kept the methodology contained in the 2012 IPC. There were a couple of items that didn't get addressed in that Virginia amendment, this is one. The section refers to the published roof drain flow rate for sizing the storm drainage system. This is not applicable to the Virginia amended methodology for sizing these systems.

**Comments:**

Mr. Grace gave an overview of proposal

**CONSENSUS APPROVED****TP1105.2**

**Proponents:** Richard Grace, representing VPMIA/VBCOA ([richard.grace@fairfaxcounty.gov](mailto:richard.grace@fairfaxcounty.gov))

**Reason Statement:** The 2015 IPC introduced a different methodology for sizing conductors, leaders and storm drains using the flow rate through the roof drain. When Virginia adopted the 2015 IPC, we kept the methodology contained in the 2012 IPC. There were a couple of items that didn't get addressed in that Virginia amendment, this is one. The section refers to the published roof drain flow rate for sizing the storm drainage system. This is not applicable to the Virginia amended methodology for sizing these systems.

**Comments:**

Mr. Grace gave an overview of proposal

**CONSENSUS APPROVED****TP1110**

**Proponents:** Richard Grace, representing VPMIA/VBCOA ([richard.grace@fairfaxcounty.gov](mailto:richard.grace@fairfaxcounty.gov))

**Reason Statement:** The 2015 IPC introduced a different methodology for sizing conductors, leaders and storm drains using the flow rate through the roof drain. When Virginia adopted the 2015 IPC, we kept the methodology contained in the 2012 IPC. There were a couple of items that didn't get addressed in that Virginia amendment, this is one. This section was removed as part of the "package" to introduce the 2015 IPC methodology for sizing storm drainage systems. The Virginia amended methodology still requires the use of this section.

**Comments:**

Mr. Grace gave an overview of proposal

**CONSENSUS APPROVED**

### **TP1303.1**

**Proponents:** Richard Grace, representing VPMIA/VBCOA ([richard.grace@fairfaxcounty.gov](mailto:richard.grace@fairfaxcounty.gov))

**Reason Statement:** This proposal adds the CSA B805/ICC 805 Standard as an alternate compliance path for rainwater to be used in nonpotable applications. This language was approved on the national level to be incorporated into the 2021 International Plumbing Code and International Residential Code. The standard contains provisions for nonpotable applications as well as for potable applications, however the provisions for potable applications are not being proposed in this technical amendment, nor were they approved on the national level. The Standard provides a far more comprehensive prescriptive and/or performance document as an alternate compliance path to nonpotable applications which includes the ability to collect rainwater from areas other than aboveground impervious roofing surfaces, identification of end uses based on tier levels and a water quality guidance requirement measured and documented through a required water safety plan.

### **Comments:**

Mr. Grace gave an overview of proposal

Ms. Davis pointed out that there was one concern that was received from another state agency DEQ, they're concern is related to CSA allowing storm water to be included in the collection of rain water which our code specifically does not allow per the definition of rain water. They're concern is addressed by the order of precedence in chapter 1 which states the code comes first, just because there is a secondary allowance in the standard will not permit storm water to be collected as rain water which is what DEQ concern is as a state agency.

DEQ's concern is the intermingling of the two.

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