

AGENDA
DHCD Workgroup #3
September 27, 2012 - 9:30 a.m. - 3:30 p.m.

Location: **WYNDHAM RICHMOND AIRPORT**
Lunch Provided by Reservation Only:

Contact Janice Firestone at janice.firestone@dhcd.virginia.gov or 804-371-7150

1. Introductions
2. Summary from June 14th meeting. **(Handout p. 1)**
3. 2012 IRC
 - Wall bracing-sub-groups working on code changes **(Handout p. 5)**
 - 108.2 Exemptions from permit – accessory structure **(Handout p. 12)**
 - 117.1 Temporary building uses **(Handout p. 15)**
 - HJR 648 **(Handout p. 16)**
 - Energy R402.2.4 attic hatches **(Handout p. 20)**
 - Energy R402.4.2 fireplaces, R403.1.1 thermostat **(Handout p. 22)**
 - Energy R402.4.1.1 log homes, R402.3.6 delete, R402.2.3 eaves baffles **(Handout p. 24)**
 - Energy R202 building thermal envelope, R 402.2.1 attic insulation, duct insulation **(Handout p. 26)**
 - Energy Manual J, Rescheck, Manual S – mandate or optional
 - Energy visual duct and exterior envelope inspection allowed but 2012 IRC not allowed either **(Handout p. 29)**
 - Energy HBAV building cavities, sealing, ceiling without attics, equipment trade-offs and wood frame wall insulation **(Handout p. 30)**
 - R1001.8 refractory mortar **(Handout p. 35)**
 - R602.7 headers **(Handout p. 36)**
 - R502.5 Girder span **(Handout p. 38)**
 - R507 titan footing **(Handout p. 39)**
 - Ipe (Brazilian walnut) railings no stamps or grade and not in NDS durable wood.
 - Habitable attic amend say 1/3 of floor below or allow as is now the case as it not considered a story.
 - IRC scoping **(Handout p. 41)**
 - Southern Pine Sam Francis may have code change
 - Arc-fault WG 4
 - Door closer for door from garage to home – review new requirement
 - IMC and IRC kitchen hoods domestic and commercial WG 2 and 4 reviewing ongoing statewide issue
 - CO alarms review supervised new requirement and costly
 - Expanded drip edges review new requirement
 - Stone veneers – review
 - Other VBCOA Energy Committee proposals **(Handout p. 42)**
 - R507.2 - Deck ledger connections **(Handout p. 45)**
4. New Business
5. Next meeting January 10, 2013 finalize all code changes for proposed regulations
6. Adjournment

SUMMARY

DHCD Workgroup #3 2012 USBC International Residential Code June 14, 2012 - 9:30 a.m. - 3:30 p.m.

Location: Virginia Housing Center

- USBC/IRC technical amendments - delete or change
 - R401.3, - Drainage. VA amendment in 2009 added the words, “to the dwelling unit” after the word hazard. Consensus was to keep it the way it is for 2012. This item will be taken off the list of issues for this workgroup.
 - R602.10 wall bracing simpler model. Multiple groups are working on this. Discussion on whether to form an official subgroup to include everyone, but the consensus was to continue working in smaller groups for now. Parties were encouraged to collaborate with each other during their processes. **DHCD expect a work product/code changes for the September 27th meeting.**
 - R612.2 window sills. Consensus was that it’s okay staying at 18 but other issues came up. Concerns over stops for 4" sphere requirement. One person said they couldn't find windows with the req'd stops, another said he didn't have any problem finding them. There may be a code change coming. **Off list or DHCD need code change by September 13th.**
 - M1502.4.4.1 duct length. 2012 IRC changes from 25 to 35 to delete VA amendment. No code change needed, it will be part of the base document. This item will be taken off the list of issues for this workgroup.
 - P2903.5. VA amendment added, “where quick-closing valves are utilized unless otherwise approved”. Group will review to see if this can be deleted since language in 2012 changed.
- USBC IRC E for attic installation increased to R-46 and attic hatch door code change to do R-5 instead of R-38. Code change submitted. Can do now - performance path. No opposition. More discussion later on general energy requirements. A. Meeks is collecting information from DOE.
- USBC IRC southern pine devaluation review to add into span charts. Sam Francis stated additional sizes are still being evaluated. **This item will be taken off the list of issues for this workgroup or Sam Francis to submit code change by September 13th.**
- USBC IRC R403.1 (code change submitted 6/13/12 by Bryan Deem). Administrative group is also looking at size of buildings. Suggestion was made to look at all the sections that have a square footage max indicated for compliance and make them match. Footings vs. when a permit is required. Only difference between the two is 56 sq. ft.
- R703.7 stone veneer inspections/window flashing/weep holes, 3rd party verification, make mandatory inspection or BO can do as optional inspection now. Conversation seemed to revolve around the fact that the BO can do the inspections now if they choose, shouldn't be a mandated inspection. **This item will be taken off the list of issues for this workgroup.**

- USBC IRC deck guards. Discussion on point loads not being the appropriate load requirement. Deck ledger bolting review. Some folks will take a look at this issue further to determine if a code change is necessary. Titan Deck footings Discussion that these metal deck footings were not appropriate and had no listings. Plug type footings are acceptable and can be an alternative method and material. Cannot put them in the code because each proprietor has a different size/height of deck etc. that they are used for. Some disagreed and thought it should be clear in the code that they are permitted and should be used “per manufacturer’s instructions”. **These three items will be taken off the list of issues for this workgroup unless a code change is submitted by September 13th.**
- USBC IBC/IRC bed and breakfasts review 5 bedrooms and 10 guest limits for R-3/R-5. SFM believes some occupant limit should be set on the 5 bedroom scope. ICC approved for 2015 code change for 5 bedrooms and up to 16 persons, but would be sprinkled. Fire service concerned about number of persons. Discussion on how you would enforce that if private families lived there. **This item will be taken off the list of issues for this workgroup unless a code change is submitted. DHCD comment: 2015 code change would allow 5 bedrooms or up to 16 persons.**
- USBC IBC/IRC: PWC issues live-work units and townhomes R-3 and R-5 next to each other and fire walls or R-5 over M, A, B or S mixed uses. 2012 allows IBC Live Work dwelling units only if sprinkled and IRC construction. USBC no sprinklers IRC so can live/work dwelling units be built R-5. **There seemed to be agreement that IBC is appropriate. Not R-5 without sprinklers. This item will be taken off the list of issues for this workgroup unless a code change is submitted. DHCD notes that there are hundreds of live-work dwelling units today in Virginia mostly know as home occupation by zoning ordinances and include dentist offices, CPA offices, reporters, convention planners, etc.**
- USRC IRC/IBC HJR 648 optional accessible standards R-3 and R-5. Discussion on door widths being mandatory. There were mixed views with many opposing, primarily due to the size of the half baths in most first story floor plans, but many felt there might be a way to make it work if the code change is tweaked. For the optional standard, there was some support but many expressed concerns over BO being required to “certify” something. This would cause more responsibility and more inspections while BO offices are short staffed. DHCD comments: **This code change isn’t mandatory but when built these are the requirements. One can do more or less. The certification requires no more work then doing the required inspections. Certification can be in a form letter or noted on the final inspection reports the same as defective drywall or solar tax credits.**
- USBC IRC habitable attic definition allows what under IBC is 4th story. Code change submitted. There was lots of discussion related to need vs. unintended consequences and how to best address it. Many felt this is an issue that needs to be changed. Others indicated they haven’t had any problems in their localities. This will be discussed further at future meetings.
- USBC IRC arc-fault devices review. Group was informed that a code change was being prepared by WG4.
- USBC IRC M conditioned spaces, crawl space supply and exhaust requirements- There were no issues or concerns. **This item will be taken off the list of issues for this workgroup.**

- USBC IRC fuel gas CSST bonding review. WG 4 deleted as issue. **No discussion. This item will be taken off the list of issues for this workgroup.**
- USBC IRC open porch includes roof clarify. Brian indicated he is working with Lynn Underwood on this issue and that this is a place holder for a code change that is being developed.
- USBC IRC E and IECC sizing of HVAC system RESCHECK use and manual J clarify use – Lots of discussion on this issue. Not a lot of buy-in on the requirements for energy plan review/inspections. Lots of comments/concerns to Steve to take back to the committee. **DHCD comment: DOE requires by 2017 the adoption of the 2012 IECC and 90% compliance. The 90% compliance is going to require beefed up plan reviews and inspections with higher permit fees.**
- USBC IRC remediation requirements review. Some think the testing strips too expensive and not reliable readings. WG 4 did ask if language needed to be added on protocols. This will be taken off the list for this group unless a code change is submitted. **No comments concerns on this issue. This item will be taken off the list of issues for this workgroup.**
- USBC IRC heat pump thermostats review. **No comments on this. This item will be taken off the list of issues for this workgroup.**
- USBC IRC fireplace not allowed in basements IECC 403 without air supply. WG 4 code change being submitted with 2015 clarification on listing can have no door. Also, R1001.8 Smoke chamber walls. **There was a general discussion on this. Group will wait and see what is submitted to workgroup 4.**
- Review tread and risers. This will be taken off the list for this group unless a code change is submitted. **No interest in changing. This item will be taken off the list of issues for this workgroup.**
- N1102 – Building Thermal Envelope and IECC code changes IRC-E exterior envelope moisture problems and equipment trade-offs. BO's requiring 3rd party inspections for visual inspections and approvals for duct or door testing review. There was much discussion and lots of comments/concerns for Steve to take back to the committee.
- FRT townhomes being not allowed review. This will be taken off the list for this group if resolved. **Group was surprised that someone wasn't allowing this. No code change needed as it seems clear. This item will be taken off the list of issues for this workgroup.**
- Review major 2012 code changes with cost estimates and 2015 IRC code changes
 - Tamper proof plates cost and exemptions in 2009 NEC. This will be taken off the list for this group unless a code change is submitted. May have a change submitted for this. Haywood had a history of problems if the plates are changed out.
 - Garages now sprinkled so would need IRC code change to delete. No comments. Staff note: After review of the provision (R309.5), it is not a mandate for garage sprinklers. It is instead a reference to Table R302.1(2) for separation distance for sprinkled dwellings and it is only a tradeoff for separation distance if the whole subdivision is sprinkled. **That is still usable in Virginia if someone elects to sprinkler a dwelling or a whole subdivision, so it can stay in the IRC without there being a conflict with Virginia's deletion of the dwelling and townhouse sprinkler provisions. Off list.**

- Garage door closer new in 2012 review. **Will review.**
 - Domestic and commercial stoves type 1 hoods WG 4 code change need to review IRC. **There were concerns over the requirement to have make up air if over 400 cfm.**
 - CO alarms supervised review for need. **The group will look at this.**
 - Expanded drip edges review for need. **No comments at this time, will review.**
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- New business. None. **DHCD Comment: IRC Committee-VBCOA want additional 2102 code changes that need review by stakeholders.**
 - Next meeting September 27th, 2012 9:30 at VHC
 - Adjournment

R602.13 Empirical method. Buildings having a maximum height of 2 stories above grade, a maximum roof framing span of 32 feet, a maximum total floor area, excluding basements, of 3,000 square feet, located in seismic design category A, B, or C, in an area where the basic wind speed is less than 110 mph, shall be permitted to be constructed in accordance with the following:

1. exterior walls sheathed with minimum 7/16 inch wood structural panels fastened in accordance with Table R602.3(3), or minimum ½ inch structural fiberboard sheathing fastened in accordance with Table R602.3(1), either or both, and
2. foundation sills shall be anchored to concrete or masonry foundations in accordance with Sections R403.1.6 and R602.11.1, and
3. exterior walls shall be constructed in accordance with Figure R602.13(1), and
4. top plates of exterior walls shall be attached to rafters or roof trusses above in accordance with Table R602.3(1), and where required by this section, blocking between rafters or roof trusses shall be attached to top plates of exterior walls and to rafters and roof trusses in accordance with Table R602.3(1). A continuous band, rim, or header joist or roof truss parallel to the exterior wall shall be permitted to replace the blocking required by this section. Blocking shall not be required over openings in exterior walls. In addition to the requirements of this section, lateral support shall be provided for rafters and ceiling joists in accordance with Section R802.8 and for trusses in accordance with Section R802.10.3, Roof ventilation shall be provided in accordance with Section R806.1.
 - A. For wind speeds less than 100 mph (45 m/s):
 - i. Where the distance from the top of the exterior wall to the top of the rafters or roof trusses above is 9.25 inches (235 mm) or less, blocking between rafters or roof trusses shall not be required.
 - ii. Where the distance from the top of the exterior wall to the top of the rafters or roof trusses above is between 9.25 inches (235 mm) and 15.25 inches (387 mm) blocking between rafters or roof trusses shall be provided in accordance with Figure R602.13(2).
 - B. For wind speeds of 100 mph (45 m/s) and less than 110 mph (49 m/s), where the distance from the top of the exterior wall to the top of the rafters or roof trusses above is 15.25 inches (387 mm) or less, blocking between rafters or roof trusses shall be provided above the exterior wall in accordance with Figure R 613.(2).
 - C. For wind speeds less than 110 mph (49 m/s) where the distance from the top of the exterior wall to the top of the rafters or roof trusses above exceeds 15.25 inches (387 mm), the top plate of the exterior wall shall be connected to perpendicular rafters or roof trusses above in accordance with one or more of the following methods:
 - i. Soffit blocking panels constructed per Figure R602.13(3).
 - ii. Vertical blocking panels constructed per Figure R602.13(4).
 - iii. Full-height engineered blocking panels designed per the AF&PA WFCM.

- iv. Blocking, blocking panels, or other methods of lateral load transfer designed in accordance with accepted engineering practice.

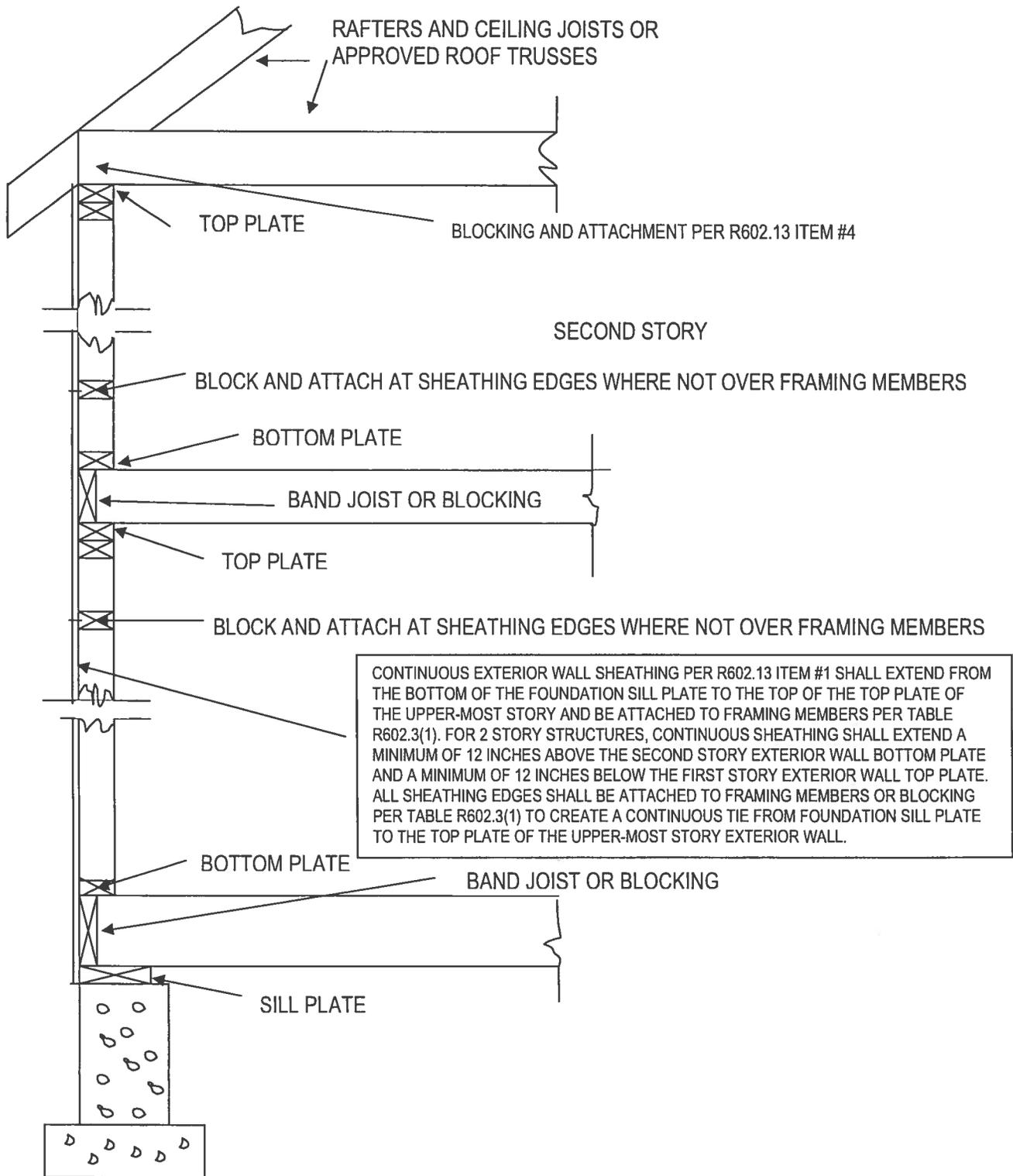
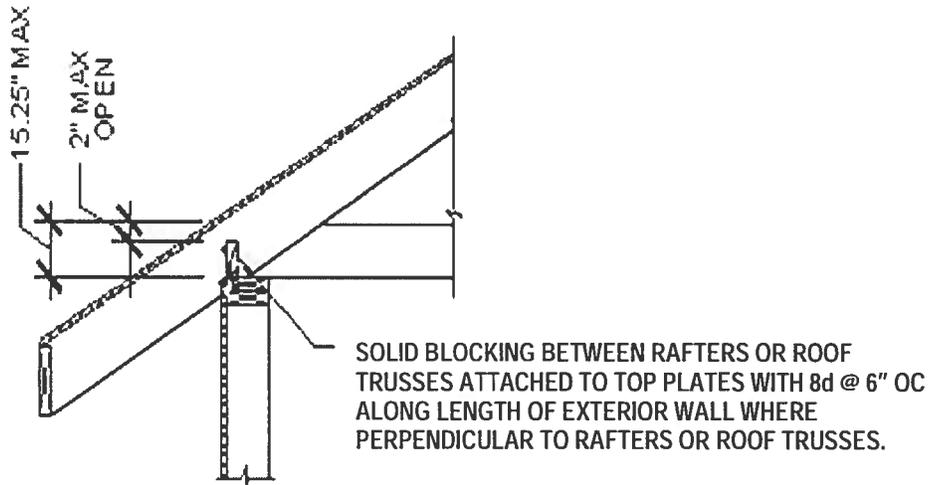


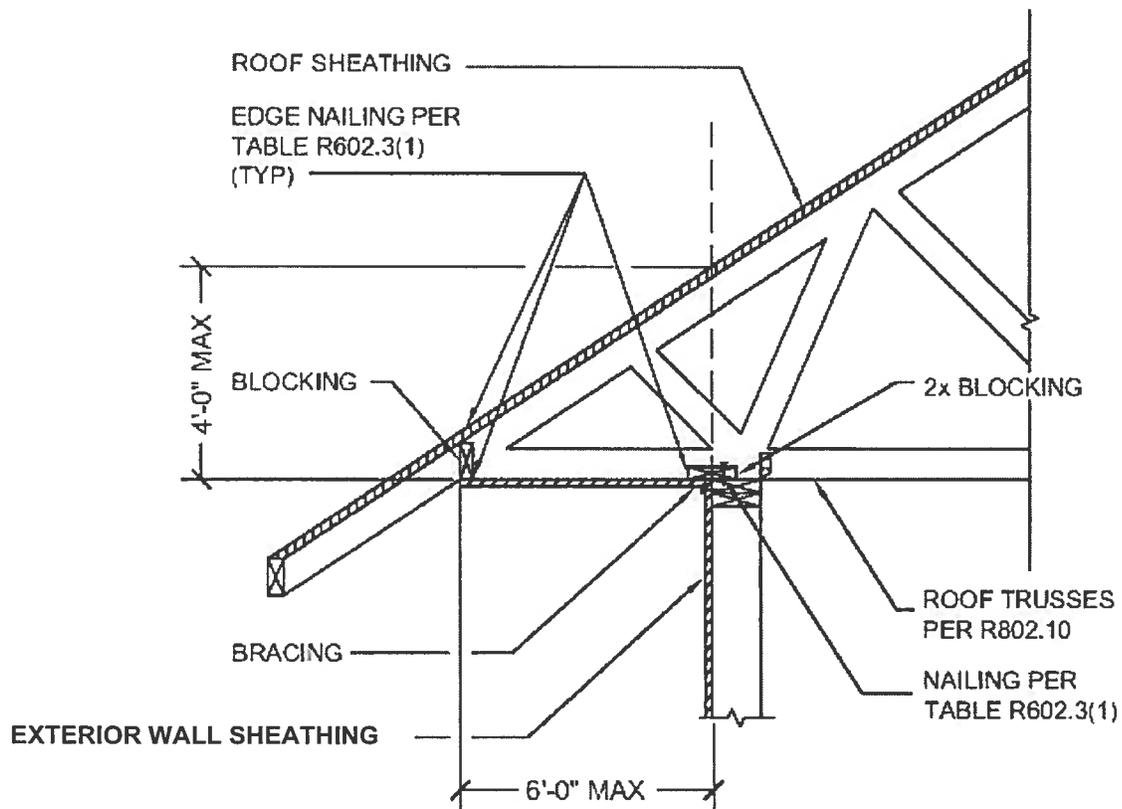
FIGURE R602.13(1)
EMPIRICAL METHOD EXTERIOR WALL CONSTRUCTION



For SI: 1 inch = 25.4 mm

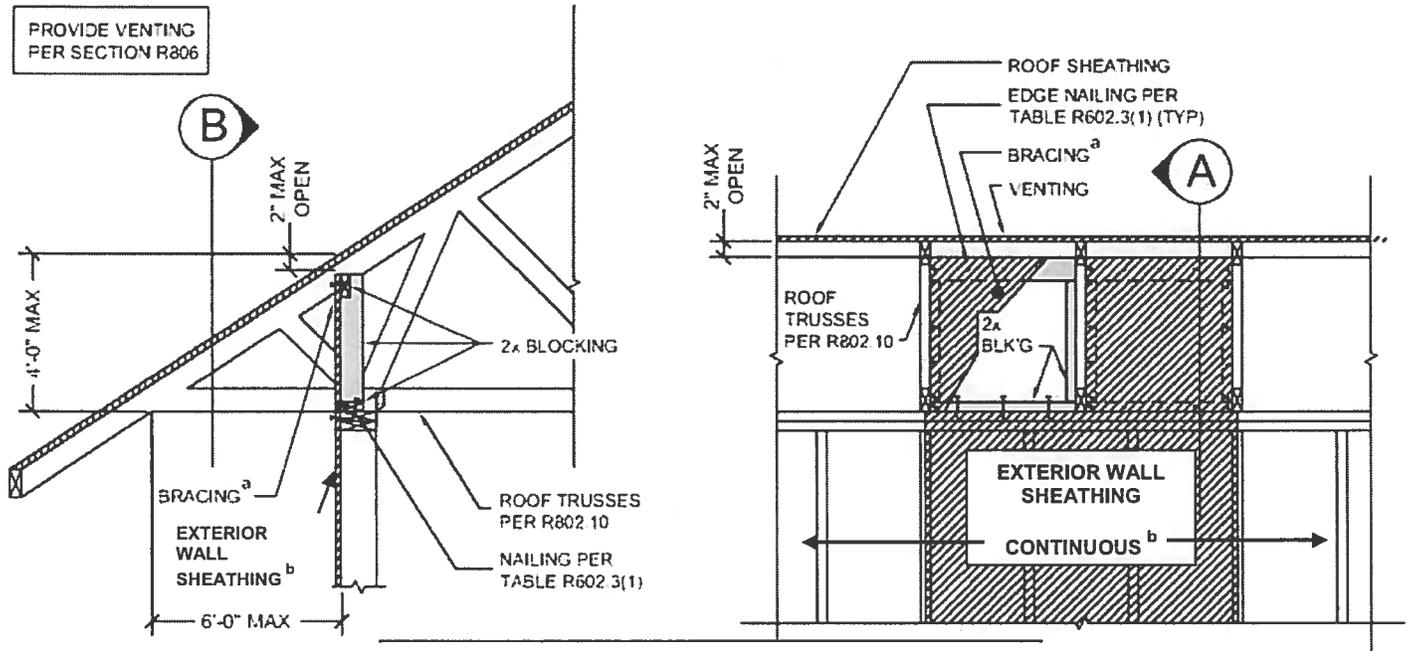
FIGURE R602.13(2)

EXTERIOR WALL CONNECTION TO PERPENDICULAR RAFTERS



For SI: 1 inch = 25.4 mm
 A. Provide ventilation (not shown) per Section R806.

FIGURE R602.13(3)
EXTERIOR WALL CONNECTION OPTION TO PERPENDICULAR RAFTERS OR ROOF TRUSSES



(A) SECTION

(B) ELEVATION

- a. Bracing shall be minimum 7/16 inch wood structural panels fastened in accordance with Table R602.3(3), or minimum 1/2 inch structural fiberboard sheathing fastened in accordance with Table R602.3(1), either or both, and shall be continuous at all locations where rafters or roof trusses are perpendicular to exterior wall.
- b. Exterior wall sheathing shall be minimum 7/16 inch wood structural panels fastened in accordance with Table R602.3(3), or minimum 1/2 inch structural fiberboard sheathing fastened in accordance with Table R602.3(1), either or both, and shall be continuous for the entire perimeter except at openings.

FIGURE R602.13(4)
EXTERIOR WALL CONNECTION OPTION TO PERPENDICULAR RAFTERS OR ROOF TRUSSES

12060801

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information (Check one): individual Government Entity Company

Name: Richard L. Burkard Jr. Representing: City of Chesapeake, Virginia

Mailing Address: 306 Cedar Road P.O. Box 15225, Chesapeake, VA 23328-5225

Email Address: rburkard@cityofchesapeake.net Telephone Number: (757) 382-8563

Proposal Information

Code(s) and Section(s) : Add Section IRC R602.13

R602.13 Simplified wall bracing for structures in wind zones greater than 90 MPH but less than 110 MPH. Buildings located in areas where the basic wind speed is greater than 90 mph (40 m/s) but less than 110 mph (49 m/s), for Exposure Category A, B and C, shall meet all of the requirements listed in section R602.12, except for the additional items that need to added as listed below.

1. Wood continuous sheathing panels applied on the outside of the exterior walls shall be a minimum of 7/16 OSB.
2. Exterior wood sheathing panels shall be applied with a minimum of full head 8d common nails (2 1/2" x 0.131) or 10d gun nails (3" x 0.128) spaced 6 inches on center at edges, field and 4 inches on the corners.
3. Foundation anchorage shall be as per R403.1.6, except 1/2 inch (12.7mm) in diameter anchor bolts shall be spaced at a maximum of 4 feet on center.
4. A full perimeter structural 2x fascia will be allowed to be installed on roofs with less than a 16" inch overhang and be allowed to replace rafter blocking where the distance from the top plate to the roof sheathing less than 15.25" inches in accordance with R602.10.8.1.

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

This section will provide a simplified wall bracing requirement for those communities and builders, where the wind speed exceeds 90 mph. Most builders where the wind speed is greater than 90 mph use 7/16 OSB continuous sheathing method when constructing new homes and additions. By adding a few extra sheathing nails, a continuous 2x fascia and a few extra anchor bolts, they can greatly reduce the complexity of wall bracing similar those communities whose wind speed is 90 MPH.

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

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Bryan Deem

Representing: Stafford County

Mailing Address: 359 Laurel Drive, Aylett, Virginia 23009

Email Address: bdeem@co.stafford.va.us

Telephone Number: 540-658-4504

Proposal Information

Code(s) and Section(s): USBC R403.1

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

R403.1 General. All exterior walls shall be supported on continuous solid or fully grouted masonry or concrete footings, wood foundations, or other approved structural systems which shall be of sufficient design to accommodate all loads according to Section R301 and to transmit the resulting loads to the soil within the limitations as determined from the character of the soil. Footings shall be supported on undisturbed natural soils or engineered fill.

~~**Exception:** One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, not exceeding 256 square feet (23.7824 m²) of building area, provided all of the following conditions are met:~~

- ~~1. The building eave height is 10 feet or less.~~
- ~~2. The maximum height from the finished floor level to grade does not exceed 18 inches.~~
- ~~3. The supporting structural elements in direct contact with the ground shall be placed level on firm soil and when such elements are wood they shall be approved pressure preservative treated suitable for ground contact use.~~
- ~~4. The structure is anchored to withstand wind loads as required by this code.~~
- ~~5. The structure shall be of light frame construction whose vertical and horizontal structural elements are primarily formed by a system of repetitive wood or light gauge steel framing members, with walls and roof of light weight material, not slate, tile, brick or masonry.~~

To be replaced by:

Exception: One story detached accessory structures 200 square feet or less which are exempt from application of permit in accordance with section R108.2.

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

Under the current provision there is an unusual accommodation for tool sheds between 200 square feet and 256 square feet. While a 200 square foot shed does not require an application for permit, those between 200 and 256 need not have a footing designed "to accommodate all loads according to Section R301 and to transmit the resulting loads to the soil within the limitations as determined from the character of the soil." It would be unusual to press for other code requirements to be met when the foundation system is not required to meet any standard. The current provision requires partial code compliance for a shed that is 14'x14'; strangely, a shed that is 16'x16' must be fully compliant.

It seems more logical to align both USBC R403.1 and USBC R108.2 so that detached structures 200 square foot or less avoid regulation altogether.

Submittal Information

Date Submitted: 6-13-12

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

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
600 East Main Street
Suite 300
Richmond, VA 23219

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



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

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): X Individual Government Entity Company

Name: John Catlett

Representing: VBCOA Administration Committee

Mailing Address: 301 King Street, Alexandria, Virginia 22314

Email Address: john.catlett@alexandriava.gov

Telephone Number: 703.746.4182

Proposal Information

Code(s) and Section(s): 108.2 Exemptions from Permit

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

108.2 Exemptions from application for permit. . . .

2. One story detached accessory structures used as tool and storage sheds, playhouses or similar uses, provided the floor area does not exceed ~~200~~ 256 square feet (18 m²) and the structures are not classified as a Group F-1 or H occupancy.

(No other changes)

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

This change would provide consistency with the provisions for permanent foundations found in the IBC. This only exempts the structure from building permit, not compliance with the VCC or local zoning requirements. This provides consistency with the model codes.

Submittal Information

Date Submitted: August 1, 2012

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

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
600 East Main Street
Suite 300
Richmond, VA 23219

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



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

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): X Individual Government Entity Company

Name: John Catlett

Representing: VBCOA Administration Committee

Mailing Address: 301 King Street, Alexandria, Virginia 22314

Email Address: john.catlett@alexandriava.gov

Telephone Number: 703.746.4182

Proposal Information

Code(s) and Section(s): 117.1 Temporary Buildings, Structures and Uses

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

117.1 Temporary building and, structures and uses. The building official is authorized to issue a permit for temporary buildings or structures, and temporary uses within existing buildings and structures. Such permits shall be limited as to time of service, but shall not be permitted for more than one year, except that upon the permit holder's written request, the building official may grant one or more extensions of time, not to exceed one year per extension. The building official shall review and may approve conditions or modifications for temporary uses that may be necessary to provide equivalent levels of safety without obtaining full compliance with this code. The building official is authorized to terminate the approval and order the demolition, removal of temporary buildings or structures or discontinuance of the temporary use during the period authorized by the permit when determined necessary.

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

It has been identified that some localities have not allowed temporary shelters and other uses except in buildings meeting all of the requirements for the proposed uses. The proposed changes will clearly allow the building officials to consider alternatives and approve them for temporary uses. This will allow consideration of the risk vs. benefit associated with short term temporary uses. This can provide flexibility to consider temporary uses for things such as hyper/hypothermia shelters, overnight events such as Club or youth group overnight events at churches, fundraising events of very limited duration while considering alternatives such as fire watches, occupancy limitations, single station smoke detection, etc.

Submittal Information

Date Submitted: August 1, 2012

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

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
600 East Main Street
Suite 300
Richmond, VA 23219

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

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

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: 2011 HJR 648 Workgroup

Representing: _____

Mailing Address: _____

Email Address: _____

Telephone Number: _____

Proposal Information

Code(s) and Section(s): USBC, Virginia Construction Code Section 310.6 (IRC Section R311.2.1)

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

Add new Section R311.2.1 to the International Residential Code to read as follows:

R311.2.1 Interior doors. All interior doors to habitable spaces, bathrooms and toilet rooms which are located on the level of the dwelling containing the egress door required by Section R311.2 shall have doorways that have a clear opening of 31¾ inches (805 mm) minimum. The clear opening of such doorways having swinging doors shall be measured between the face of the door and stop, with the door open 90 degrees. Where the egress door required by Section R311.2 is located on a split level, bi-level or tri-level entryway, or does not otherwise open to the main level of the dwelling, the level of the dwelling to have interior doors conforming to this section shall be the main level of the dwelling.

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

This proposal is to have all interior doors used for maneuvering through the main level of new dwellings to have a clear opening of 31¾ inches to facilitate the movement of wheelchair users on that level without having to later modify the doors. The opening dimension specified permits the use of a standard 2'-8" door, which is already common practice in multi-family dwelling construction and is not significantly more expensive than the standard 2'-6" (30") doors, which some builders are currently using for powder room and bedroom doors. This requirement would not apply to closet or pantry doors or any similar doors not serving a room of the dwelling.

Submittal Information

Date Submitted: _____

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

Please submit the proposal to:

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

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



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

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Draft under consideration by HBAV _____

Representing: _____

Mailing Address: _____

Email Address: _____

Telephone Number: _____

Proposal Information

Code(s) and Section(s): USBC, Virginia Construction Code Section 310.6 (IRC Section R311.2.1) _____

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

Add new Section R311.2.1 to the International Residential Code to read as follows:

R311.2.1 Interior doors. All interior doors to habitable spaces, bathrooms and toilet rooms which are located on the level of the dwelling containing the egress door required by Section R311.2 shall have doorways that have a clear opening of 31¾ inches (805 mm) minimum. The clear opening of such doorways having swinging doors shall be measured between the face of the door and stop, with the door open 90 degrees. Where the egress door required by Section R311.2 is located on a split level, bi-level or tri-level entryway, or does not otherwise open to the main level of the dwelling, the level of the dwelling to have interior doors conforming to this section shall be the main level of the dwelling.

Exceptions:

1. Doors at the end of a hallway.
2. Doors for a half bath or powder room.

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

This proposal is to have all interior doors used for maneuvering through the main level of new dwellings to have a clear opening of 31¾ inches to facilitate the movement of wheelchair users on that level without having to later modify the doors. The opening dimension specified permits the use of a standard 2'-8" door, which is already common practice in multi-family dwelling construction and is not significantly more expensive than the standard 2'-6" (30") doors, which some builders are currently using for powder room and bedroom doors. This requirement would not apply to closet or pantry doors or any similar doors not serving a room of the dwelling.

The exceptions are for architectural considerations as there is not enough room for the door jamb and trim if a 2'-8" door is located at the end of a hallway and the door would have to swing out of a half-bath to make it functional, which is undesirable.

Submittal Information

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

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: 2011 HJR 648 Workgroup

Representing: _____

Email Address: _____

Telephone Number: _____

Proposal Information

Code(s) and Section(s): USBC, Virginia Construction Code Sections 310.6 (IRC Section R320.2) and 1109.16

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

Add new Section R320.2 to the International Residential Code to read as follows:

R320.2 Universal design features for accessibility in dwellings. Dwellings constructed under the International Residential Code not subject to Section R320.1 may comply with Section 1109.16 of Part I of the Uniform Statewide Building Code (13 VAC 5-63) and be approved by the local building department as dwellings containing universal design features for accessibility.

Add new Section 1109.16 to the Virginia Construction Code to read as follows:

1109.16 Dwellings containing universal design features for accessibility. Group R-5 occupancies not subject to Section R320.1 of the IRC and Group R-3 occupancies not subject to Section 1107.6.3 may comply with this section and be approved by the local building department as dwellings containing universal design features for accessibility.

1109.16.1 Standards for dwellings containing universal design features for accessibility. When the following requirements are met, approval shall be issued by the local building department indicating that a dwelling has been constructed in accordance with these standards and is deemed to be a dwelling containing universal design features for accessibility.

1. The dwelling must comply with the requirements for Type C units under Section 1005 of ICC A117.1 with the following changes to the those requirements.

1.1. That at least one bedroom be added to the interior spaces required by Section 1005.4 of ICC A117.1.

1.2. In the toilet room or bathroom required by Section 1005 of ICC A117.1, in addition to the lavatory and water closet, a shower or bathtub complying with Section 1004.11.3.2.3 of ICC A117.1 shall be provided and shall include reinforcement for future installation of grab bars in accordance with Section 1004.11.1 of ICC A117.1.

1.3. That the exception to Section 1005.4 of ICC A117.1 is not applicable.

1.4. That there be a food preparation area complying with Section 1005.7 of ICC A117.1 on the entrance level.

1.5. That any thermostat for heating or cooling on the entrance level comply with Section 1005.8 of ICC A117.1.

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

This proposal is to establish an optional standard for accessible dwellings in recognition that such features are not required in single

family dwelling construction, but that there needs to be a consistent standard when such features are desired. The proposal utilizes new Type C dwelling unit requirements developed for the ICC A117.1 standard through the International Code Council's code development process and also incorporates features from the Virginia EasyLiving Home program, for which tax credits are available. In addition, specifications consistent with the federal HUD guidelines for bathtub and showers are used.

Submittal Information

Date Submitted: _____

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

Please submit the proposal to:

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

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



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

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Alan Meeks

Representing: The Marwin Company, Inc.

Mailing Address: PO Box 9126, Columbia, SC 29290

Email Address: alan@marwincompany.com

Telephone Number: 803-776-2396

Proposal Information

Code(s) and Section(s): 2012 IECC 402.2.4 Access Hatches & Doors / 2012 IRC N1102.2.4 Access Hatches & Doors

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

~~402.2.3 Access hatches and doors. Access doors from conditioned spaces to unconditioned spaces (e.g. attics and crawl spaces) shall be weather-stripped and insulated to a level equivalent to the insulation on the surrounding surfaces. Access shall be provided to all equipment that prevents damaging or compressing the insulation. A wood framed or equivalent baffle or retainer is required to be provided when loose fill insulation is installed, the purpose of which is to prevent the loose fill insulation from spilling into the living space when the attic access is opened, and to and provide a permanent means of maintaining the installed R-value of the loose fill insulation."~~

*Delete Section 402.2.3, 'Access hatches and doors', and substitute the following:

402.2.3 Access hatches and doors.

Access doors from conditioned spaces to unconditioned spaces (e.g., attics, unconditioned basements and crawl spaces) shall be weather-stripped and insulated in accordance with the following insulation values:

1. Hinged vertical doors shall have a minimum overall R-5 insulation value;

2. Hatches/scuttle hole covers shall have a minimum of R-38 insulation;

and

3. Pull down stairs shall have a minimum of 75 percent of the panel area having R-5 rigid insulation.

Access shall be provided to all equipment which prevents damaging or compressing the insulation. A wood framed or equivalent baffle or retainer is required to be provided when loose fill insulation is installed, the purpose of which is to prevent the loose fill insulation from spilling into the living space when the attic access is opened, and to provide a permanent means of maintaining the installed R-value of the loose fill insulation. For safety, when climbing into an attic space a 12 inch (30.5 cm) to 24 inch (61cm) walkway may be installed around the perimeter of the hatch or pull down stair on top of the ceiling joists.

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

The intent of the amendment is to provide an easier, safer and cost effective means of insulating the attic access opening while maintaining the intent of the energy code. Energy saving estimates for Chesterfield, Va. are minimal (less than 10 dollars a year) when insulating and weather-stripping beyond an R-5 minimum in the small square foot area that an attic stairway represents in an attic area. Construction savings would be a minimum of \$200. Energy Star® requirements for the same application only requires “a durable \geq R-10 insulated cover that is gasketed.”

Submittal Information

Date Submitted: 8-1-12

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

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
600 East Main Street
Suite 300
Richmond, VA 23219

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



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

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Matt Westheimer

Representing: VBCOA Energy Committee

Email Address: tmwestheimer@co.hanover.va.us

Telephone Number: (804) 365-6344

Proposal Information

Code(s) and Section(s): VCC (IECC Section R402.4.2 and Table R402.4.1.1)

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

Change Section R402.4.2 and the last row of Table 402.4.1.1 as shown:

R402.4.2 Fireplaces. New wood-burning fireplaces shall be provided with outdoor combustion air and shall have gasketed doors or tight-fitting flue dampers and ~~outdoor combustion air~~.

Table R402.4.1.1

Fireplace	An air barrier shall be installed on fireplace walls. Fireplaces shall have gasketed doors <u>or tight-fitting flue dampers</u> .
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Supporting Statement (including intent, need, and impact of the proposal):

The proposal is to permit fireplaces to either have gasketed doors or tight-fitting dampers to accommodate common practice in both site-built masonry fireplaces and factory-built fireplaces. Either method will satisfy energy conservation goals.

Submittal Information

Date Submitted: 3/21/12

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

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
600 East Main Street
Suite 300
Richmond, VA 23219

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



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

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Stephen Turchen

Representing: Virginia Building & Code Officials Association

Mailing Address: Suite 316 / 12055 Government Center Parkway, Fairfax, VA 22035

Email Address: Stephen.turchen@Fairfaxcounty.gov

Telephone Number: 703-324-1653

Proposal Information

Code(s) and Section(s): 2012 IECC R403.1.1

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

R403.1.1 Programmable thermostat. ~~Where the primary heating system is a forced air furnace, at least one thermostat per~~ The thermostat controlling the primary heating or cooling system of the dwelling unit shall be capable of controlling the heating and cooling system on a daily schedule to maintain different temperature set points at different times of the day. [Remainder of paragraph unchanged.]

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

This suggested change recognizes that forced air heating and air conditioning systems are not the only systems that may benefit from programmable thermostats. Hydronic, radiant electric, and solar thermal systems could also be programmed for night or "unoccupied" setback periods. The proposal concurrently clarifies that the primary heating or cooling system, at minimum, is the system that should receive the programmable thermostat. This clarification is necessary for those residential dwelling units that have multiple systems; e.g., first floor / second floor forced air systems, or radiant electric systems with thermostats in each room. Which system must have a programmable thermostat? It is the "primary" system, typically the one serving the largest area of the dwelling, but subject to reasonable interpretation by the Building Official. Impact of this proposal may be to reduce installation of unnecessary programmable thermostats in multiple H/AC systems.

Submittal Information

Date Submitted: _____

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

Please submit the proposal to:

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

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Matt Westheimer

Representing: VBCOA Energy Committee

Email Address: tmwestheimer@co.hanover.va.us

Telephone Number: (804) 365-6344

Proposal Information

Code(s) and Section(s): VCC (IECC Section R402.3.6)

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

Delete Section R402.3.6 in its entirety as shown below:

~~R402.3.6 Replacement fenestration. Where some or all of an existing fenestration unit is replaced with a new fenestration product, including sash and glazing, the replacement fenestration unit shall meet the applicable requirements for U-factor and SHGC in Table R402.1.1.~~

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

While Section R402.3.6 is addressing alterations to existing buildings and would be deleted due to Chapter 1 of the Virginia Construction Code anyway, deleting it in the IECC will make it clear that it cannot be applied.

Submittal Information

Date Submitted: 3/21/12

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

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
600 East Main Street
Suite 300
Richmond, VA 23219

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



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

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Bruce Cornwall

Representing: VBCOA Energy Committee

Mailing Address: 302 N Main St., Culpeper, VA 22701

Email Address: bcornwall@culpepercounty.gov

Telephone Number: (540) 727-3444, Ext. 387

Proposal Information

Code(s) and Section(s): VCC (IECC R402.2.3)

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

Change Section R402.2.3 of the 2012 IECC to read as follows:

R402.2.3 Eave baffle. For air permeable insulations in vented attics, a baffle shall be installed adjacent to soffit and eave vents. Baffles shall maintain an opening equal or greater than the size of the vent. The baffle shall extend over the top of the attic insulation. The baffle shall be permitted to be any ~~solid~~ approved material.

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

By changing the word "solid" to "approved" you lower the possibility of having a material installed that may not meet smoke and flame spread criteria. The material would still have to meet the requirement of being not easily crushed.

Submittal Information

Date Submitted: 3/15/12

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

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
600 East Main Street
Suite 300
Richmond, VA 23219

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



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

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Stephen Turchen

Representing: Virginia Building & Code Officials Association

Mailing Address: Suite 316 / 12055 Government Center Parkway, Fairfax, VA 22035

Email Address: Stephen.turchen@Fairfaxcounty.gov

Telephone Number: 703-324-1653

Proposal Information

Code(s) and Section(s): 2012 IECC Sections R202 and C202

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

Change the definition of "Building thermal envelope" in Sections R202 and C202 as shown:

BUILDING THERMAL ENVELOPE. The basement walls, exterior walls, floor, roof, and any other building elements that enclose conditioned space or provides a boundary between conditioned space and exempt or unconditioned space. Unconditioned space shall include those buildings or spaces adjacent to a conditioned space that may not be heated or cooled for extended periods of time, such as adjacent townhouses or adjacent tenant spaces, due to periods of non-occupancy.

Supporting statement:

The proposed change is intended to ensure that the thermal envelope boundary will include the separation between a conditioned space and those spaces which have a reasonable expectation of being unoccupied (and therefore unconditioned) for a significant albeit temporary period of time. Typical residential building example is an occupied townhouse that is adjacent to an unoccupied townhouse. Typical commercial building example is a tenant space that is adjacent to a vacant or simply undeveloped tenant space. If the common wall between the townhouses or between the tenant spaces is uninsulated, there will be unnecessary heat transfer across that boundary. The proposal will prevent this situation from developing.

There may be cost impacts of this proposal, but they are difficult to gauge. Townhouses required "rated" separations which may include insulating materials that could also satisfy the wall R-value requirement. Common townhouse construction practice is to build a stud wall on the inside of the rated wall, which could be filled with materials with the required R-value. Tenant demising walls are not commonly insulated for energy conservation or to achieve a fire rating, but ARE sometimes insulated for sound transmission attenuation. Sound insulation can serve double duty as an energy insulating product if it meets the required R-value of Table C402.2.

Submittal Information

Date Submitted: _____

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

Please submit the proposal to:

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

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Stephen Turchen

Representing: Virginia Building & Code Officials Association

Mailing Address: Suite 316 / 12055 Government Center Parkway, Fairfax, VA 22035

Email Address: Stephen.turchen@Fairfaxcounty.gov Telephone Number: 703-324-1653

Proposal Information

Code(s) and Section(s): 2012 IECC R402.2.1

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

R402.2.1 Ceilings with attic spaces. When Section R402.1.1 would require R38 in the ceiling, installing R30 over 100% of the ceiling area shall be deemed to satisfy the requirement for R38 whenever the full height of uncompressed R30 insulation extends over the wall top plate at the eaves. Similarly, when Section R402.1.1 would require R49 in the ceiling, installing R38 over 100% of the ceiling area shall be deemed to satisfy the requirement for R49 whenever the full height of uncompressed R30 insulation extends over the wall top plate at the eaves. This reduction shall not apply to the U-factor alternative approach in Section R402.1.3 and the total UA alternative in Section R402.1.4.

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

Revised language clarifies how to interpret the "alternative" ceiling insulation requirement. It has come to VBCOA's attention that some code officials have interpreted R402.1.1 as permitting R38 over the wall top plate when using "raised heel" or "energy" trusses, but where R49 could be installed in the interior of the attic where height permits, R49 would in fact be required in those areas. The amendment seeks to clarify that R38 could be used throughout the entire attic, where a full R38 could be installed over the top plate. This approach is consistent with US DOE analysis of heat flow through insulated attics (ca. 1996), accounting for actual insulation thicknesses and framing members. Depending on how this particular provision had been previously enforced, impact may be to reduce overall installed insulation materials in attics with no appreciable difference in heat flow rate through this part of the thermal envelope.

Submittal Information

Date Submitted: _____

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

Please submit the proposal to:

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

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Bryan Deem

Representing: Stafford County

Mailing Address: 359 Laurel Drive, Aylett, Virginia 23009

Email Address: bdeem@co.stafford.va.us

Telephone Number: 540-658-4504

Proposal Information

Code(s) and Section(s): Change section N1103.2.1 accordingly:

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

N1103.2.1 (R403.2.1) Insulation (Prescriptive). Supply ducts in attics shall be insulated to a minimum of R-8. All other ducts shall be insulated to a minimum of R-6.

Exceptions:

1. Ducts or portions thereof located completely inside the *building thermal envelope*.

Add exception #2 to say:

2. Joist spaces used as combustion air ducts in accordance with IRC G 2407.11 shall not be used in floor required to be insulated according to R 1102.1.1.

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

A joist space used for a combustion air duct would certainly create a void in the building thermal envelope if used in an insulated floor assembly. With other options available for conveyance of both indoor and outdoor combustion air, there would be little compromise avoiding this type of application when it compromises the building thermal envelope.

Submittal Information

Date Submitted: 6/13/12

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

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Bruce Cornwall

Representing: VBCOA Energy Committee

Mailing Address: 302 N Main St., Culpeper, VA 22701

Email Address: bcornwall@culpepercounty.gov

Telephone Number: 540-727-3444, Ext. 395

Proposal Information

Code(s) and Section(s): VCC (IECC R402.4.1.2.1), (IRC N1102.4.1.2.1)

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

Add new Section R402.4.1.2.1 to the IECC to read as follows:

R402.4.1.2.1 Visual inspection option. Field verification by visual inspection of items listed in Table R402.4.1.1, applicable to the methods of construction, shall be an acceptable alternative to complying with Section R402.4.1.2.

Add new Section N1102.4.1.1 to the IRC to read as follows:

N1102.4.1.2.1 Visual inspection option. Field verification by visual inspection of items listed in Table N1102.4.1.1, applicable to the methods of construction, shall be an acceptable alternative to complying with Section N1102.4.1.2. When this option is chosen, it is assumed that the air infiltration rate is less than 5 air changes per hour and a whole-house mechanical ventilation shall be provided in accordance with Section R303.4.

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

A thorough visual inspection of the air sealing done before drywall will be more cost effective and save more energy than air sealing done after a failed blower door test.

Complying with Section R303.4 for IRC buildings will assure that adequate air changes per hour are being met.

Submittal Information

Date Submitted: 7/9/12

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
600 East Main Street
Suite 300
Richmond, VA 23219

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



Recommended Amendments to the 2012 International Residential Code (IRC)

Issue: Duct Sealing

2012 IRC Section: N1103.2.2

Recommended Amendment:

Modify the Section as shown below (Delete text):

N1103.2.2 (R403.2.2) Sealing (Mandatory). Ducts, air handlers, and filter boxes shall be sealed. Joints and seams shall comply with Section M1601.4.1 of this code.

Exceptions:

1. Air-impermeable spray foam products shall be permitted to be applied without additional joint seals.
2. Where a duct connection is made that is partially inaccessible, three screws or rivets shall be equally spaced on the exposed portion of the joint so as to prevent a hinge effect.
3. Continuously welded and locking-type longitudinal joints and seams in ducts operating at static pressures less than 2 inches of water column (500 Pa) pressure classification shall not require additional closure systems.

Duct tightness shall be verified by either of the following:

- ~~1. Postconstruction test: Total leakage shall be less than or equal to 4 cfm (113.3 L/min) per 100 square feet (9.29 m²) of conditioned floor area when tested at a pressure differential of 0.1 inches w.g. (25 Pa) across the entire system, including the manufacturer's air handler enclosure. All register boots shall be taped or otherwise sealed during the test.~~
2. 1. Rough-in test: Total leakage shall be less than or equal to 4 cfm (113.3 L/min) per 100 ft² (9.29 m²) of conditioned floor area when tested at a pressure differential of 0.1 inches w.g. (25 Pa) across the system, including the manufacturer's air handler enclosure. All registers shall be taped or otherwise sealed during the test. If the air handler is not installed at the time of the test, total leakage shall be less than or equal to 3 cfm (85 L/min) per 100 square feet (9.29 m²) of conditioned floor area.

Exception: The total leakage test is not required for ducts and air handlers located entirely within the building thermal envelope.

Recommended Amendments to the 2012 International Residential Code (IRC)

Issue: Building Cavities

2012 IRC Section: N1103.2.3

Recommended Amendment:

Modify the Section as shown below (Delete text):

N1103.2.3 (R403.2.3) Building cavities (Mandatory).

Building framing cavities shall not be used as supply ducts or plenums. Building cavities used as plenums shall be durably sealed to limit infiltration. The sealing methods between dissimilar materials shall allow for differential expansion and contraction and shall be caulked, gasketed, weatherstripped or otherwise sealed with an air barrier material, suitable film or solid material.

Recommended Amendments to the 2012 International Residential Code (IRC)

Issue: Ceilings without Attic Spaces

2012 IRC Section: N1102.2.2

Recommended Amendment:

Modify the Section as shown below (Delete text):

N1102.2.2 Ceilings without attic spaces. Where Section N1102.1.1 would require insulation levels above R-30 and the design of the roof/ceiling assembly does not allow sufficient space for the required insulation, the minimum required insulation for such roof/ceiling assemblies shall be R-30. This reduction of insulation from the requirements of Section N1102.1.1 shall be limited to 500 square feet (46 m²) or 20% of the total insulated ceiling area, ~~which ever is less.~~ This reduction shall not apply to the U-factor alternative approach in Section N1102.1.3 and the total UA alternative in Section N1102.1.4

Recommended Amendments to the 2012 International Residential Code (IRC)

Issue: Restoring Equipment Trade-offs *

2012 IRC Section: Table N1105.5.2(1)

Recommended Amendment:

Modify the Table as shown below (Delete text, add New Text)

**TABLE N1105.5.2(1)
SPECIFICATIONS FOR THE STANDARD REFERENCE AND PROPOSED DESIGNS**

BUILDING COMPONENT	STANDARD REFERENCE DESIGN	PROPOSED DESIGN
Heating systems ^{f, g,}	<p>As proposed for other than electric heating without a heat pump. Where the proposed design utilizes electric heating without a heat pump the standard reference design shall be an air source heat pump meeting the requirements of Section R403 of the IECC-Commercial Provisions.</p> <p><u>Fuel type: same as proposed design</u></p> <p><u>Efficiencies:</u></p> <p><u>Electric: air-source heat pump with prevailing federal minimum efficiency</u></p> <p><u>Nonelectric furnaces: natural gas furnace with prevailing federal minimum efficiency</u></p> <p><u>Nonelectric boilers: natural gas boiler with prevailing federal minimum efficiency</u></p> <p>Capacity: sized in accordance with Section R403,6</p>	As proposed
Cooling system ^{g, i,}	<p>As proposed</p> <p>Fuel type: Electric</p> <p>Efficiency: in accordance with prevailing federal minimum standards</p> <p>Capacity: sized in accordance with Section R403,6</p>	As proposed
Service Water Heating ^{g, i, j, k}	<p>As proposed</p> <p><u>Fuel type: same as proposed design</u></p> <p><u>Efficiency: in accordance with prevailing Federal minimum standards</u></p> <p><u>Use: gal/day = 30 + 10 × Nbr</u></p> <p><u>Tank temperature: 120°F</u></p> <p><u>Use: same as proposed design</u></p>	<p>As proposed</p> <p><u>Same as standard reference</u> <u>gal/day = 30 + 10 × Nbr</u></p>

(Remainder of Table remains unchanged)

Recommended Amendments to the 2012 International Residential Code (IRC)

Issue: Wood Frame Wall Insulation

2012 IRC Section: Table N1102.1.1 and Table N1102.1.3

Recommended Amendment:

Modify the Tables as shown below: (Delete data, add new data)

**TABLE N1102.1.1
INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT^a**

CLIMATE ZONE	FENESTRATION U-FACTOR ^b	SKYLIGHT ^b U-FACTOR	GLAZED FENESTRATION SHGC ^{b,*}	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	MASS WALL R-VALUE ⁱ	FLOOR R-VALUE	BASEMENT ^c WALL R-VALUE	SLAB ^d R-VALUE & DEPTH	CRAWL SPACE ^e WALL R-VALUE
1	NR	0.75	0.25	30	13	3/4	13	0	0	0
2	0.40	0.65	0.25	38	13	4/6	13	0	0	0
3	0.35	0.55	0.25	38	20 or 13+5^h 13	8/13	19	5/13 ^f	0	5/13
4 except Marine	0.35	0.55	0.40	49	20 or 13+5^h 13	8/13	19	10/13	10, 2ft	10/13
5 and Marine 4	0.32	0.55	NR	49	20 19 or 13+5 ^h	13/17	30 ^g	15/19	10, 2ft	15/19
6	0.32	0.55	NR	49	20 19 or 13+5 ^h	15/20	30 ^g	15/19	10, 4ft	15/19
7 and 8	0.32	0.55	NR	49	20 19+5 or 13+10 ^h	19/21	38 ^g	15/19	10, 4ft	15/19

All footnotes shall remain

**TABLE N1102.1.3
EQUIVALENT U-FACTORS^a**

Climate Zone	Fenestration U-Factor	Skylight U-Factor	Ceiling U-Factor	Frame Wall U-Factor	Mass Wall U-Factor ^b	Floor U-Factor	Basement Wall U-Factor	Crawl Space Wall U-Factor
1	0.50	0.75	0.035	0.082	0.197	0.064	0.360	0.477
2	0.40	0.65	0.030	0.082	0.165	0.064	0.360	0.477
3	0.35	0.55	0.030	0.057 0.082	0.098	0.047	0.091 ^c	0.136
4 except Marine	0.35	0.55	0.026	0.057 0.082	0.098	0.047	0.059	0.065
5 and Marine 4	0.32	0.55	0.026	0.057 0.060	0.082	0.033	0.059	0.055
6	0.32	0.55	0.026	0.048 0.060	0.060	0.033	0.050	0.055
7 and 8	0.32	0.55	0.026	0.048 0.057	0.057	0.028	0.050	0.055

All Footnotes remain unchanged

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

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Jim Harrell

Representing: Blue Ridge Masonry Association

Mailing Address: 120 Wood Pine Drive, Stoneville, NC 27048

Email Address: jharrell@triad.rr.com

Telephone Number: (336)548-5815

Proposal Information

Code(s) and Section(s): IRC R1001.8

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

Smoke chamber walls shall be constructed of *solid masonry* units, hollow masonry units grouted solid, stone or concrete. The total minimum thickness of front, back and side walls shall be 8 inches (203mm) of *solid masonry*. When the inside surface of the smoke chamber is formed by corbelled masonry, the inside surface shall be parged smooth with refractory mortar conforming to ASTM C 199. When a lining of firebrick at least 2 inches (51mm) thick, or a lining of vitrified clay at least 5/8 inch (16mm) thick is provided, the total minimum thickness of front, back and side walls shall be 6 inches (152mm) of *solid masonry*, including the lining. Firebrick shall conform to ASTM C 1261 and be laid with medium duty refractory mortar conforming to ASTM C 199. Vitrified clay linings shall conform to ASTM C 315.

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

The noted Section is inconsistent with Section R1001.5 in regards to standard masonry wall thickness for fireplaces, which are typically exposed to more extreme temperatures. Safety is assured with the minimum thickness of solid masonry prescribed. Nonaqueous mortars are not practical for applying in the thicknesses required for constructing and parging the smoke chamber. Refractory mortar is not a readily available product which adds considerable cost and inconsistent enforcement, without the benefit of increasing the level of safety from historically proven industry standard practices.

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

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Lynn Underwood, Brian Foley

Representing: City of Norfolk, Fairfax County

Mailing Address: 400 Granby, Norfolk, Virginia 23503

Email Address: lynn.underwood@norfolk.gov

Telephone Number: (757) 664-6511

Proposal Information **Draft code change #1**

Code(s) and Section(s): USBC new Section R602.7.4 and Table R602.7.4

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

Amend Section R602.7.1 to state:

R602.7 Headers For header spans see Tables R502.5(1), R502.5(2) and R602.7.1.

Exception: Fully open porches or decks with simply supported headers used to support uniform loads that meet the requirements of Section R602.7.4.

Add a new section R602.7.4 to state:

R602.7.4 The allowable spans for nominal 2 inch double headers in bearing walls shall not exceed the spans in Table R602.7.4.

Add a new Table R602.7.4 to state:

Table R602.7.4

Maximum Spans For Headers Located Over Openings In Porches, Decks or Similar Locations (feet)

<u>Size of Headers</u>	<u>①Supporting One Floor</u>	<u>②Supporting One Roof</u>	<u>③Supporting One Floor and One Roof</u>	<u>④Supporting Two Floors and One Roof</u>
<u>2 - 2 X 4</u> <u>2 - 2 X 6</u> <u>2 - 2 X 8</u> <u>2 - 2 X 10</u> <u>2 - 2 X 12</u>				

Add a new figure R602.7.4 to illustrate:

Submittal Information

1. Please see attached calculations that form the engineering basis for the size of structural members with reduced tributary spans.
2. Please see copies of referenced documents from Section 602.6 and Table 602.6 in the 1995 edition of the One and Two Family Dwelling Code published by the Council of American Building Officials (CABO).
3. Please see supporting documentation submitted by the Home Builder's Association of Virginia (HBAV)

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

The 2012 International Residential Code (IRC) and its predecessors regulated the size of headers based on the provisions in Chapter Five. Note that Tables R502.5(1) and (2) has categories of building width that begins at 20 feet. The size of headers in this table assumes a rectangular tributary area that was at least 10 feet (20/2). Because of the lower end limit of 20 feet, headers over posts or columns that create porches or decks with less than 10 foot of tributary load must use that, much higher criteria. For instance a 6 foot porch with columns spaced at 10' O.C. must use 3 – 2 X 10s or 3 – 2 X 12s to comply with the code. The option for the builder is to seek an engineering rationalization to use anything different.

This table was created based on engineering principles that included analyzing for flexural bending, deflection, and horizontal shear. In addition, the design strength of lumber was set at the weakest allowed by the code for this condition and followed the standards recently created by the American Lumber Standards Committee. It is important to note that the 1995 edition of the One and Two Family Dwelling Code had a table that was very similar to this table. Note that this table is slightly more conservative when considering floor and roof loading conditions.

Date Submitted: June 15, 2012

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

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
Main Street Center
600 East Main Street
Richmond, VA 23219-1321

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



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

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Bryan Deem Representing: NA

Mailing Address: 359 Laurel Drive, Aylett, Virginia 23009

Email Address: bdeem@co.stafford.va.us Telephone Number: 540-658-4504

Proposal Information

Code(s) and Section(s): IRC R502.5 & R602.7.4

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

Add the following language/ section:

R502.5 Allowable girder spans. The allowable spans of girders fabricated of dimension lumber shall not exceed the values set forth in Tables R502.5(1) and R502.5(2). Girders shall be supported laterally at the ends to prevent rotation.

R602.7.4 Lateral restraint at supports. Headers shall be supported laterally at the ends to prevent rotation.

The Residential code specifies the required number of jack supports based on opening size and tributary area; however, there is no reference to king studs which are a critical component for load transfer and stability of headers and girders. The American Wood Council has published prescriptive measures for stability of bending members (NDS 4.4.1). It is the recommendation of the AWC that the language above be added to amend both the USBC and future editions of the IRC to account for this aspect which is currently not accounted for in the residential code.

Submittal Information

Date Submitted: June 25, 2012

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

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
600 East Main Street
Suite 300
Richmond, VA 23219

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



Ph: (804)365-6041
Fax: (804)365-6247

From: Paul Weimer [mailto:pweimer@ashlandwood.com]
Sent: Tuesday, May 22, 2012 11:42 AM
To: Stills, Harold A.
Subject: Titan Deck foot

Harold,

As we spoke over the phone I had a question regarding a new product call Titan deck foot. This system replaces the poured concrete footings needed for a floating deck that are under 6'. I would like to know if these meet the requirements for our area in Hanover for footings. I will be repairing/replacing my existing deck and will need to have new footings. My existing deck at it's highest point is less than the 6' limitations of this system. Please let me know what you find out and thank you for your help.

Below is the link for your review.

<http://www.ideas-for-deck-designs.com/titan-deck-foot.html>

Paul Weimer

project manager/engineer/estimator

Ashland Woodwork, Inc.

118 N. Thompson St.

Ashland, Va. 23005

804.798.4088

2012 V-USBC code change proposal.

R507 Decks

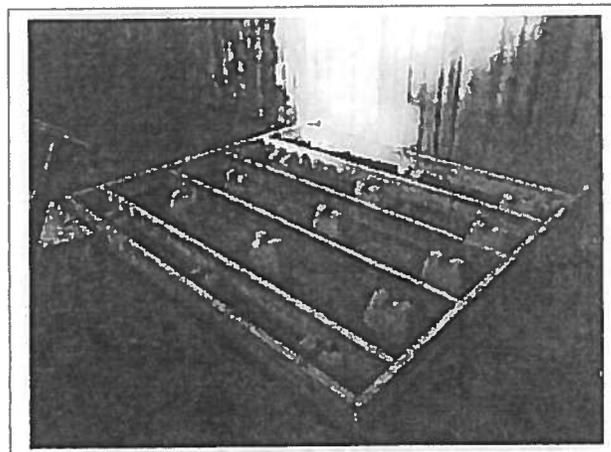
Allow concrete pier blocks to be used for wood decks.

Condition: Free standing decks.

Max size: 256 sqft

Max height above grade: 16"

Pier blocks to be set directly on ground.



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

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information (Check one): Individual Government Entity Company

Name: Under consideration by VBCOA IRC Committee Representing: _____

Mailing Address: _____

Email Address: _____ Telephone Number: _____

Proposal Information

Code(s) and Section(s): VCC Sections 103.10 and 310.7 (Group R-5 category)

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

Delete Item 6 in Section 103.10 and amend the Group R-5 description as shown below:

103.10 Use of certain provisions of referenced codes. The following provisions of the IBC and of other indicated codes or standards are to be considered valid provisions of this code. Where any such provisions have been modified by the state amendments to the IBC, then the modified provisions apply.

(Items 1-5 unchanged)

~~6. Section R101.2 of the IRC.~~

310.7 Residential Group R-5. Residential occupancies in both detached one- and two-family dwellings; and townhouses which are not more than three stories above grade plane in height and have a separate means of egress and accessory structures within the scope of the. The applicable provisions of the International Residential Code, also referred to as the "IRC- 1," shall be used for determining whether construction falls within the above scoping provisions.

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

This proposal is to reinstate the scoping criteria for when the IRC may be used back into the Group R-5 classification and to clarify that the definitions of "accessory structure" in the IRC and the applicable provisions of the IRC to determine how many stories there are in a building are used for the Group R-5 classification, rather than the IBC definitions of story and accessory structure, which are different than the IRC definitions.

Submittal Information

Date Submitted: _____

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

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

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Matt Westheimer

Representing: VBCOA Energy Conservation Committee

Mailing Address: 401 Lafayette Street, Williamsburg, VA. 23185

Email Address: mwest@williamsburgva.gov

Telephone Number: 757-220-6135

Proposal Information

Code(s) and Section(s): VCC (IECC Table R402.4.1.1)

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

Add a footnote to Table R402.4.1.1 as shown:

TABLE R402.4.1.1	
AIR BARRIER AND INSULATION INSTALLATION	
COMPONENT	CRITERIA a,b
(no change to table)	

- a. In addition, inspection of log walls shall be in accordance with the provisions of ICC-400.
- b. Structural integrity of headers shall be in accordance with the applicable building code.

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

The added footnote clarifies that the use of insulating material in headers cannot affect the structural integrity of the header required by the applicable building code.

Date Submitted: 3/21/12 modified 6/25/12

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

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
600 East Main Street
Suite 300
Richmond, VA 23219

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



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

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Matt Westheimer

Representing: VBCOA Energy Conservation Committee

Mailing Address: 401 Lafayette Street, Williamsburg, VA. 23185

Email Address: mwest@williamsburgva.gov

Telephone Number: 757-220-6135

Proposal Information

Code(s) and Section(s): VCC (IECC R404.1)

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

R404.1 Lighting equipment (Mandatory). A minimum of 75 percent of the lamps in permanently installed ~~lighting fixtures~~ luminaries shall be high-efficacy lamps or a minimum of 75 percent of the permanently installed ~~lighting fixtures~~ luminaries shall contain only high efficacy lamps.

(no change to the exception)

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

To make the wording when referring to lighting consistent with NEC

Submittal Information

Date Submitted: 6/25/12

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

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
600 East Main Street
Suite 300
Richmond, VA 23219

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



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

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Matt Westheimer / Bryan Deem Representing: VBCOA Energy Conservation Committee

Mailing Address: 401 Lafayette Street, Williamsburg, VA. 23185

Email Address: mwest@williamsburgva.gov Telephone Number: 757-220-6135

Proposal Information

Code(s) and Section(s): Add section N1102.4.5

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

Add Section N1102.4.5 to read as follows:
N1102.4.5 Mechanical rooms. Mechanical rooms that utilize outdoor combustion air shall be thermally isolated from the building thermal envelope.

Supporting Statement (including intent, need, and impact of the proposal):
There appears to be jurisdictional disagreement regarding this application. It seems obvious that a room that is supplied by outdoor combustion air via ducts or openings presents a potential for leakage into the building thermal envelope. Where there is an apparent conflict between IECC, IMC and IFGS this should be expressly stated for clarity.

Submittal Information

Date Submitted: 6/13/12 modified 6/25/12

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

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
600 East Main Street
Suite 300
Richmond, VA 23219

Email Address: taso@dhcd.virginia.gov
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VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Bryan Deem

Representing: Stafford County

Mailing Address: 359 Laurel Drive, Aylett, Virginia 23009

Email Address: bdeem@co.stafford.va.us

Telephone Number: 540-658-4504

Proposal Information

Code(s) and Section(s): IRC table R507.2.

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

I propose to replace table R507.2 in the IRC with Table 5 from the DCA 6.

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

Table R507.2 in the International Residential Code is restrictive to the extent that it does not apply to many existing installations. While the IRC limits ledger attachment to either solid sawn or LVL band joists, a majority of existing homes use rim board or other engineered wood products (EWP's) for band joist material.

The Design for Code Acceptance for Decks (version 6) incorporates a table that permits ledger attachment to EWP with some conditional restraints. This table would grant more flexibility for contractors to achieve a sound ledger attachment prescriptively.

Submittal Information

Date Submitted: 6/13/12

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

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
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