

DHCD -- Division of Building and Fire Regulation
2009 Code Change Cycle

COMPILATION DOCUMENT
(of all code changes received with staff evaluations)

PART III

Code changes beginning with a "C" are to the Virginia Construction Code; with an "R" are to the Virginia Rehabilitation Code; with an "M" are to the Virginia Maintenance code; with an "F" are to the Virginia Statewide Fire Prevention Code; with an "I" are to the Virginia Industrialized Building Safety Regulations; and with an "A" are to the Virginia Amusement Device Regulations. The order is as follows: C – R – M – F – I – A.

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PART II contains page numbers 81 – 178 and code changes C-310.6(R302.1(6)) – C-708.14

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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-903.2**

Nature of Change:

To retain the current sprinkler threshold for Group E buildings of 20,000 square feet instead of using the new IBC threshold of 12,000 square feet.

Proponent: Dan Zacharias, representing the Old Dominion Association of Church Schools

Staff Comments:

The issue was discussed at the workgroup meetings as a significant difference between the 2006 and 2009 IBCs. The fire service representatives supported the new IBC thresholds with the reason that schools are used as multipurpose facilities, including shelters at times. The proposal was received subsequent to the discussions but was considered at at least one client group meeting; however, no consensus was reached.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: C-903.2

Proponent Information

(Check one): Individual Government Entity Company

Name: Dan Zacharias

Representing: Old Dominion Association of Church Schools

Mailing Address: 3131 Valor Court, Broadway, VA 22815

Email Address: vaodacs@verizon.net

Telephone Number: 540-896-2785

Proposal Information

Code(s) and Section(s): IBC Section 903.2

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

Retain 20,000 square foot threshold for requiring automatic sprinkler systems in educational structures (Group E).

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

The cost of dropping the threshold to 12,000 square feet would be extremely high compared to the minute risk involved with retaining it at the current 20,000 square feet. A number of private schools would bear an inordinate financial burden when they build. These schools are already complying with the multitude of fire safety regulations designed to protect the students and teachers, and their safety record over the years has been outstanding.

Submittal Information

Date Submitted: July 13, 2009

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: tsu@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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-903.2.1.2**

Nature of Change:

To delete the current USBC amendment to the IBC which retained the 2003 IBC sprinkler threshold for restaurants of 300 occupants rather than 100 occupants.

Proponent: Robby Dawson, representing the Virginia Fire Services Board

Staff Comments:

The proposal was not received in time to be vetted through the workgroup process. The 2006 amendment was the result of a proposal from the Virginia Hospitality and Travel Association which would have left the sprinkler threshold at 300 for all Group A-2 occupancies. Public comment by the fire services community raised the concern over nightclubs, so the final approval kept the 300 occupant threshold for all A-2 occupancies other than nightclubs. Staff agrees that the having a different threshold for sprinklers within the same occupancy classification is problematic as a change of occupancy doesn't necessarily trigger the requirement for a sprinkler system to be necessary. However, that may be remedied by changing the requirements for a change of occupancy to address changes in activities which may affect the application of the code.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

**VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CODE CHANGE FORM**

Address to submit to:		Document No. <u>C- 903.2.1.2</u>
DHCD, The Jackson Center 501 North Second Street Richmond, VA 23219-1321		Committee Action: _____
Tel. No. (804) 371 – 7150 Fax No. (804) 371 – 7092 Email: bhcd@dhcd.virginia.gov		BHCD Action: _____

Submitted by: Robby Dawson

Representing: Fire Services Board

Address: 1005 Technology Park Drive, Glen Allen, VA 23059

Phone No. 804-717-6838

Regulation Title: USBC

Section No(s): 903.2.1.2

903.2.1.2 Group A-2. An automatic sprinkler system shall be provided for Group A-2 occupancies where one of the following conditions exists:

1. The fire area exceeds 5,000 square feet (465 m²);
2. The fire area has an occupant load of 100 ~~or more in night clubs or 300 or more in other Group A-2 occupancies~~; or
3. The fire area is located on a floor other than the level of exit discharge.

Supporting Statement:

This change seeks to utilize the model IBC thresholds for sprinklers in A-2 use groups.

The 100 number as an occupant load is defined in the model building code. The Board of Housing amended the 2006 edition of the IBC to increase the A-2 use limit to 300 but retain the 100 occupant threshold for “night clubs”. This change creates an unrealistic expectation and burden on fire officials to require sprinkler systems in A-2 uses when they begin using the business as a “night club”, but there are no provisions in the code for a change of use, and no provisions in the SFPC to require building elements to be added when they were not required under the building code.

As an example, a business builds an A-2 restaurant with a bar area with an occupant load of 299 and fire area less than 5000 square feet. At some time after opening, the proprietor adds a dancing area (which does not change the use group), an area for a band or DJ (which does not change the use group), and the A-2 restaurant is now a night club. There is no avenue to require sprinklers in this A-2 use because at the time of construction it wasn’t a night club, and now there is no change of use from the original A-2 use.

A significant number of historic fires in this country have been those that involve all of the elements of night clubs and did not include sprinkler systems. Virginia's own study following the Station Night Club fire in 2003 identified that the IBC was moving toward the occupant threshold of 100 for the requirement of sprinklers, and the NFPA had issued an interim code establishing that same threshold and did not pursue additional requirements or retro-fitting requirements.

In light of the Virginia Task Force Study, the decision of both model code making agencies to establish 100 as the occupant load to require sprinklers, the fact this change was put into place in the 2006 code cycle with very little debate or discussion, and the difficulty if not impossibility of enforcing this provision, the Fire Service Board Code Committee is requesting this change to eliminate the state amendment and utilize the base model code requirements.

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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change Nos. C-903.2.7(a) and C-903.2.7(b)**

Nature of Change:

Two proposals to address a new requirement in the IBC for sprinklers to be required in Group M wherever upholstered furniture is present.

Proponent: Frank Castelvechi, representing Henrico County Building Department (C-903.2.7(a)) and Roger Robertson, representing Chesterfield County Building Department (C-903.2.7(b))

Staff Comments:

The issue was discussed in workgroup meetings as a significant difference between the 2006 and 2009 IBC; however, no proposals had been received. The fire services representatives were generally supportive of the new IBC sprinkler threshold while the business community did not believe the change was necessary. Mr. Castelvechi's proposal is similar to a proposal approved during the first round of proposals at ICC for the 2012 IBC and would permit upholstered furniture without sprinklers at up to 5000 square feet. Mr. Robertson's proposal would keep the current USBC requirements intact.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: C - 903.2.7(a)

Proponent Information (Check one): Individual Government Entity Company

Name: Frank G. Castelvechi, III, PE Representing: Henrico County

Mailing Address:
PO Box 90775
Henrico VA 23273

Email Address: cas13@co.henrico.va.us

Telephone Number: 804 501 4375

Proposal Information

Code(s) and Section(s): IBC 903.2.4, 903.2.7, 093.2.9

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

903.2.4 add new subsection--

4. Where a Group F-1 occupancy used for the manufacture of upholstered furniture or mattresses exceeds 2500 square feet.

903.2.7 Change to read--

4. Where a Group M occupancy used for the display and sale of upholstered furniture or mattresses exceeds 5000 square feet.

903.2.9 add new subsection--

5. Where a Group S-1 occupancy used for the storage of upholstered furniture or mattresses exceeds 2500 square feet.

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

This is consistent with the action taken by the ICC Fire Code Committee in Baltimore to address the hazards of the manufacture, storage and sales of these items. Severe fires occur in these occupancies on a regular basis often resulting in total loss to the structure and the loss of neighboring buildings, as well as occasional fatalities. The 2500 square foot threshold for Manufacture and Storage is to permit small re-upholstery shops and the storage of furniture in mini storage facilities.

The 5000 square foot threshold adopted by the IFC committee is intended to permit the sale of small amounts of these articles in other stores and in small specialty shops.

Submittal Information

Date Submitted: 12/8/2009

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 2009 Code Change Cycle

Code Change Number: C-903.2.7 (b)

Proponent Information (Check one): Individual Government Entity Company

Name: Roger Robertson Representing: Chesterfield County

Mailing Address: P.O. Box 40, 9800 Government Center Parkway, Chesterfield, VA 23832

Email Address: robertsonr@chesterfield.gov Telephone Number: 804-751-4749

Proposal Information

Code(s) and Section(s): Virginia Construction Code part I, section 903.2.7

Proposed Change (including all relevant section numbers, if multiple sections):
903.2.7 Group M. An automatic sprinkler system shall be provided throughout buildings containing a group M occupancy where one of the following conditions exists:
1. A group M fire area exceeds 12,000 square feet.
2. A group M fire area is located more than three stories above grade plane.
3. The combined area of all group M fire areas on all floors, including any mezzanines, exceeds 24,000 square feet.
4. ~~A Group M occupancy is used for the display and sale of upholstered furniture.~~

Supporting Statement (including intent, need, and impact of the proposal): To treat furniture stores as other M occupancies and return the sprinkler threshold to 12,000 square feet. The existing item 4 leads to non-uniform enforcement since it could be interpreted to apply to any small M occupancy that has a single chair for sale or sells office furniture. The existing language in item 4 invites inconsistency through its lack of more specific description of its intent.

Submittal Information

Date Submitted: January 25, 2010

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 Centre
600 E. Main St., Ste. 300
Richmond, VA 23219

Email Address: tsu@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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-903.2.8**

Nature of Change:

To delete the current USBC amendment to the IBC which permits new apartments to be constructed without sprinklers if the necessary water pressure and volume is not available at a site.

Proponent: Robby Dawson, representing the Virginia Fire Services Board

Staff Comments:

The proposal was not received in time to be vetted through the workgroup process. The state amendment has been in place since the legacy code (the BOCA Code) required sprinklers in all Group R buildings. The amendment was based on an exceptions present in the BOCA Code which equated the added separation of dwelling units to the use of a sprinkler system; however, the state amendment limited its application to only those areas without adequate water supply. Staff has gotten indications from apartment builders on the outskirts of the Tidewater area that the exceptions are still being used, but it is not known whether the exceptions are being utilized statewide.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: C-903.2.8

Proponent Information

(Check one): Individual Government Entity Company

Name: Robby Dawson

Representing: Virginia Fire Services Board

Mailing Address: 1005 Technology Park Drive, Glen Allen, VA 23059

Email Address: dawsonj@chesterfield.gov

Telephone Number: 804-717-6838

Proposal Information

Code(s) and Section(s): USBC 903.2.8

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

Change Section 903.2.7 (903.2.8) of the USBC to read:

903.2.7 Group R. An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area, ~~except in the following R-2 occupancies when the necessary water pressure or volume, or both, for the system is not available:~~

Exceptions:

- ~~1. Buildings which do not exceed two stories, including basements which are not considered as a story above grade, and with a maximum of 16 dwelling units per fire area. Each dwelling unit shall have at least one door opening to an exterior exit access that leads directly to the exits required to serve that dwelling unit.~~
- ~~2. Buildings where all dwelling units are not more than two stories above the lowest level of exit discharge and not more than one story below the highest level of exit discharge of exits serving the dwelling unit and a two-hour fire barrier is provided between each pair of dwelling units. Each bedroom of a dormitory or boarding house shall be considered a dwelling unit under this exception.~~

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

With the advancement of technology and methodology associated with residential sprinkler systems now being a justified requirement in the IRC, it stands to reason the same justification is in place for R-2 occupancies and the current exception for excluding sprinklers is not present in the IRC and it should also not be included in the USBC.

Ultimately it's a fire safety benefit to the occupants R-2's in those areas with low water supplies. The least amount of water will be applied during the initial phases of a fire through the sprinkler systems as opposed to the amounts of water needed for more involved structure fires that do not have benefit of a sprinkler system. Some of the water supply issues may include small mains that are sized to small to supply fire department pumpers but would be sufficient to supply the lower demand of a sprinkler system. If a municipal system is not in place, the fire department may have to locate a water supply and then shuttle water to the scene. Having a sprinkler system translates into lower amounts of property damage, content damage and a lessening of having to relocate residents other than possibly those in the apartment where the fire originated.

In addition, there's less strain being placed on the local fire service. And in the case of volunteer departments, there's the additional strain of finding, recruiting, training and retaining sufficient volunteer staffing. Then there's the factor of

response times. With increased response times being realized in some areas, particularly more rural areas with a volunteer fire service, having sprinkler systems in these buildings can help mitigate the effects. Basically, having a sprinkler system equates to having a firefighter on duty 24/7.

Submittal Information

Date Submitted: 12/16/09

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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-906**

Nature of Change:

To add a requirement for fire extinguishers to be provided in Group R-2 buildings and to delete an allowance for fire extinguishers to be omitted from Group A, B and E occupancies when quick response sprinklers are present.

Proponent: Robby Dawson, representing the Virginia Fire Services Board

Staff Comments:

The proposal was not received in time to be vetted through the workgroup process. Fire extinguishers were never required in Virginia for Group R-2 occupancies because of the potential for tampering or causing damage, therefore when the International Codes were adopted, the Group R-2 requirement was deleted through a state amendment. It is unknown whether the quick response exception in the International Codes (which is not a state amendment) is being used in Virginia extensively enough to warrant action.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: C-906

Proponent Information

(Check one): Individual Government Entity Company

Name: Robby Dawson

Representing: Virginia Fire Services Board

Mailing Address: 1005 Technology Park Drive, Glen Allen, VA 23059

Email Address: dawsonj@chesterfield.gov

Telephone Number: 804-717-6838

Proposal Information

Code(s) and Section(s): USBC and SFPC Section 906

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

906.1 Where required.

Portable fire extinguishers shall be installed in the following locations.

1. In new and existing Group A, B, E, F, H, I, M, R-1, R-2, R-4 and S occupancies.

~~Exception: In new and existing Group A, B and E occupancies equipped throughout with quick response sprinklers, portable fire extinguishers shall be required only in locations specified in Items 2 through 6.~~

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

Fire extinguishers have historically been the first line of defense for small, controllable fires. They are intended to be used for fires of limited size and easily controlled. If a fire is discovered in its early stages the most effective means of protecting life and preventing property loss is to sound an alarm and then to control and/or extinguish the incipient stage fire with a portable fire extinguisher. To simply wait for the fire to grow to size large enough for a sprinkler head to activate is contrary to lessons and guidance from the fire service and fire protection professionals. Since fire extinguishers provide a first line of defense vs. sprinklers, it remains unclear as to the justification for this exception. In that light, the Exception 1 to Section 906.1 should be deleted.

This exception was not in the original draft of the International Fire Code and it did not exist in any of the legacy fire codes. It currently does not exist in NFPA 1 Uniform Fire Code, NFPA 10 Standard for Portable Fire Extinguishers or NFPA 5000 Building Construction and Safety Code. It first appeared in the Final Draft of the 2000 editions of the IFC/IBC. Since the first publication of the International Fire Code, some Virginia fire service and fire protection professionals have expressed concern over the inclusion of an exception.

As a result a number of states have deleted the exception upon adoption of the IFC/IBC.

- 12 States plus Washington D.C. and New York City have Deleted Line 1 Exception.
- 2 States have amended Section 906.1 and the exception to require more extinguishers
- 2 States use both NFPA 1 and the IFC with more stringent code applicable.
- 17 additional States have adopted NFPA 1 as their fire code instead of the IFC.

A total of 33 State jurisdictions and an unknown number of local jurisdictions have chosen to delete the exception in favor of providing the ability to control a fire at its earliest stages.

There are other issues with this exception that have arisen since states have now been adopting the IFC and enforcing it within their state. Some examples are:

- The exception is not being interpreted correctly and as a result is not being limited to occupancies with "QUICK RESPONSE" sprinklers installed. Instead, it is being applied in all cases where "REGULAR" sprinklers are installed.
- When an occupancy is being renovated and the sprinkler system is updated, presently installed extinguishers are being removed, lessening the level of protection available.
- Fire code officials do not all see hazard areas the same and as a result Section 906.1, Item 6 is not consistently applied jurisdiction to jurisdiction.
- Some officials are exempting all extinguishers from being required thereby placing the occupants in danger at the time of a fire.

An added detriment is that if a building is occupied without fire extinguishers the ability of the building owner to properly and effectively place fire extinguishers is negatively impacted by the practical difficulty of installing fire extinguisher cabinets. Walls may not be thick enough for recessing the cabinets to keep the fire extinguishers from being obstructions to travel or from being hit and damaged themselves. If the walls and partitions can handle the recessed cabinets, design drawings and permits may be required to modify the walls and partitions.

The inclusion of R-2 occupancies is in keeping with the national model code.

This proposal will eliminate the exception and provide for the proper placement of an important incipient firefighting tool.

This proposed change, designated as F94-09/10, was accepted by the ICC Fire Code Committee at the recent Code Change hearings held in Baltimore. The Committee vote was 8 to 3 in favor of "As Submitted".

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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-907.2.3**

Nature of Change:

To add requirements for an emergency voice/alarm communication system in schools and to increase the required rating of school corridors.

Proponent: Robby Dawson, representing the Virginia Fire Services Board Code Committee

Staff Comments:

The proposal was not received in time to be vetted through the workgroup process. It is based on a proposal which was approved in the first round of hearings at ICC for the 2012 IBC. It is not known at this time whether public comment has been received at the national level to challenge the requirement. The voice/alarm communication system is what is already required for large Group A (assembly) occupancies. The change to the corridor rating requirement is to require a one-hour rated corridor regardless of whether a sprinkler system is installed.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: C-907.2.3

Proponent Information

(Check one): Individual Government Entity Company

Name: Robby Dawson

Representing: Virginia Fire Services Board Code Committee

Mailing Address: 1005 Technology Park Drive, Glen Allen, VA 23059

Email Address: dawsonj@chesterfield.gov

Telephone Number: 804-717-6838

Proposal Information

Code(s) and Section(s): USBC Section 907.2.3 and Table 1018.1 with corresponding changes to SFPC

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

1. Revise as follows:

907.2.3 Group E. A manual fire alarm system that ~~activates~~ initiates the occupant notification signal utilizing an emergency voice/alarm communications system meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall be installed in Group E occupancies. When automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system.

Exceptions:

1. A manual fire alarm system is not required in Group E occupancies with an occupant load of ~~less than 50~~ 30 or less.

2. Manual fire alarm boxes are not required in Group E occupancies where all of the following apply:

2.1. Interior corridors are protected by smoke detectors.

2.2. Auditoriums, cafeterias, gymnasiums and similar areas are protected by heat detectors or other approved detection devices.

2.3. Shops and laboratories involving dusts or vapors are protected by heat detectors or other approved detection devices.

2.4. ~~The capability to activate the evacuation signal from a central point is provided.~~

2.5. ~~In buildings where normally occupied spaces are provided with a two-way communication system between such spaces and a constantly attended receiving station from where a general evacuation alarm can be sounded, except in locations specifically designated by the fire code official.~~

3. Manual fire alarm boxes shall not be required in Group E occupancies where the building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1, ~~the notification appliances~~ emergency voice/alarm communications system will activate on sprinkler waterflow and manual activation is provided from a normally occupied location.

2. Revise table as follows:

TABLE 1018.1
CORRIDOR FIRE-RESISTANCE RATING

OCCUPANCY	OCCUPANT LOAD SERVED BY CORRIDOR	REQUIRED FIRE-RESISTANCE RATING (HOURS)	
		Without sprinkler system	With sprinkler system ^c
H-1, H-2, H-3	All	Not Permitted	1
H-4, H-5	Greater than 30	Not Permitted	1
A, B, E, F, M, S, U	Greater than 30	1	0
E	Greater than 30	1	1
R	Greater than 30	Not Permitted	0.5
I-2 ^a , I-4	All	Not Permitted	0
I-1, I-3	All	Not Permitted	1 ^b

- a. For requirements for occupancies in Group I-2, see sections 407.2 and 407.3.
- b. For a reduction in the fire-resistance rating for occupancies in Group I-3, see Section 408.8.
- c. Building equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.1.2 where allowed.

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

This proposed change, designated as F107-09/10, was accepted by the ICC Fire Code Committee at the recent Code Change hearings held in Baltimore. The Committee vote was 11 to 0 in favor of "As Submitted".

This code change was proposed by several parties in a previous ICC development cycle as E117-07/08. Although half the Committee supported its adoption, the Chair broke a tie vote in favor of a recommendation of disapproval. At the Final Action Hearings, the Committee's recommendation was overturned, but a motion to "approve as submitted" failed to secure the 2/3 majority needed for adoption. The ICC Membership voted 55% in favor of adoption.

There are good reasons that a solid majority of the ICC Membership favored adopting this proposal. First, the E occupancies at issue represent structures built to house a dense population of children ranging from ages 4 through early teens. E occupancies typically have paper and other flammables hung from ceilings to floors throughout. Classrooms are filled with desks containing books, papers and other flammables. Science labs use chemicals and accelerants. Lunch rooms have stoves, ovens and trash cans spread throughout loaded with waste paper and other flammables. Theaters house clothing, wooden and cardboard props and paper banners strung from one end of the room to the other. Lockers contain books and hide things that are not easily monitored. Janitorial closets house cleaning solutions and solvents. Many E occupancies are multi-story buildings with classrooms on several floors.

E occupancies mix a high concentration of children with fuel loads on a daily basis. As budgets shrink, so do the number of adult supervisors. Our children are in schools because they are required to be there. We owe them a duty to ensure they are safe from the risk of fire while in school. We simply cannot wait for a catastrophe to protect children while at school.

Unfortunately the world of elementary, secondary and higher education learning has gone through tremendous changes in security measures undertaken, both operationally and hardware installations, due to the threat of violent acts committed against students and staff. Where we had educational facilities with highly effective fire drill evacuation procedures and actions during system activation, we now have written plans and training in place to ignore the activation of the fire alarm system if a "lockdown" has been declared because the activation of the fire alarm system may be a diversion to bring staff and students out into the open to serve as victims.

This is not a possible situation. This is a very real situation that occurs throughout the country in response to the acts of violence that have occurred at educational facilities. Though the exact procedure may vary site to site, the main premise of a "lockdown" is to gather staff and students into classrooms and offices and to lock the doors, preventing intruders from getting into the room and preventing staff and students from leaving the rooms until an all clear is

announced. The staff and students are trained to ignore a fire alarm activation during a lockdown until they are ordered to evacuate after someone in authority, (could be a Principal or could be a Police Commander), makes a determination that the fire threat is real and that they must evacuate to survive the fire.

We have two main concerns. Once the students and staff ignore the fire alarm, there needs to be a reliable method of communicating the message that now is the time to evacuate. PA systems that do not meet appropriate standards of care for installation or maintenance related to reliability at the time of a fire emergency do not satisfy that need. To address this issue this proposal would require the installation of an emergency voice/alarm communications system installed in accordance with the code and referenced standards. Recognizing that there is a related increase in the cost of construction Section 907.5.2.2 allows that system to be used for other announcements to eliminate the need for a public address system for that purpose.

Section 907.2.3, Exception one has been modified to correlate the occupant load triggers, Items 2.4 and 2.5 would be redundant since the emergency voice/alarm communications system would meet those two requirements and Exception 3 was modified to correlate with the new language in 907.2.3.

Because the students and staff will delay their evacuation while a fire is attacking the structure and potentially cutting off escape routes where corridors are not protected, this code change proposal will also require all corridors serving an occupant load greater than 30 in group E educational occupancies to have 1 hour fire resistant rating except as allowed by Exception 1 to section 1018.1.

Exception 1 to Section 1018.1 is a legitimate exception for the one hour corridor fire resistant rating requirement, since it requires every classroom to have at least one door directly to the exterior and rooms used for assembly purposes have at least ½ of the required means of egress directly to the exterior as well. Under those conditions, there is no need for the students and other occupants to rely on exiting the building through the corridors since they can go directly to the exterior and move to a safe area of refuge. Once the announcement to evacuate occurs they can exit without being exposed to the fire threat potentially extended into the unprotected corridor.

However, if this is not the case, then the students, teachers, and other occupants of the educational occupancy must rely on the corridor system to exit safely from the building. In that case the paths of travel to get out of the building are restricted and the occupants may be exposed to the room of fire origin while trying to evacuate. Certainly, the basis for 1 hour fire resistive protection for corridors when the occupant load exceeds 30 is to provide for a reasonable level of protection for the occupants as they exit the building without having them unduly be exposed to a fire condition, water, and smoke which may impede their egress because they have delayed their evacuation due to a "lockdown".

It has been reported that there is an annual average of 14,700 fires in educational properties in the United States. The estimated average property loss from these fires is \$85 million per year, and caused approximately 100 injuries. The costs of bussing students to alternate facilities, the impact of double sessions in schools to accommodate displaced students, and the mental aspect of the children who fell victim to the fires is less than construction costs of a 1 hour fire resistant corridor.

Nearly half (49.7 %) of these fires were incendiary or suspicious in nature. Structure fires can start in a wide variety of different areas. During 1999-2001, 23% of the fire origins were in bathrooms/locker rooms, 13% started in the kitchen area, 7% in the classrooms, and another 7% started in corridors. Even more disturbing are findings indicating that injuries per school fires are higher than those of ALL non-residential structure fires. Certainly, the fact that more than 70% of fires occur between 0800 and 1600, the hours students are most likely to be in school, and 16% of fires occur between 1700 and 2400; 12% occur between 2400 and 0800 shows that the threat of a fire occurring while children are present is real.

Currently, the USBC allows the 1-hour fire –resistance rated corridor to be omitted where the building is protected by an automatic sprinkler system. We don't believe that such a "trade-off" is appropriate, especially in an educational occupancy where there are large numbers of children at relatively high density who are placed at risk in a fire situation. We believe that due to the expanding use of "lockdown" procedures a balanced design approach to providing life safety in educational occupancies is prudent so that the 1-hour fire resistance rated corridors can work in conjunction with the automatic sprinkler system to assure the level of life safety for the building's occupants intended by the code.

Note that an I-3 occupancy, (correctional centers, detention centers, jails, prerelease centers, prisons, and reformatories), requires the corridors to have 1 hour fire-resistance ratings when the occupancy is protected by a fire suppression system, regardless of the number of occupants. When a "lockdown" occurs in a school the staff and students are prisoners. They are prohibited from leaving the rooms or areas of protection until given permission (ordered) to do so, or because they are being held hostage. For consistency purposes the staff and students in educational occupancies deserve the same level of protection we provide to inmates. A comparison to the other I groups where evacuation of the occupants may be delayed or prevented because they are incapable of self

preservation is also appropriate and substantiates a need to increase the protection level for corridors in the education group occupancies since in the case of "lockdowns" the staff and students are prevented from taking self preservation actions when the fire alarm activates until authorized, (ordered), to evacuate after an undetermined delay in time.

Other points to consider are the construction modifications made due to high-profile events and fuel loads in our schools. Events as the Columbine High School shootings, the need of school security can sometimes conflict with the requirements of fire safety. For example, exits may be restricted for security reasons preventing escape should a fire occur. Today's structures are unquestionably safer, yet the contents of today's classrooms are more combustible. Evidence suggests that fires in schools can spread far more rapidly due to the fuel load in the school buildings.

An additional benefit of the 1-hour fire resistance rated corridor is that it can assist fire fighters and tactical response team members in doing their job by providing a protected means of access to the interior of the building where they can perform their search and rescue missions, as well as fire fighting operations, in relative safety. Fire resistant corridors provide fire fighters and tactical response team members with additional time to conduct their life safety operations more effectively and safely.

From an economic perspective, fires rank as a major national problem, and since no individual safety measure is reliable all of the time, fire protection should and must be redundant. We are concerned that the compounding effect of sprinkler trade-offs could lead to greater risk to the life safety of the building occupants, especially if combined with the reduction in or the elimination of the 1 hour fire resistance rated corridors providing access to the exits or exit stairwells in an occupancy that routinely has staff and students drill and respond in real events to ignore fire alarm system activations.

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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-908.1**

Nature of Change:

To add requirements for carbon monoxide alarms in Groups I and R to the IBC as well as installation and design standards.

Proponent: Chief James A Gray, representing the Virginia Fire Chiefs Association, Inc.

Staff Comments:

The proposal was received in time to be considered through the workgroup process with no consensus for approval achieved. Issues discussed were that the proposal is for all Group I occupancies, which would include jails and prisons and the Group R occupancies have been considered by the Virginia Housing Commission without a recommendation for implementation. It was agreed that Group R-2 occupancies are of higher risk and are where reports of exposures are dominant. Staff notes that the use of two new standards are included in the proposal, yet no copies of the standards were provided.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: C-908.1

Proponent Information (Check one): Individual Government Entity Company

Name: Chief James A. Gray Representing: Virginia Fire Chiefs Association, Inc

Mailing Address: Hampton Division of Fire & Rescue 22 Lincoln Street Hampton, VA 23669

Email Address: igray@hampton.gov Telephone Number: 757-727-6580

Proposal Information

Code(s) and Section(s): USBC 908.1

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

Add New USBC

SECTION 908 CARBON MONOXIDE ALARMS

908.1 Carbon monoxide alarms. Group I or R occupancies in a building containing fuel burning appliances or a building which has an attached garage shall be provided with single station carbon monoxide alarms. The carbon monoxide alarms shall be single or multiple station carbon monoxide alarms complying with UL 2034 and be installed and maintained in accordance with NFPA 720 and manufacturer's instructions. An open parking structure, as defined in the International Building Code, shall not be deemed to be an attached garage. shall be provided in accordance with this section.

Exception: Guestrooms or dwelling units which do not themselves contain a fuel-burning appliance or have an attached garage, but which are located in a building with a fuel-burning appliance or an attached garage, need not be provided with single station carbon monoxide alarms, provided that:

1. The guestroom or dwelling unit is located more than one story above or below any story which contains a fuel-burning appliance or an attached garage;
2. The guestroom or dwelling unit is not connected by duct work or ventilation shafts to any room containing a fuel-burning appliance or to an attached garage; and
3. The building is provided with a common area carbon monoxide alarm system.

908.2 Group R-1 and R-2. Single or multiple station carbon monoxide alarms shall be installed in all sleeping units in Group R-1 and R-2 equipped with fuel fired appliance(s) in the following locations:

1. In each story within a dwelling unit.
2. On the ceiling or wall outside of each separate sleeping area in the immediate vicinity of the bedrooms.

908.3 Groups R-3 and R-4. Single or multiple station carbon monoxide alarms shall be installed in Groups R-3 and R-4 dwelling units equipped with fuel fired appliance(s) in the following locations:

1. In each story within a dwelling unit.
2. On the ceiling or wall outside of each separate sleeping area in the immediate vicinity of the bedrooms.

908.4 Maintenance. Required carbon monoxide alarms shall be maintained in accordance with the Statewide Fire Prevention Code.

(Renumber subsequent sections)

Add New SFPC

908.7 Carbon monoxide alarms. Carbon monoxide alarms shall be maintained as approved when required by the USBC.

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

Carbon monoxide detectors available in today's market meet the updated requirements which have eliminated the false positives that are an issue with those opposed previously to carbon monoxide detectors installation requirements.

Prior to the strong support of the fire service and others, 21 individuals were treated and 5 hospitalized because of carbon monoxide fumes in a student apartment in Blacksburg. In Salem the year before, there was a fatality resulting from carbon monoxide fumes at Roanoke College. Now, according to the Journal of the American Medical Association (JAMA), those who sustained heart muscle injury due to their exposure to carbon monoxide had an increased risk of death during a mid-point follow-up period of 7.6 years compared to those without injury to the heart. Despite a decline in the annual death rate from carbon monoxide (CO) poisoning, CO remains the most common type of accidental poisoning in the United States, contributing to 40,000 or more emergency department visits each year, according to background information. The only way to protect citizens from an odorless, tasteless and colorless gas, which are products of combustion, is to install carbon monoxide detectors around sleeping quarters, in basements and other areas where the gas may settle. Carbon monoxide poisoning mimics many common illnesses such as the flu and food poisoning.

In 2008, the Virginia Department of Fire Programs implemented a grant program where carbon monoxide detectors were given to families in the Martinsville / Henry County area who met certain requirements relating to heating assistance. Within three days of installation, a family of 4 evacuated their house because the alarm sounded. It was found that piping in the heating system had numerous holes thus causing the accumulation of gas in the home they were renting. Four people are alive today because of a carbon monoxide detector. In 2005, there were six deaths attributed to carbon monoxide poisoning and in 2006 there were 635 incidents in which fire departments responded. In April 2009, two children were overcome by carbon monoxide in an apartment, but survived. The 5 condo building in Fairfax County, all received the gas from a generator being used inside a utility room.

Carbon monoxide detectors undeniably save lives and need to be installed where there are fossil fuel appliances in close proximity, i.e. attached garages or fireplaces. As stated previously, carbon monoxide is an odorless, tasteless and colorless gas, which is product of combustion and can make an individual extremely ill or can be fatal.

This is for new construction only.

Submittal Information

Date Submitted: 5/19/09

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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-915.1**

Nature of Change:

Minor and clarification changes to the emergency communication equipment requirements.

Proponent: J. Kenneth Payne, Jr., AIA, representing VSAIA

Staff Comments:

The proposal stems from discussions at the workgroup meetings and from an inquiry to the State Building Code Technical Review Board concerning the application of the emergency communication equipment requirements implemented in the 2006 USBC and SFPC. While the proposal was not drafted until after discussions, the change appears to be in line with discussions and would simply clarify the application of the current provisions.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: C-915.1

Proponent Information

(Check one): Individual Government Entity Company

Name: J. Kenneth Payne, Jr., AIA

Representing: VSAIA

Mailing Address: 3200 Norfolk Street, Richmond, Virginia 23230

Email Address: kpayne@moseleyarchitects.com

Telephone Number: 804-794-7555

Proposal Information

Code(s) and Section(s): 2009 VCC Section 915.0 – In-Building Emergency Communications Coverage

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

915.1 General. For localities utilizing public safety wireless communications, dedicated infrastructure to accommodate and perpetuate continuous in-building emergency communication equipment to allow emergency public safety personnel to send and receive emergency communications shall be provided in new buildings and structures in accordance with this section.

Exceptions:

1. Buildings of Use Groups A-5, I-4, within dwelling units of R-2, R-3, R-4, R-5, and U.
2. Buildings of Type IV and V construction without basements, that are not considered unlimited area buildings in accordance with Section 507.
3. Above grade single story buildings of less than 20,000 square feet.
4. Buildings or leased spaces occupied by federal, state, or local governments, or the contractors thereof, with security requirements where the building official has approved an alternative method to provide emergency communication equipment for emergency public safety personnel.
5. Where the owner provides technological documentation from a qualified individual that the structure or portion thereof does not impede emergency communication signals.
6. Buildings and structures located in localities that do not provide the necessary equipment to connect to the radiating cable to make an in-building emergency communication system functional.

~~**915.2 Where required.** For localities utilizing public safety wireless communications, new buildings and structures shall be equipped throughout with dedicated infrastructure to accommodate and perpetuate continuous emergency communication.~~

915.2.1.1 Installation. The building owner shall install radiating cable systems, such as coaxial cable or equivalent. The radiating cable shall be installed in dedicated conduits, raceways, plenums, attics, or roofs, compatible for these specific installations as well as other applicable provisions of this code. The locality shall be responsible for the installation of any additional communication equipment required for the operation of the system.

915.2.1.2 Operations. The locality will assume all responsibilities for the installation operation and maintenance of additional the emergency communication equipment. The building owner shall provide sufficient operational space within the building to allow the locality access to and the ability to operate in-building emergency communication equipment. ~~To allow the locality access to and the ability to operate such equipment, sufficient space within the building shall be provided.~~

915.2.1.3 Inspection. In accordance with Section 113.3, all installations shall be inspected prior to concealment.

915.2.3 Acceptance test. Upon completion of installation, after providing reasonable notice to the owner or their representative, emergency public safety personnel shall have the right during normal business hours, or other mutually agreed upon time, to enter onto the property to conduct field tests to verify that the required level of radio coverage is present at no cost to the owner. Any noted deficiencies in the installation of the radiating cable or operational space shall be provided in an inspection report to the owner to the owner or the owner's representative.

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

The proposed language will prevent the use of exception #2 for buildings of Type IV and V construction when the building is constructed as unlimited area. Due to the changes regarding unlimited area buildings that allow type IV and V construction to use the unlimited area provisions the change has become necessary.

It is believed the intent of Exception #2 was to exempt wood frame buildings; however, it is believed it was not the intent to allow unlimited area buildings to be exempt (e.g., "big-box" buildings like Target, Wal-Mart, etc.), especially those of Type IV and V construction. Construction Types IV and V are usually constructed out of wood (which does *not* tend to affect the communication equipment); however, those types of construction could also be constructed out of steel and/or concrete/CMU (which *do* tend to affect the communication equipment). Those types of buildings could make the communications malfunction.

The proposed language also clarifies that the *locality* is responsible for supplying the equipment. It also includes an exception for localities that do not have the money or desire to buy and install the extra equipment necessary to make the system fully functional.

Submittal Information

Date Submitted: January 20, 2010

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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change Nos. C-1005.1(a), (b) and (c)**

Nature of Change:

Three proposals to re-establish the lesser egress width requirements when a sprinkler system is utilized.

Proponent: J. Kenneth Payne, Jr., AIA, representing VSAIA (C-1005.1(a)), Ray Grill, representing Arup Architects/Engineers (C-1005.1(b)) and Shaun Pharr, representing the Apartment and Office Building Association of Metropolitan Washington DC and the Virginia Apartment Management Association (C-1005.1(c))

Staff Comments:

The issue was identified by staff as a significant difference between the 2006 and 2009 IBC and was discussed as such at the workgroup meetings. The proposals were not received in time for review by the workgroups; however, they are based on the discussions. All three proposals would reinstate the lower egress width multiplier for sprinklered buildings. Mr. Grill's proposal was approved in the first round of hearings for the 2012 IBC and would provide the additional requirement of an emergency voice/alarm system for those buildings taking the sprinkler incentive. The other correlations in Mr. Grill's proposal for the IEBC and the IFC are not necessary under the Virginia scheme for the use of the International Codes.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: C-1005.1(a)

Proponent Information (Check one): Individual Government Entity Company

Name: J. Kenneth Payne, Jr., AIA Representing: VSAIA

Mailing Address: 3200 Norfolk Street, Richmond, Virginia 23230

Email Address: kpayne@moseleyarchitects.com Telephone Number: 804-794-7555

Proposal Information

Code(s) and Section(s): 2009 IBC Section 1005.1 – Minimum required egress width

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

1005.1 Minimum required egress width. The *means of egress* width shall not be less than required by this section. The total width of *means of egress* in inches (mm) shall not be less than the total *occupant load* served by the *means of egress* multiplied by 0.3 inches (7.62 mm) per occupant for stairways and by 0.2 inches (5.08 mm) per occupant for other egress components. The width shall not be less than specified elsewhere in this code. Multiple *means of egress* shall be sized such that the loss of any one *means of egress* shall not reduce the available capacity to less than 50 percent of the required capacity. The maximum capacity required from any *story* of a building shall be maintained to the termination of the *means of egress*.

Exceptions:

1. *Means of egress* complying with Section 1028.
2. For occupancies other than H-1, H-2, H-3, H-4, and I-2 in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, the total width of means of egress in inches (mm) shall not be less than the total occupant load served by the means of egress multiplied by 0.2 inches (5.08 mm) per occupant for stairways and by 0.15 inches (3.81 mm) per occupant for other egress components.

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

The proposed change retains the sprinkler incentive that Virginia has implemented from the 1980's (which is rapidly disappearing in the model building codes, even without empirical data supporting the 2009 change from 2006). To my knowledge, the empirical data does not justify deleting the incentive. Sprinklered buildings in Virginia also have an exceptional life safety record in sprinkled buildings.

The change is formatted to avoid adding back the "table" that then would need to be referenced throughout the rest of the code. By dealing with the change as an exception, all of the other references to this code section would not need to be revised.

The deletion of the sprinkler incentive will potentially increase the cost of all new buildings, by requiring wider corridors, wider doors and/or more doors, and wider stairs and/or more stairs. Refer to the examples below:

Doors: Assume a nominal 3'-0" wide door provides 33" of *clear* width. Under the 2006 (and earlier) code, this door in a sprinkled building would accommodate 220 occupants (33 divided by 0.15). Under the 2009 code, this same door *in a sprinkled building* would accommodate only 165 occupants (33 divided by 0.20). This represents a 25% reduction in occupant load capacity for no other reason than to eliminate sprinkler trade-offs. This will require more doors or wider doors (however, 4'-0" wide doors are the widest that are tested) to accommodate the same number of occupants.

Stairs: Assume a 4'-0" clear width stair provides 48" of *clear* width. Under the 2006 (and earlier) code, this stair in a sprinkled building would accommodate 240 occupants (48 divided by 0.20). Under the 2009 code, this same stair *in a sprinkled building* would accommodate only 160 occupants (48 divided by 0.30). This represents a 33% reduction in occupant load capacity for no other reason than to eliminate sprinkler trade-offs. This will require more stairs or wider stairs to accommodate the same number of occupants.

Corridors: Assume a 5'-0" clear width corridor provides 60" of *clear* width. Under the 2006 (and earlier) code, this corridor in a sprinkled building would accommodate 400 occupants (60 divided by 0.15). Under the 2009 code, this same corridor *in a sprinkled building* would accommodate only 300 occupants (60 divided by 0.20). This represents a 25% reduction in occupant load capacity for no other reason than to eliminate sprinkler trade-offs. This will require wider corridors to accommodate the same number of occupants.

All of the above examples (and this would apply to all means of egress elements) would add costs to all projects, reduce rentable space (wider corridors, wider stairs, more stairs), and thus reduce revenue for the Commonwealth of Virginia.

If we continue to allow the model codes to strip the sprinkler incentives, we may end up with unanticipated consequences of limited buildings with sprinkler systems, as owners might choose to forego the costs of sprinkler systems to offset the additional construction costs of all of the increased egress requirements and reduced rental income.

Submittal Information

Date Submitted: January 19, 2010

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



Code Change Number: C-1005.1(b)

Our ref VSUBC/RG

Date December 31, 2009

BY EMAIL

1775 K Street, NW
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Tel +1 202 729 8230

Ray.Grill@arup.com

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Mr. Stephen W. Calhoun
Department of Housing and Community Development
600 East Main Street
Richmond, VA 23219

ARUP

**Proposed Change to the Uniform Statewide Building Code
Section 1005.1 of the 2009 Edition of the IBC**

Dear Mr. Calhoun,

I am writing to propose an amendment to the 2009 IBC for inclusion in the Uniform Statewide Building Code. I've attached proposed code change E21 (Attachment 1) which I submitted to the ICC for incorporation into the 2012 edition of the IBC. I propose that the changes in E21 be included in the Uniform Statewide Building Code.

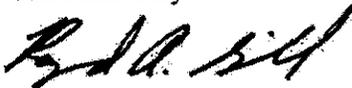
In way of summary, the proposal reinstates the egress width factors that were allowed in the code for sprinklered buildings prior to the 2009 edition of the IBC with the added requirement of an Emergency Voice Evacuation System.

The code change proposal was heard by the Egress Committee of ICC and the proposal was recommended for approval as submitted. I have also attached the Report of Hearings for E21 (Attachment 2) which has recently been published by ICC. The proposal which I have attached provides the rationale for acceptance and the committee's statement in the Report of Hearings reinforces the rationale for approval.

I am a resident of Virginia and licensed as an engineer in the Commonwealth. I may be attending the public hearings on January 25th. Do I need to register in advance to speak to this proposal? If there are any requirements in that regard, I would appreciate it if you could direct me to them.

Thank you for your consideration of this proposal.

Yours sincerely



Raymond A. Grill, P.E., LEED AP
Principal

Enc

While this undoubtedly is true, there is no record, nor were any offered as part of the supporting information for this change for any event or series of events causing a loss of life due to this modification to the fundamental capacity of each element of the means of egress. On the contrary, the record of life loss in buildings which are protected by fire suppression is remarkable.

Events such as earthquakes, and tornados and even terrorist attacks are not events that can be planned for. Hurricanes and floods are typically fairly well understood and can be planned for allowing persons to leave in an orderly fashion. However, these events pose little immediate threat to building occupants. Even though the WTC was attacked by airplanes, the NIST report states:

During the last 20 minutes before each building collapsed, the evacuation rate in both buildings had slowed to about one-fifth the immediately prior evacuation rate. This suggests that for those seeking and able to reach and use undamaged exits and stairways, the egress capacity (number and width of exits and stairways) was adequate to accommodate survivors.

In the same NIST report it states that the building design was modified such that it:

Reduced the number of required stairwells from 6 to 3, and the size of doors leading to the stairs from 44 inches to 36 inches;

These changes were due to the change to the 1968 Port Authority Code allowing the same changes to the width of the stairs just removed from the IBC. Even under the most dire of circumstances, the reduced width of the elements of the means of egress in the WTC allowed "those seeking and able to reach and use undamaged exits and stairways, the egress capacity (number and width of exits and stairways) was adequate to accommodate survivors."

The impact of this change on buildings and building design is enormous, and couldn't have happened at a worse time for the construction industry. Standard elements of the means of egress which were typically modified to allow the sprinkler increases are now restricted as follows:

Sprinklered Doors – 36" 34" clear 226 capacity
 Unsprinklered Doors – 36" 34" clear 179 capacity

Sprinklered Stairs – 44" 220 capacity
 Unsprinklered Stairs – 44" 146 capacity

Speculative office buildings which would have a single corridor, or open space and two exit stairs would have been allowed to serve a total capacity of 440 occupants; based on 100 sf. per occupant, the building could be built 44,000 sf. in area with a fire suppression system based strictly on means of egress capacity. Using the same scenario under the current IBC, the maximum occupant load served by the same door and stairs would be limited to 292 occupants; which would serve a total building area of 29,200 sf.

The result of this change will likely be less fire suppression in such office buildings as well, resulting in the following scenarios:

Office building		2009 IBC	2006 IBC
		2 exits 29,200 sf. in area	3 exits 43,800 sf. in area
3 stories Type IIB No fire suppression	3 stories Type IIB No fire suppression	2 exits 44,000 sf. in area	3 exits 66,000 sf. in area
3 stories Type IIB No fire suppression	3 stories Type IIIA No fire suppression	4 stories Type IIB Fire suppression	4 stories Type IIB Fire suppression
5 stories Type IV No fire suppression	5 stories Type IV No fire suppression	4 stories Type IIIB Fire suppression	4 stories Type IIIA Fire suppression
3 stories Type VA No fire suppression	NP	6 stories Type IV Fire suppression	6 stories Type IV Fire suppression
		4 stories Type VA Fire suppression	NP

In every case, the reductions from what was allowed in 2006 are marginal compared to what is allowed without fire suppression. 15,000 sf per floor of leasable space for Types IIB, IIB, IV and VA construction has been traded for fire suppression. These smaller buildings are less economically viable and will not be built, and yet we know that with the incentives for use of sprinklers they are a rational and safe way to build. Today, they would be required to add a third stair to achieve the same leasable building area or widen the two stairs, which would also reduce the leasable space.

I believe approving this code change will undo what is a very regressive position for the IBC. We are penalizing the users and designers by removing the one life safety system we know works virtually every time, causing undue economic pressure on development at a time when it can least afford it.

Fewer and fewer states are seeing the economic advantage of tri-annual adoption of the ICC codes for various reasons. This is an unfortunate trend that is likely to cause an undoing of the joint efforts by industry and code officials to assure as much as possible a uniform set of standards for construction in the United States. This change forges a stand that indicates a more balanced and rational approach to safety in buildings. It recognizes the overwhelming benefits of fire safety protection as part of the design and operation of buildings.

Cost: This code change will reduce the cost of construction.

PART I – IBC MEANS OF EGRESS

Public Hearing: Committee: AS AM D
 Assembly: ASF AMF DF

PART II – IFC

Public Hearing: Committee: AS AM D
 Assembly: ASF AMF DF

ICCFILENAME:Collins-E7-1005.1

E21-09/10

1005.1 (IFC [B] 1005.1); 3404.6, 3412.6.11, Table 3412.6.11(1) [IEBC [B] 303.6, 1301.6.11, Table 1301.6.11(1)]; IFC 4604.7, Table 4604.7

Proponent: Ray Grill, Arup, representing self

THIS IS A 2 PART CODE CHANGE. BOTH PARTS WILL BE HEARD BY THE MEANS OF EGRESS COMMITTEE AS 2 SEPARATE CODE CHANGES. SEE THE TENTATIVE HEARING ORDER FOR THIS COMMITTEE.

PART I – IBC MEANS OF EGRESS

Revise as follows:

1005.1 (IFC [B] 1005.1) Minimum required egress width. The means of egress width shall not be less than required by this section. The total width of means of egress in inches (mm) shall not be less than the total occupant load served by the means of egress multiplied by 0.3 inches (7.62 mm) per occupant for stairways and by 0.2 inches (5.08 mm) per occupant for other egress components. The width shall not be less than specified elsewhere in this code. Multiple means of egress shall be sized such that the loss of any one means of egress shall not reduce the available capacity to less than 50 percent of the required capacity. The maximum capacity required from any story of a building shall be maintained to the termination of the means of egress.

Exception Exceptions:

1. Means of egress complying with Section 1028.
2. For other than H and I-2 occupancies, the total width of means of egress in inches (mm) shall not be less than the total occupant load served by the means of egress multiplied by 0.2 inches (5.1 mm) per occupant for stairways and by 0.15 inches (3.8 mm) per occupant for other egress components in buildings that are provided with sprinkler protection in accordance with 903.3.1.1 or 903.3.1.2 and an emergency voice/alarm communication system in accordance with 907.5.2.2.

3404.6 (IEBC [B] 303.6) Means of egress capacity factors. Alterations to any existing building or structure shall not be subject to the egress width factors in Section 1005.1 of the International Building Code for new construction in determining the minimum egress widths or the minimum number of exits in an existing building or structure. The minimum egress widths for the components of the means of egress shall be based on the means of egress width factors in the building code under which the building was constructed, and shall be considered as complying means of egress for any alteration if, in the opinion of the code official, they do not constitute a distinct hazard to life.

3412.6.11(IEBC [B] 1301.6.11) Means of egress capacity and number. Evaluate the means of egress capacity and the number of exits available to the building occupants. In applying this section, the means of egress are required to conform to the following sections of this code: 1003.7, 1004, 1005.1, 1014.2, 1014.3, 1015.2, 1021, 1024.1, 1027.2, 1027.6, 1028.2, 1028.3, 1028.4 and 1029 [except that the minimum width required by this section shall be determined solely by the width for the required capacity in accordance with Table 3412.6.11(1)]. The number of exits credited is the number that is available to each occupant of the area being evaluated. Existing fire escapes shall be accepted as a component in the means of egress when conforming to Section 3406.

Under the categories and occupancies in Table 3412.6.11(2), determine the appropriate value and enter that value into Table 3412.7 under Safety Parameter 3412.6.11, Means of Egress Capacity, for means of egress and general safety.

2. Delete without substitution:

**TABLE 3412.6.11(1) (IEBC [B] 1301.6.11(1))
EGRESS WIDTH PER OCCUPANT SERVED**

OCCUPANCY	WITHOUT SPRINKLER SYSTEM		WITH SPRINKLER SYSTEM ^a	
	Stairways (inches per occupant)	Other egress components (inches per occupant)	Stairways (inches per occupant)	Other egress components (inches per occupant)
Occupancies other than those listed below	0.3	0.2	0.2	0.15
Hazardous: H-1, H-2, H-3 and H-4	0.7	0.4	0.3	0.2
Institutional: I-2	NA	NA	0.3	0.2

For SI: 1 inch = 25.4 mm. NA = Not applicable.

a. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.

Revise as follows:

TABLE 3412.6.11(2) (IEBC [B] TABLE 1301.6.11(2))
MEANS OF EGRESS VALUES
(No change to table)

PART II – IFC

Delete without substitution:

~~**4604.7 Minimum required egress width.** The means of egress width shall not be less than as required by the code under which constructed but not less than as required by this section. The total width of means of egress in inches (mm) shall not be less than the total occupant load served by the means of egress multiplied by the factors in Table 4604.7 and not less than specified elsewhere in this section. Multiple means of egress shall be sized such that the loss of any one means of egress shall not reduce the available capacity to less than 50 percent of the required capacity. The maximum capacity required from any story of a building shall be maintained to the termination of the means of egress.~~

TABLE 4604.7
EGRESS WIDTH PER OCCUPANT SERVED

OCCUPANCY	WITHOUT SPRINKLER SYSTEM		WITH SPRINKLER SYSTEM ^a	
	Stairways (inches per occupant)	Other egress components (inches per occupant)	Stairways (inches per occupant)	Other egress components (inches per occupant)
Occupancies other than those listed below	0.3	0.2	0.2	0.15
Hazardous: H-1, H-2, H-3 and H-4	0.7	0.4	0.3	0.2
Institutional: I-2	NA	NA	0.3	0.2

For SI: 1 inch = 25.4 mm. NA = Not applicable.

a. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.

(Renumber subsequent sections)

Reason: The egress factors for sprinklered buildings were eliminated during the last cycle with no technical justification. The exception reinstates the egress factors for sprinklers buildings but also would require an emergency voice/alarm communication system (EVAC) to be provided.

The EVAC system provides the ability to communicate instructions to occupants that would facilitate evacuation or relocation that may be necessary in fire or other emergencies. This would also lead to more efficient use of the egress system.

The original submitter of this code change had also submitted a code change (E17-07/08) to reduce the occupant load in office buildings by changing the occupant load factor from 1/100 sq.ft. to 1/175 sq.ft. The change in occupant load factor was rejected even though that proposal had a scientific study published by NIST to back the proposal.

Cost Impact: The code change proposal will not increase the cost of construction.

PART I – IBC MEANS OF EGRESS

Public Hearing: Committee: AS AM D
 Assembly: ASF AMF DF

PART II – IFC

Public Hearing: Committee: AS AM D
 Assembly: ASF AMF DF

ICCFILENAME:GrIII-E1-1005.1

E22–09/10

Exceptions:

1. For areas not confined by barriers, the path of egress travel from the outdoor areas are permitted to pass through the building. Means of egress requirements for the building shall be based on the sum of the occupant loads of the building plus the outdoor areas.
42. Outdoor areas used exclusively for service of the building need only have one means of egress.
23. Both outdoor areas associated with Group R-3 and individual dwelling units of Group R-2.

Committee Reason: The proposal is not clear in what would be considered a barrier. The code should allow for egress back through the building from areas such as balconies, central court yards and occupied roofs. There is a conflict in the text in that if there is a barrier you cannot egress through the building, but if there is not a barrier you can egress through the building. There are no allowances for exterior stairways for egress.

Assembly Action: None

E20-09/10

This is a 2 part code change. Both parts were heard by the IBC Means of Egress Code Development Committee.

PART I- IBC MEANS OF EGRESS

Committee Action: Disapproved

Committee Reason: The proponent's reason statement mentioned the NIST study for the World Trade Center. Because there was an election that day, the building was not fully occupied. This report does not cover if the building was fully occupied. If the building had been fully occupied many people would not have gotten out. In the towers there were three means of egress, however, two of the stairways were compromised that day, so we do need a third staircase. Another committee member clarified that the official findings were not as indicated in the reason statement, but if the building had been fully occupied, it was predicated that possibly 14,000 people would have died.

Assembly Action: None

PART II- IFC

Committee Action: Disapproved

Committee Reason: With the disapproval of Part I, the text in the IFC needs to remain for corridor width in existing buildings.

Assembly Action: None

E21-09/10

This is a 2 part code change. Both parts were heard by the IBC Means of Egress Code Development Committee.

PART I IBC MEANS OF EGRESS

Committee Action: Approved as Submitted

Committee Reason: Studies have shown that most people do not react to an initial alarm, therefore, requiring a voice alarm will increase safety by providing occupants with additional information about the emergency and evacuation. The current egress width requirement will mostly affect buildings with high occupant loads that are not highrise buildings. With the addition of many safety features to highrise buildings, such as the fire service access elevators, and occupant evacuation elevators, highrise buildings will be much safer. One of the other concerns in the NIST report was counter flow in the stairways. That has also been addressed through the new highrise requirements. No technical justification for the increased width for means of egress was provided in the original change in the last cycle. The additional width requirements for all buildings went too far. This is a good compromise.

Assembly Action: None

PART II- IFC

Committee Action: Approved as Submitted

Committee Reason: Part II was approved for consistency with the committee's action on Part I.

Assembly Action: None

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: C-1005.1(c)

Proponent Information

(Check one): Individual Government Entity Company

Name: W. Shaun Pharr

Representing: The Apartment and Office Building Assn. of
Metropolitan Washington DC and the Virginia Apartment
Management Association

Mailing Address: 1050 17th Street NW Suite 300 Washington, DC 20036

Email Address: spharr@aoba-metro.org

Telephone Number: (202) 296-3390

Proposal Information

Code(s) and Section(s): IBC Sec. 1005.1 and Table 1005.1 - width per occupant

Proposed Change (including all relevant section numbers, if multiple sections):
Revise so as to retain the 0.15 inches provision for sprinklered buildings, per pp. 54-57 of Agenda Package for 1/12/2010 Code Update Meeting.

Supporting Statement (including intent, need, and impact of the proposal):
No compelling policy or other reason exists for the Commonwealth to abandon this long-standing provision-- it acts as an incentive to sprinkler buildings and should be retained.

Submittal Information

Date Submitted: January 25, 2010

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 E. Main St., Suite 300

Email Address: tsu@dhcd.virginia.gov
Fax Number: (804) 371-7092

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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-1007.7**

Nature of Change:

To clarify the requirements of the IBC for exterior areas for assisted rescue.

Proponent: Ron Clements, representing the Chesterfield County Building Department

Staff Comments:

The proposal was submitted in time for review by several of the workgroups and no opposition was voiced. The proposal has also been submitted to the ICC process and was successful in the first round of hearings for the 2012 IBC.

Codes and Standards Committee Action:

Approve as presented.

Disapprove.

Approve as modified (specify):

Carry over to next cycle.

Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: C-1007.7

Proponent Information (Check one): Individual Government Entity Company

Name: Ron Clements Representing: Chesterfield County Building Inspection Dept.

Mailing Address: 9800 Government Center Parkway

Email Address: clementstro@chesterfield.gov Telephone Number: (804) 751-4163

Proposal Information

Code(s) and Section(s): IBC 1007.7

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

Revise as follows:

1007.7 (IFC 1007.7) Exterior area for assisted rescue. ~~The exterior area for assisted rescue must be open to the outside air and shall be an area provided on the exterior landing serving an exit door on an accessible route. The exterior area of assisted rescue shall meet the size and access requirements of Section 1007.6.1. Separation walls shall comply with the requirements of Section 704 for exterior walls. Where walls or openings are between the area for assisted rescue and the interior of the building, the building exterior walls within 10 feet (3048 mm) horizontally of a nonrated wall or unprotected opening shall have a fire-resistance rating of not less than 1 hour. Exterior walls separating the exterior area of assisted rescue from the interior of the building shall have a minimum fire resistance rating of 1 hour, rated for exposure to fire from the inside. The fire resistance rated exterior wall construction shall extend horizontally 10 feet (3048mm) beyond the landing on either side of the landing or equivalent fire resistance rated construction is permitted to extend out perpendicular to the exterior wall 4 feet (1220 mm) minimum on the side of the landing. The fire resistance rated construction shall extend vertically from the ground to a point 10 feet (3048 mm) above the floor level of the area for assisted rescue or to the roof line, whichever is lower. Openings within such fire resistance rated exterior walls shall be protected in accordance with section 715 by opening protectives having a fire protection rating of not less than 3/4 hour. This construction shall extend vertically from the ground to a point 10 feet (3048 mm) above the floor level of the area for assisted rescue or to the roof line, whichever is lower.~~

1007.7.1 (IFC 1007.7.1) Openness. The exterior area for assisted rescue shall be at least 50 percent open, and the open area above the guards shall be so distributed as to minimize the accumulation of smoke or toxic gases.

1007.7.2 (IFC 1007.7.2) Exterior exit-stairway. Exterior exit-stairways that are part of the means of egress for the exterior area for assisted rescue shall provide a clear width of 48 inches (1219 mm) between handrails.

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

The first text strike-through removed redundant language regarding openness to the exterior. The requirement for openness is provided in detail in section 1007.7.1 therefore the statement is redundant in the first sentence of 1007.7. The added text to the first sentence clearly states that the exterior area for assisted rescue is an area on an exterior landing serving an exit door on an accessible route. This clarifies that the area is on an exterior landing, that it is served by an exit door therefore this is part of the exit discharge and that it is on an accessible route, which guarantees that there is an accessible route to get to the exterior area for assisted rescue. The current language is ambiguous about exactly how the exterior area for assisted rescue fits into the overall means of egress system. The second strike text strike-through removes confusing text that states "building exterior walls within 10 feet (3048 mm) horizontally of a nonrated wall or unprotected opening shall have a fire-resistance rating". That language suggests that some portion of

the separation wall is non rated but the wall beyond the non rated portion is to be rated? It is very confusing text that is corrected in the following new text proposed. The new text attempts to capture the basic technical requirements of the current section with two technical changes. The first was the added text that allows the rated construction to extend out perpendicular from the building on the end of the landing. This is a method that we have used to protect exterior areas for assisted rescue adjacent to, and within 10 feet of, loading dock doors to avoid having to provide a ¾ hour protected opening at the loading dock door. The 4 foot minimum dimension is based on the 4 foot protection required for similar types of exposure protection specified in sections 706.5 Exception #2 and 3, and 706.5.1 exception #1. The second technical change is the requirement for the rating to be for inside exposure. This is based on the current method for prescribing exterior wall fire ratings in section 705.5. Inside exposure is specified in this case since the protection intended is from a fire inside the building. The last change to section 1007.7 is to refer opening protection of the fire rated construction to section 715. Section 715 has the complete opening protection provisions necessary to properly protect the openings. Having the opening protection specification in section 1007.7 without all of the supporting sections provided in section 715 is technically inaccurate. Table 715.4 requires ¾ hour protection in exterior walls so no amendment to the table is required and additionally the current text could be mis-applied to allow ¾ hour opening protection when the wall had a higher fire rating for another purpose, which would not occur with a direct reference to section 715.

Section 1007.7.1 has the text "above the guards" removed because the text accomplishes the performance requirement intended without that text. Additionally an exterior area for assisted rescue could be constructed without a guardrail in some circumstances such as a grade level landing that connects to the public way with a stair in the exit discharge. Lastly "guard" is not a defined term.

Section 1007.7.2 uses the term exterior "exit" stair. Exterior exit stairs are regulated by section 1026 and are an exit component. The exterior stair serving an exterior area for assisted rescue is typically an exit discharge component. If a true section 1026 exit stair is used to serve an exterior area for assisted rescue per 1007.2 exception #2 removal of the work "exit" would not pose a problem because the more generic term "exterior stair" could be applied to an exit stair. Based on these points "exit" is proposed to be deleted from 1007.7.2.

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:

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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-1018.2**

Nature of Change:

To add exceptions to the minimum egress width requirements for assisted living facilities.

Proponent: Ed Altizer, State Fire Marshal, representing the Virginia State Fire Marshal's Office

Staff Comments:

The proposal was submitted based on discussions at the sub-workgroup meetings for assisted living facilities. The proposal has not been vetted through the full workgroups. Staff notes that the provision should not use the term "Assisted Living Facility" as that is a state specific term to the Virginia Department of Social Services and would be confusing in the USBC. Staff further notes that it would be possible to read the proposal as a more restrictive requirement than the current code as exception numbers two and three of the current provision typically apply to assisted living facilities.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION
Code Change Form for the 2009 Code Change Cycle

Code Change Number: C-1018.2

Proponent Information

(Check one): Individual Government Entity Company

Name: Ed Altizer

Representing: Virginia State Fire Marshal's Office

Mailing Address: 1005 Technology Park Drive , Glen Allen, VA 23059

Email Address: ed.altizer@vdfp.virginia.gov

Telephone Number: 804-612-7267

Proposal Information

Code(s) and Section(s): 2009USBC and proposed referenced 2009 IBC 1018.2

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

1018.2 Corridor width. The minimum corridor width shall be as determined in Section 1005.1, but not less than 44 inches (1118 mm).

Exceptions:

1. Twenty-four inches (610 mm)—For access to and utilization of electrical, mechanical or plumbing systems or equipment.
2. Thirty-six inches (914 mm)—With a required occupant capacity of less than 50.
3. Thirty-six inches (914 mm)—within a dwelling unit.
4. Seventy-two inches (1829 mm)—In Group E with a corridor having a required capacity of 100 or more.
5. Seventy-two inches (1829 mm)—In corridors and areas serving gurney traffic in occupancies where patients receive outpatient medical care, which causes the patient to be not capable of self-reservation.
6. Ninety-six inches (2438 mm)—In Group I-2 in areas where required for bed movement.
7. Seventy-two inches (1829 mm)—In Group I-2 Assisted Living Facilities in corridors serving areas with wheelchair, walker, and gurney traffic in I-2 occupancies where residents are capable of self preservation.
8. Forty Four inches (1118 mm) – In corridors in Assisted Living Facility serving resident rooms with a means of egress door leading directly to the outside.

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

This is to clarify an often misconception that all I-2 facilities must have 8 foot corridors for patient use. Some ALFs with residents who are not capable of self preservation may not require movement of beds for evacuation but would otherwise require some assistance and thus a 6 foot corridor that allow wheelchairs, gurneys, walkers and other devices to pass would be sufficient width.

Cost Impact: Will lessen costs on facilities affected.

Submittal Information

Date Submitted: November 20, 2009

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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-1020.1.6**

Nature of Change:

To require stairways to be numbered in new buildings.

Proponent: John Catlett, Building Official for the City of Alexandria, representing himself

Staff Comments:

This proposal was tentatively approved at the Codes and Standards Committee meeting of December 14, 2009 unless public comment is received during the Compilation Document comment period.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM

(Use this form to submit changes to building and fire codes)

<p>Address to submit to:</p> <p>DHCD, the Jackson Center 501 North Second Street Richmond, VA 23219-1321</p> <p>Tel. No. (804) 371 – 7150 Fax No. (804) 371 – 7092 Email: bhcd@dhcd.state.va.us</p>		<p>Document No. <u>C-1020.1.6</u></p> <p>Committee Action: _____</p> <p>BHCD Action: _____</p>
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Submitted by: John Catlett Representing: City of Alexandria

Address: 301 King Street, Alexandria, Va, 22314 Phone No.: (703.838.4360)

Regulation Title: Virginia New Construction Code Section No(s): IBC Section 1020.1.6

Proposed Change:

1020.1.6 Stairway identification and floor number signs. A sign shall be provided at identifying the location and at each floor landing in interior exit enclosures connecting more than three stories designating the floor level, the terminus of the top and bottom of the stair enclosure and the stair identification by a letter of the alphabet of the stair. The signage shall also state the story of, and the direction to the exit discharge and the availability of roof access from the stairway for the fire department. The sign shall be located 5 feet (1524 mm) above the floor landing in a position that is readily visible when the doors are in the open and closed positions.

Supporting Statement: The code currently requires that a stairway be identified. This is so that an occupant can report their location in an emergency and the fire department can locate the appropriate stairway. Currently, there is no standardized method of identification. Some localities have misunderstood that both the floor and stair location should be designated by number. This code change will provide standardized guidance that the stair shall be identified by a letter and the floor designation by number.

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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-1021.2**

Nature of Change:

To delete problematic language in the single exit building provision of the IBC.

Proponent: Dan K. Williams, representing the Fairfax County Building Department

Staff Comments:

The proposal was not received in time to be vetted through the workgroup process. The proponent believes that the provision was modified at the national level to permit a potentially unsafe situation of a single exit in a multiple story building to discharge into a floor below. Staff notes that the provision is limited to only two or three story buildings with the third story only being applicable to Group R-2 and even the second story limited to only Groups B, F, M and S. Staff further notes that the current (2006 IBC) table is difficult to apply to mixed use buildings and staff believes that was the impetus for the change at the national level.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

H:\My Documents\2009 Va-2009 International Codes\Code changes\2009 VCC 1021.2 and T1021.2.doc

Code Change Number: C-1021.2

Proponent Information (Check one): Individual Government Entity Company

Name: Dan K. Williams Representing: Fairfax County

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

Email Address: Dan.Williams@fairfaxcounty.gov Telephone Number: 703-324-1060

Proposal Information

Code(s) and Section(s): 2009 Virginia Construction Code Section No(s): VCC Section 1021.2 and Table 1021.2

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

Change Section 1021.2 of the IBC to read:

1021.2 Buildings with single exits. Only one exit shall be required from Group R-3 occupancy buildings or from stories of other buildings as indicated in Table 1021.2. Occupancies shall be permitted to have a single exit in buildings otherwise required to have more than one exit if the areas served by the single exit do not exceed the limitations of Table 1021.2. Mixed occupancies shall be permitted to be served by single exits provided each individual occupancy complies with the applicable requirements of Table 1021.2 for that occupancy. Where applicable, cumulative occupant loads from adjacent occupancies shall be considered in determining the number of exits required for each story, accordance with the provisions of Section 1004.1. Basements with a single exit shall not be located more than one story below grade plane.

**TABLE 1021.2
STORIES BUILDINGS WITH ONE EXIT**

<u>STORY MAXIMUM HEIGHT OF BUILDING ABOVE GRADE PLANE</u>	<u>OCCUPANCY</u>	<u>MAXIMUM OCCUPANTS (OR DWELLING UNITS) PER FLOOR AND TRAVEL DISTANCE</u>
<u>First story or basement</u>	<u>A, B^d, E^c, F^d, M, U, S^d</u>	<u>49 occupants and 75 feet travel distance</u>
	<u>H-2, H-3</u>	<u>3 occupants and 25 feet travel distance</u>
	<u>H-4, H-5, I, R</u>	<u>10 occupants and 75 feet travel distance</u>
	<u>S^a</u>	<u>29 occupants and 100 feet travel distance</u>
<u>Second story</u>	<u>B^b, F, M, S^a</u>	<u>29 occupants and 75 feet travel distance</u>
	<u>R-2</u>	<u>4 dwelling units and 50 feet travel distance</u>
<u>Third story</u>	<u>R-2^c</u>	<u>4 dwelling units and 50 feet travel distance</u>

For SI: 1 foot = 304.8 mm.

- a. For the required number of exits for parking structures, see Section 1021.1.2.
- b. For the required number of exits for air traffic control towers, see Section 412.3.
- c. Buildings classified as Group R-2 equipped throughout with an automatic sprinkler system in accordance

with Section 903.3.1.1 or 903.3.1.2 and provided with emergency escape and rescue openings in accordance with Section 1029.

d. Group B, F and S occupancies in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 shall have a maximum travel distance of 100 feet.

e. Day care occupancies shall have a maximum occupant load of 10.

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

1021.2 Single exits & Table 1021.2 Stories with one exit. A code change was approved in the 2009 IBC: single exits from upper levels in a multi-story building would be permitted, on a "portion by portion" basis. This is dangerous, with major impacts that are negative to life safety.

In existing buildings, new tenants could block exit access paths to stairways, or "reserve them", by constructing walls or installing locks on doors, denying the emergency use of a stairway to the other tenants.

Similarly, new buildings could be constructed with the same inherent dangers. Conceivably, four (or more) tenant spaces on a floor could empty into a single exit access to a single stairway. Or, if the building was originally constructed with occupant limitations, it could be extremely difficult, if not impossible, to alter it in the future for any new occupancies.

Group R-2 buildings, when considered in conjunction with their increases in size under the 2009 IBC, might have up to 80 residents trying to access a single stair. Again, this is counter to considerations for their well-being.

This is counter to all previous history of fire and life safety.

The language above is that of IBC Section 1021.2 and Table 1021.2 (with modifications). These modifications maintain the concept of "single exit buildings" for limited occupants, but remove the "single exit story". This is imperative to the safety of the building occupants.

Submittal Information

Date Submitted: January 25, 2010

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 E. Main St., Suite 300
Richmond, VA 23219

Email Address: tsu@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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change Nos. C-1024.1(a) and (b)**

Nature of Change:

Two proposals to limit the new exit marking requirements in the 2009 IBC.

Proponent: J. Kenneth Payne, Jr., AIA, representing VSAIA (C-1024.1(a)) and Shaun Pharr, representing the Apartment and Office Building Association of Metropolitan Washington DC and the Virginia Apartment Management Association (C-1024.1(b))

Staff Comments:

This issue was identified as a significant change between the 2006 and 2009 IBC for the workgroups. While the proposals were not received in time to be reviewed by the workgroups, there was general comment that the new provisions may not be warranted. Mr. Payne's proposal would limit the application of the new requirements to only super-high-rise buildings and Mr. Pharr's proposal would retain the current 2006 exiting requirements.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: C-1024.1(a)

Proponent Information

(Check one): Individual Government Entity Company

Name: J. Kenneth Payne, Jr., AIA

Representing: VSAIA

Mailing Address: 3200 Norfolk Street, Richmond, Virginia 23230

Email Address: kpayne@moseleyarchitects.com

Telephone Number: 804-794-7555

Proposal Information

Code(s) and Section(s): 2009 IBC Section 1024.1 – General (Luminous Egress Path Markings)

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

1024.1 General. *Approved* luminous egress path markings delineating the exit path shall be provided in buildings of Groups A, B, E, I, M and R-1 having occupied floors located more than 75 ~~420~~ 128 016 feet (~~22 860~~ 128 016 mm) above the lowest level of fire department vehicle access in accordance with Sections 1024.1 through 1024.5.

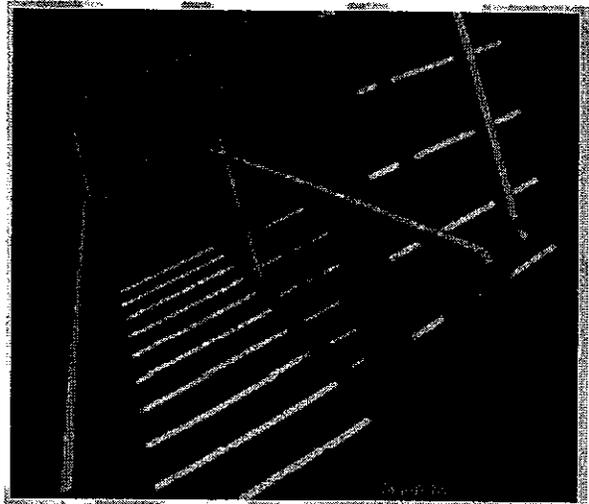
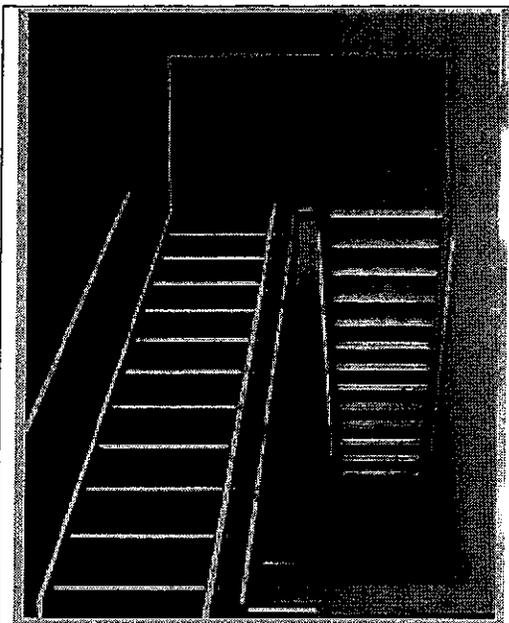
Supporting Statement (including intent, need, and impact of the proposal):

It is my understanding that this new code section was included as a result of the 9/11 reports and/or recommendations. Given that the loss of life that day mostly involved "super" high rises, it appears this section is more suited to much taller buildings. Given the definition of a "high rise," these requirements could potentially be required for a *five-story* building, which is a far cry from those buildings affected on 9/11.

However, the biggest concern is the durability of the required markings and the continued maintenance (and associated costs) involved for what could ultimately affect numerous multi-story buildings throughout the Commonwealth. It seems inevitable that the markings on the edge of the steps, edge of the landings, and almost certainly the markings applied to the *top* of the handrails, will fail or wear off those surfaces, and will require constant repair or replacement. Worse – nothing is done to repair or replace the defective markings – which could lead to unanticipated consequences (e.g., tripping over loose markings, or getting a person's hand stuck on the markings that become loose on the handrails).

Requiring markings for "super" high rises seems more appropriate (and thus, its impact in Virginia very limited, if at all) where the egress travel distances are much longer and arduous. The 420 feet comports with Section 403 as the delineation between high rises and "super" high rises.

We can only assume the addition of the markings on the top surface of the handrails have been coordinated with ICC/ANSI A117.1 and 2004 ADAAG, relative to smooth surfaces for handrails. If not, then the application on the handrails could cause rejection under the accessibility standard and/or regulation.



Submittal Information

Date Submitted: January 19, 2010

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 2009 Code Change Cycle

Code Change Number: C-1024.1(b)

Proponent Information

(Check one): Individual Government Entity Company

Name: W. Shaun Pharr

Representing: The Apartment and Office Building Assn. of Metropolitan Washington DC

Mailing Address: 1050 17th Street NW Suite 300 Washington, DC 20036

Email Address: spharr@aoba-metro.org

Telephone Number: (202) 296-3390

Proposal Information

Code(s) and Section(s): IBC Sec. 1024

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

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

This new section in the IBC would require luminous egress path markings in several building groups, including B, with occupied floors more than 75 feet. Its adoption in the IBC was driven largely in response to the NIST post-9/11 study; while its necessity and/or utility may be demonstrable in super high-rise buildings, these are not at all clear in regard to the buildings of much lower height which are likely to be built in the Commonwealth in the next several years. Rather than impose the initial installation and subsequent maintenance burdens of such a requirement, Virginia can and should wait for more persuasive evidence that such measures beyond those already required in the VSBC are also necessary.

Submittal Information

Date Submitted: January 25, 2010

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

Email Address: tsu@dhcd.virginia.gov

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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-1103.2.7**

Nature of Change:

To modify an accessibility provision approved for the proposed 2009 USBC.

Proponent: Dan K. Williams, representing the Fairfax County Building Department

Staff Comments

The proposal was not received in time to be vetted through the workgroup process. The proponent believes that the exception approved by the Board for the proposed 2009 USBC contains problematic language. New language is suggested. Staff notes that the new language is more restrictive than the language approved for the proposed regulation as it limits the exception to only two-occupant or less areas. The proponent's language would require a ramp to a choir loft.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

H:\My Documents\2009 Va-2009 International Codes\Code changes\2009 VCC 1103.2.7 and 1103.2.16.doc

Code Change Number: C-1103.2.7

Proponent Information (Check one): Individual Government Entity Company

Name: Dan K. Williams Representing: Fairfax County

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

Email Address: Dan.Williams@fairfaxcounty.gov Telephone Number: 703-324-1060

Proposal Information

Code(s) and Section(s): 2009 Virginia Construction Code Section No(s): VCC Section 1103.2.7 and 1103.2.16

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

Change Section 1103.2.7 of the IBC to read:

1103.2.7 Raised areas. Raised areas used primarily for purposes of security, life safety or fire safety including, but not limited to, observation galleries, prison guard towers, fire towers or lifeguard stands, and raised areas used primarily for religious ceremonies in a place of religious worship are not required to be accessible or to be served by an accessible route.

Add Section 1103.2.16 to the IBC to read:

1103.2.16 Places of religious worship. Limited-occupant, raised or depressed areas in a place of religious worship are not required to be accessible or to be served by an accessible route. Such limited-occupant areas shall be limited to two occupants or less, and include, but are not limited to, raised rostrums, and depressed or raised areas for performance of musical instruments such as pianos or organs.

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

1103.2.7 Raised areas. As written, VCC Section 1103.2.7 added “raised areas used primarily for religious ceremonies in a place of religious worship” to the list of areas used for security, life safety, or fire safety, that do not require accessibility, nor an accessible route.

Absent specific limitations (such as a single-occupant rostrum), this change is not in the best interests of the public, and should not be in the code. It could be construed to exclude an entire place of religious worship from any and all accessibility provisions (even a way to enter the building, since the building itself might be elevated above its surrounding land area, and is “used primarily for religious ceremonies”). Why, of all possible groups and uses, should the VCC deny accessibility to that population that might most need or expect it, the worshipers and users of the facility? If the VCC intent is for “raised rostrums”, or “organs located in a depressed pit”, or similar (limited occupancy) areas to be exempted, let it say so, but not with such sweeping generality.

Also, the phrase “...used primarily for religious ceremonies...” is subjective and open to wide misinterpretation.

Further, the VCC language as written might contradict the “conversion of occupancy”

requirements wherein “accessibility” is being emphasized (see VCC Section 103.3).

This code change, as presented, results in no modifications to IBC Section 1103.2.7 (and therefore that VCC change is removed), but instead provides a separate new Section 1103.2.16 for such exempted limited-occupant, specific-use areas in places of religious worship. It maintains the presumed intent of the VCC, yet also maintains accessibility requirements for the worshipers and users of the facility. The exempted areas have a specific limitation to two occupants or fewer. The subjective phrase, “...used primarily for religious ceremonies...” has been removed.

Submittal Information

Date Submitted: January 25, 2010

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 E. Main St., Suite 300
Richmond, VA 23219

Email Address: tsu@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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-1301(401.3)**

Nature of Change:

To delete the requirement for an energy certificate in the 2009 IRC and 2009 IECC.

Proponent: Guy Tomberlin, Fairfax County Building Department, representing VPMIA and VBCOA's Plumbing/Mechanical/Fuel Gas Committees

Staff Comments:

This proposal was tentatively approved at the Codes and Standards Committee meeting of December 14, 2009 unless public comment is received during the Compilation Document comment period.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: C-1301 (401.3)

Proponent Information

(Check one): Individual Government Entity Company

Name: Guy Tomberlin

Representing: VA Plumbing and Mechanical Inspectors Association and VA Building and Code Officials Association Plumbing/Mechanical/Fuel Gas Committees

Mailing Address: 12055 Government Center Parkway, Suite 630
Fairfax, VA 22035

Email Address: guy.tomberlin@fairfaxcounty.gov

Telephone Number: 703-324-1611

Proposal Information

Code(s) and Section(s): IECC Section 401.3 Certificate. And IRC Section N1101.9 Certificate.

Proposed Change (including all relevant section numbers; if multiple sections): Delete IECC Section 401.3 Certificate, and IRC Section N1101.9 Certificate, in their entirety.

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

Technically these two sections are currently unenforceable as they can be classified as Administrative functions. The two submitting code committees agreed that these provisions added absolutely no value to increased energy efficiency. This section requires a certificate be placed on the electrical panel stating certain energy related building components such as R-values, U-factors etc... Unfortunately this is nothing more than a good idea with no energy conserving benefit what so ever. This information is no more useful than if the builder were required to place a label on the panel stating the joist size, framing wall sizes, etc or the type of plumbing and electrical fixtures. Yes it's nice to know but does it lend itself in anyway to increased energy conservation or enhanced building safety, no. In fact it will be create problems throughout the life of the building. For example what if the owner changes some components without the benefit of permits and inspections, then sells the building and the next owner comes in years later to make adjustments and finds that the building is not what the certificate says it was? It may be better, what then? What does the code official do when the label contains the wrong information? Do they reject occupancy from someone moving into their new home? Lets face it when a building component needs to be replaced it is almost always financial economics and market availability that drives the decision on replacement items, not a certificate that was posted years prior. The certificate is completely useless for any and all practical purpose. In fact, it could easily cause a chaotic exercise that builders would have to deal with in the 11th hour. Final inspections and occupancy are being withheld because this label may have not been posted. Lets not endorse rules and practice just because they are good ideas lets stay with the long standing fundamentals that the code is a minimum standard set in place to assure safety and uphold the concepts of energy conservation.

Submittal Information

Date Submitted: July 2, 2009

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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-1301(402.1.1)**

Nature of Change:

To reference an alternative standard for log wall construction and to specify greater window energy requirements for such installations.

Proponent: Michael E. Loy, representing the Log Homes Council

Staff Comments:

The proposal was not received in time to be fully vetted through the workgroup process; however, it was discussed at several client group meetings. The proposal references an ICC standard for log homes. Staff does have a copy of the standard. Staff notes that the proposal is from the Log Homes Council, yet the proposal is for the IECC and not the energy provisions of the IRC. Most log homes would be constructed to comply with the IRC.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: C-1301(402.1.1)

Proponent Information

(Check one): Individual Government Entity Company

Name: Michael E. Loy

Representing: Log Homes Council

Mailing Address: PO Box 1668, Irmo, SC 29063

Email Address: mloy@southlandloghomes.com

Telephone Number: 803-407-4601

Proposal Information

Code(s) and Section(s): IECC Table 402.1.1 Insulation and Fenestration Requirements by Component

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

Add footnote "k" to the Mass Wall R-value column of IECC Table 402.1.1 "Insulation and Fenestration Requirements by Component"

Footnote "k" to read as follows : k Log walls complying with ICC400 and with a minimum average wall thickness of 5" or greater shall be permitted in Zone 4 when overall window glazing is .32 U-factor or lower and all other component requirements are met.

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

To direct users to the consensus standard on log construction, the footnote references ICC400. This amendment would provide a prescriptive method that code officials and design professionals can apply to log homes. It simplifies administration of the codes for log construction for all parties involved. Log construction would be held to a higher requirement for window glazing.

Submittal Information

Date Submitted: 11/3/09

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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change Nos. C-1301(402.4.2)(a), (b) and (c)**

Nature of Change:

Three proposals to address the duct and blower door testing requirements in the 2009 IECC and IRC.

Proponent: Mike Toalson, representing Home Builders Association of Virginia (C-1301(402.4.2)(a)) and Guy Tomberlin, representing VPMIA and VBCOA's Plumbing/Mechanical/Fuel Gas Committees (C-1301(402.4.2)(b) and (c))

Staff Comments:

This issue was identified as a significant change between the 2006 and 2009 IECC and IRC for the workgroups and by the energy sub-workgroup. While the proposals were not received in time to be reviewed by the workgroups, there was general comment that alternatives should be provided to the requirements for duct and blower door testing. Mr. Toalson's proposal would permit random testing not to be less than one home for every seven constructed and Mr. Tomberlin's changes would require testing of every house, but would permit the HVAC contractor to do the testing. It should be noted that the IECC and the IRC already provide an inspection option in lieu of blower door testing.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: C-1301(402.4.2)(a)

Proponent Information

(Check one): Individual Government Entity Company

Name: Mike Toalson

Representing: HBAV

Mailing Address: _____

Email Address: _____

Telephone Number: _____

Proposal Information

Code(s) and Section(s): IECC 401.4 (and correlating provision in the IRC)

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

Add new text and table as follows:

401.4 Compliance testing. Where testing is required to determine air leakage of buildings or duct systems, the code official shall be permitted to require random sample testing of no fewer than one in seven residences.

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

Duct testing 100% of residences is costly and unnecessary.

Submittal Information

Date Submitted: 1-25-10

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 T&SO (Technical Assistance and Services Office)
The Jackson Center
501 N. 2nd Street
Richmond, VA 23219-1321

Email Address: tsu@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 2009 Code Change Cycle

Code Change Number: C-1301 (402.4.2) (b)

Proponent Information

(Check one): Individual Government Entity Company

Name: Guy Tomberlin

Representing: VPMIA/VBCOA PMG Code Committees

Mailing Address: 12055 Government Center Parkway, Suite 630, Fairfax VA 22030

Email Address:

mailto:guy.tomberlin@fairfaxcounty.gov

Telephone Number: 703-324-1611

Proposal Information

Code(s) and Section(s): IECC Section 402.4.2.1 and IRC Section N1102.4.2.1 amended by the 2006 VUSBC

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

Add new Section 402.4.2.2 to the IECC and N1102.4.2.2 to the IRC to read as follows:

IECC 402.4.2.1.1 Test. Testing shall be performed by approved qualified individuals, testing agencies or contractors. Testing and results shall be as prescribed in Section 403.2.2 and approved recognized industry standards. Test results shall be submitted to the code official prior to occupancy.

IRC N1102.4.2.1.1 Test Testing shall be performed by approved qualified individuals, testing agencies or contractors. Testing and results shall be as prescribed in Section N1102.4.2.1 and approved recognized industry standards. Test results shall be submitted to the code official prior to occupancy.

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

This will permit the installing contractor or any other approved testing agency to perform whole house "blower door" testing, if that option is elected test as permitted by the IECC/IRC. This proposal is specifically submitted to replace and delete other proposals that would permit any type of random testing. There is no fair, uniform, reasonable method to implement random, testing. The code official cannot be put into the position of determining when testing occurs, neither can the contractor. What if it was decided that every 3 permits issued requires testing? Would it be in a 12 month period? What about the custom home builder who only builds 3 homes a year? Is it acceptable to allow 2 custom homes to be turned over to the owners without required testing? What about the track builder that builds 100 houses per year? They only have to test 33.3%? What if they use multiple sub contractors? Do they just use the best subs on the ones they know are going to require testing? The whole concept behind the testing is to assure energy conservation measures have been incorporated into the buildings construction. Random testing has the potential to completely negate energy conservation assurance. We need to focus on the intent and assurance that each building has complied with the requirements outlined in the energy code, random testing would be cheating virtually all the home buyers who didn't have the required test performed. The answer is what we have proposed here and that is to incorporate the allowance for any qualified person/company to do the test, not to create more burdensome provisions such as specialty contractors or 3rd party certifications that some feel are needed to perform these test.

Submittal Information

Date Submitted: Jan. 21, 2010.

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 Centre

600 E. Main St., Ste. 300

Richmond, VA 23219

Email Address: tsu@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 2009 Code Change Cycle

Code Change Number: 6-1301 (402.4.2)(C)

Proponent Information

(Check one): Individual Government Entity Company

Name: Guy Tomberlin

Representing: VPMIA/VBCOA PMG Code Committees

Mailing Address: 12055 Government Center Parkway, Suite 630, Fairfax VA 22030

Email Address:

mailto:guy.tomberlin@fairfaxcounty.gov

Telephone Number: 703-324-1611

Proposal Information

Code(s) and Section(s): IECC Section 403.2.2 and IRC Section N1103.2.2.1 amended by the 2006 VUSBC

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

Add new IECC Section 403.2.2.1 and IRC Section N1103.2.2.1(below the exceptions) to read as follows:

IECC 403.2.2.1. Testing shall be performed by approved qualified individuals, testing agencies or contractors. Testing and results shall be as prescribed in Section 403.2.2 and approved recognized industry standards. Test results shall be submitted to the code official prior to occupancy.

IRC N1103.2.2.1 Test Testing shall be performed by approved qualified individuals, testing agencies or contractors. Testing and results shall be as prescribed in Section N1103.2.2 and approved recognized industry standards. Test results shall be submitted to the code official prior to occupancy.

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

This will permit the installing contractor or any other approved testing agency to test as required by the IECC and IRC. This proposal is specifically submitted to replace and delete other proposals that would permit any type of random testing. There is no fair, uniform, reasonable method to implement random, testing. The code official cannot be put into the position of determining when testing occurs, neither can the contractor. What if it was decided that every 3 permits issued requires testing? Would it be in a 12 month period? What about the custom home builder who only builds 3 homes a year? Is it acceptable to allow 2 custom homes to be turned over to the owners without required testing? What about the track builder that builds 100 houses per year? They only have to test 33.3%? What if they use multiple sub contractors? Do they just use the best subs on the ones they know are going to require testing? The whole concept behind the testing is to assure energy conservation measures have been incorporated into the buildings construction. Random testing has the potential to completely negate energy conservation assurance. We need to focus on the intent and assurance that each building has complied with the requirements outlined in the energy code, random testing would be cheating virtually all the home buyers who didn't have the required test performed. The answer is what we have proposed here and that is to incorporate the allowance for any qualified person/company to do the test, not to create more burdensome provisions such as specialty contractors or 3rd party certifications that some feel are needed to perform these test.

Submittal Information

Date Submitted: Jan. 21, 2010.

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 Centre
600 E. Main St., Ste. 300
Richmond, VA 23219

Email Address: tsu@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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-1301(404.2)**

Nature of Change:

To require an energy consumption reduction device to be installed on every panel box.

Proponent: Barry Wisner, representing Cherokee Energy Solutions

Staff Comments:

The proposal was not received in time to be vetted through the workgroup process. While the supporting statement indicates the proposal is for both residential and commercial construction, the proposal appears to be submitted only for the IECC. Staff notes that there is no standard listed for the device, nor any criteria for determining how to approve a device. The proponent has not indicated whether he has sought approval for this requirement at the national level.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: C-1301 (404.2)

Proponent Information

(Check one): Individual Government Entity Company

Name: BARRY WISNER

Representing: CHEROKEE ENERGY SOLUTIONS

Mailing Address: 2436 MISTWOOD FOREST DRIVE, CHESTER, VA 23831

Email Address: barrywisner@hotmail.com

Telephone Number: 804 475-9288

Proposal Information

Code(s) and Section(s): 404.1 Existing. ADD NEW REQUIREMENT 404.2.
505.7 Existing. ADD NEW REQUIREMENT 505.8.

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

404.2 Energy management device, voltage control guard, is required on every panel serving a residential dwelling.

505.8 Energy management device, voltage control guard, is required on the last distribution panel closest to the load of every single phase commercial electrical distribution panel utilized for lighting and general power.

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

INTENT: Energy savings. Reduce single phase power panel electrical consumption by installing the Voltage Control Guard (VCG). The VCG removes noise from the broad band of spectrum noises that exists on the neutral side of electric installations and restores the optimum phase and polarity in the system. The impact on the consumer is a reduction of electric consumption without requiring a change in the behavior of the consumer.

NEED: The Virginia Energy Plan 2007, Chapter 3: Energy Efficiency and Conservation, has a stated goal "...to reduce electric use by 10% by 2022 as called for in the 2007 electric re-regulation legislation" (Reference to Title 67 of the Code of Virginia 67-101, 67-102.)

Federal Executive Order 13123 (1999), Greening the Government Through Efficient Energy Management, Section 202: "Energy Efficiency Improvement Goals. Through life-cycle cost-effective measures, each agency shall reduce energy consumption per square foot, per unit of production, or per other unit is applicable by 20% by 2005 and 25% by 2010 relative to 1990. No facilities will be exempt from these goals unless they meet new criteria for exemptions as issued by DOE."

In order to help achieve the goals of these plans to reduce energy consumption based on these requirements, the VCG can provide a contribution to meeting these savings goals.

IMPACT: (continued below)

Submittal Information

Date Submitted: JANUARY 27, 2010.

IMPACT: Using statistical analysis on almost 2 years of field and lab data, in concert with tests currently being performed by Dominion Power, the data supports a reduction in consumption in the 5% savings range. The histograms of data collected between April 2008 and June 2009 indicate that the VCG1 has resulted in a 5% or greater savings in energy consumption in 99% of the current single-phase installations.

Dominion Services, Inc., a division of Virginia Dominion Power, is in their second phase of testing. The first phase included the installation of voltage control guards in Charles City County. The first phase is complete and they are now moving into the second level of that testing because the single unit showed positive results.

Dominion Services, Inc. has test results indicating 3 to 5 percent savings and is expanding the tests to a larger model sample because they see savings in single unit tests. Their goal is to demonstrate a lower transformer core excitation, indicating that the reduced consumption will result in creating both a heat reduction in equipment and appliance loads. These ongoing tests provide additional validation of the conceptual and operational framework of the VCG.

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 E. Main St., Suite 300

Richmond, VA 23219

Email Address: tsu@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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-2803.1(403.3)**

Nature of Change:

To add ventilation rates to the International Mechanical Code (IMC) to address areas where smoking is allowed, but are not considered smoking lounges.

Proponent: Shawn Strausbaugh, representing Arlington County

Staff Comments:

The proposal was not received in time to be vetted through the workgroup process; however, it resulted from discussions from a multi-jurisdictional group of mechanical inspection personnel to address how the IMC affects the implementation of the Virginia Indoor Clean Air Act. As the 2009 IMC assumes no smoking in areas other than smoking lounges, adjustments were needed to the ventilation rates to provide reasonable ventilation rates in those areas where smoking is permitted, but the concentration would not be as intense as in a smoking lounge. The proposal uses established ventilation rates from when the IMC did address smoking in areas other than smoking lounges.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: C-2803.1 (403.3)

Proponent Information

(Check one): Individual Government Entity Company

Name: Shawn Strausbaugh

Representing: Arlington County, VA

Mailing Address: 2100 Clarendon Blvd. suite 1000 10th floor Arlington, VA 22201

Email Address: sstrausbaugh@arlingtonva.us

Telephone Number: 703-228-3842

Proposal Information

Code(s) and Section(s): IMC 403.3 as currently amended by the 2006 VUSBC

Proposed Change (including all relevant section numbers, if multiple sections): IMC 403.3 second paragraph: With the exception of smoking lounges and other designated areas where smoking is permitted the ventilation rates in Table 403.3 are based on the absence of smoking in occupiable spaces. Where smoking is anticipated in a space other than a smoking lounge, the ventilation system serving the space shall be designed to provide ventilation over and above that required by Table 403.3 in accordance with accepted engineering practice

Add to table 403.3 under **public spaces:**

Lounges designated as an area where smoking is permitted, with footnote b, 30 cfm per person- people outdoor airflow rate in breathing zone cfm/person, 100 default occupant density #/1000 square feet.

Add to table 403.3 Under **Food and Beverage service:**

Bars or cocktail lounges designated as an area where smoking is permitted, with footnote b, 30 cfm per person- people outdoor airflow rate in breathing zone cfm/person, 100 default occupant density #/1000 square feet.

Cafeteria or fast food designated as an area where smoking is permitted, with footnote b, 20 cfm per person- people outdoor airflow rate in breathing zone cfm/person, 100 default occupant density #/1000 square feet.

Dining rooms designated as an area where smoking is permitted, with footnote b, 20 cfm per person- people outdoor airflow rate in breathing zone cfm/person, 70 default occupant density #/1000 square feet.

Supporting Statement (including intent, need, and impact of the proposal): The purpose of this proposed change is to provide more precise, enforceable code language to IMC 403.3 other than using the current term "accepted engineering practice". The ventilation rates provided in the existing 2006 VUSBC are based on the absence of smoking in occupied areas, except for the "smoking lounges" classification. The existing code gives no direction to the required outdoor air ventilation rates for other designated areas where smoking is permitted, other than stating per "accepted engineering practice". The outdoor air rates added in this proposed change are taken from the 2006 IMC. The ventilation rates in the 2006 IMC are higher than those in the 2006 VUSBC because they are based on the presence of smoking in occupied areas. This proposal is simply taking current ventilation rates that were designed and based on the presence of smoking in occupied areas, and incorporating those rates into the VUSBC. Note that the rates shown in this proposed change are less than half of the required outdoor air ventilation required per person under the occupancy classification of "smoking lounge". This proposed change will add flexibility and cost saving to a currently restrictive code requirement by providing

previously approved, alternate ventilation rates to an otherwise silent code section. This change was created through several meetings of the Northern VA Inter-jurisdictional group that were held to reach a consensus on how the VA Indoor clean air act and the existing VUSBC were to be enforced. Based upon these meeting it was felt that the existing mechanical portion of the VUSBC needed to have defined outdoor air ventilation rates for smoking areas instead of permitting the use of accepted engineering practice that would result in numerous different interpretations, or restricting all areas designated for smoking to the occupancy classification of "Smoking lounge". Again note that all the added smoking areas as listed above were taken from previously approved rates from the 2006 IMC.

Submittal Information

Date Submitted: January 23, 2010

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 Centre
600 E. Main St., Ste. 300
Richmond, VA 23219

Email Address: tsu@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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change Nos. C-2803.1(1101.10)(a) and (b)**

Nature of Change:

Two proposals to address the new requirement in the International Mechanical Code for the use of a locking cap on air-conditioning compressor units.

Proponent: Guy Tomberlin, representing VPMIA and VBCOA's Plumbing/Mechanical/Fuel Gas Committees (C-2803.1(1101.10)(a)) and Frank Castelvechi, representing Henrico County Building Department (C-2803.1(1101.10)(b))

Staff Comments:

The proposals were not received in time for review by the workgroups but the issue was discussed at several meetings. The 2006 IMC had the requirement for locking caps, so the requirement has been in place now for several years. However, at the national level in the first round of proposals for the 2012 IMC, a proposal was submitted to accept other methods of preventing access to the units in lieu of the locking caps. Mr. Tomberlin's proposal is the proposal that was accepted in the first round of hearings for the 2012 IMC. Mr. Castelvechi's proposal is to delete the requirement altogether as not being necessary on commercial appliances due to their location. Evidently, there was a similar proposal at the national level which was disapproved by the committee, but the committee action was overturned by the assembly. Mr. Tomberlin's proposal was reviewed by the Codes and Standards Committee on December 14, 2009 and was tentatively approved unless public comment was received. Mr. Castelvechi's proposal constitutes public comment, so both proposals will now be reviewed concurrently.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: C-2803.1(1101.10)(a)

Proponent Information

(Check one): Individual Government Entity Company

Name: Guy Tomberlin Representing: VPWFA/VBCOA PMF Code Comm.

Mailing Address: 12055 Gout Ctr. Plenum - Suite 630

Email Address: guy.tomberlin@afshurandjones.com Telephone Number: 703-324-1611

Proposal Information

Insert M-132 language into the IMC only -

Code(s) and Section(s): This was approved on a national level.

Proposed Change (including all relevant section numbers, if multiple sections): Note: you can click in this box and insert text. The box will expand to accommodate your insertions.

Supporting Statement (including intent, need, and impact of the proposal): Note: you can click in this box and insert text. The box will expand to accommodate your insertions.

Submittal Information

Date Submitted: 12/7/09

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 Centre
600 E. Main St., Ste. 300
Richmond, VA 23219

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

M132-09/10
1101.10

Proponent: Jeffrey M. Shapiro, PE, International Code Consultants, representing the International Institute of Ammonia Refrigeration

Revise as follows:

1101.10 Locking access port caps. Refrigerant circuit access ports located outdoors shall be fitted with locking-type tamper-resistant caps or shall be otherwise secured to prevent unauthorized access.

Reason: The intent of this change is not to diminish the barrier to "huffing" that was established by adding Section 1101.10 to the 2009 code. Instead, it is to recognize that there are other methods whereby access ports can be secured. For example, in a refrigerated warehouse, a valve inside of the building may block the flow of refrigerant to the access port located outside except when filling is taking place. With this arrangement, no refrigerant is released even when the cap is removed when the valve is closed. Likewise, ports may be located with rooftop equipment having no access except via a roof hatch from the inside. Locking, tamper-resistant caps tend to be a more suitable solution for residential-style equipment with small access ports, and the code needs to be more flexible to accommodate industrial equipment at commercial facilities.

Cost Impact: The code change proposal may increase or decrease the cost of construction depending on the selected method.

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: C-2803.1(1101.10)(b)

Proponent Information

(Check one): Individual Government Entity Company

Name: Frank G Castelvechi, III, PE

Representing: Henrico County

Mailing Address:

PO Box 90775
Henrico VA 23273

Email Address: cas13@co.henrico.va.us

Telephone Number: 804 501 4375

Proposal Information

Code(s) and Section(s): IMC 1101.10, IRC M1411.6 Locking Access Port Caps.

Proposed Change (including all relevant section numbers, if multiple sections):
Delete this section in its entirety.

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

Providing locking caps to refrigerant ports is an unnecessary expense as it will do little to address the issue of the huffing of refrigerant as the existing caps and valves already require tools to access and those interested in huffing would either be able to access the refrigerant by puncturing or sawing into the lines or equipment resulting in greater losses to those from whom the refrigerant is being stolen. Keys for these caps would soon be readily available to the underground as many huffers are either HVAC Techs or are introduced to it by HVAC Techs. Other sources of refrigerant for huffing such as vehicle systems are readily available. Other commonly available inhalants include paint, whipped cream, propane, gasoline etc.

The ICC committee had rejected this change but was overruled by the assembly after emotional testimony.

Submittal Information

Date Submitted: 12/8/2009

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 Centre
600 E. Main St., Ste. 300
Richmond, VA 23219

Email Address: tsu@dhcd.virginia.gov
Fax Number: (804) 371-7092
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VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-2804.1(310.1)**

Nature of Change:

To add a provision to the International Mechanical Code require any buildings where CSST gas piping is used to be provided with a lightning protection system.

Proponent: David G. Humphrey, representing the Virginia Chapter of the International Association of Electrical Inspectors

Staff Comments:

The proposal was not received in time to be vetted through the workgroup process; however, the issue of the use of CSST was discussed at a number of workgroup meetings as a continuation from the 2006 code change cycle. There was anecdotal evidence of continued problems with CSST systems but concerns were raised as to whether this was a solution. The proposal does not include the provisions of the International Residential Code for CSST, where most of the product is used.

Codes and Standards Committee Action:

Approve as presented.

Disapprove.

Approve as modified (specify):

Carry over to next cycle.

Other (specify):

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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change Nos. C-2901.1.1(Appendix C)(a) and (b)**

Nature of Change:

Two proposals to use Appendix C of the International Plumbing Code (IPC), the first for gray water recycling systems and the second for both gray water recycling systems and rain water re-use.

Proponent: Guy Tomberlin, Fairfax County Building Department, representing VPMIA and VBCOA's Plumbing/Mechanical/Fuel Gas Committees for (a) and representing only himself for (b)

Staff Comments:

Appendix C of the IPC, for gray water recycling systems, was added to the IPC in the 2006 edition. Virginia did not make it part of the USBC. This issue has been discussed at the workgroup meetings and the first proposal is to provide standards for the voluntary use of gray water recycling systems. The second proposal is to also use the appendix for rain water re-use, which essentially uses the same technology as gray water systems. The Department has formed a sub-workgroup of state agency representatives from the Department of Environmental Quality, the Department of Conservation and Recreation and the Department of Health and other interested parties to determine whether functional design issues are present and need to be addressed, such as protection of the potable water supply outside of a building or structure and the disposal of re-used gray water or rain water. The sub-workgroup is still meeting to develop recommendations concerning these proposals.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: C-2901.1.1 (Appendix C)(a)

Proponent Information

(Check one): Individual Government Entity Company

Name: Guy Tomberlin

Representing: VA Plumbing and Mechanical Inspectors Association and VA Building and Code Officials Association Plumbing/Mechanical/Fuel Gas Committees

Mailing Address: 12055 Government Center Parkway, Suite 630
Fairfax, VA 22035

Email Address: guy.tomberlin@fairfaxcounty.gov

Telephone Number: 703-324-1611

Proposal Information Include Appendix

Code(s) and Section(s): Incorporate Appendix C of the IPC into the body of the code.

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

New USBC/IPC Section R2901.1.1 Use of Appendix C for Gray water recycling systems. In addition to the other applicable provisions of this code, gray water recycling systems shall comply with the provisions in Appendix C of the IPC.

Note to staff – renumber existing sections accordingly.

Supporting Statement (including intent, need, and impact of the proposal): This technology has developed into a system that results in a safe installation with a huge energy conserving advantage. In today's "Green" environment this is a much needed step in the right direction for plumbing systems. Currently being located in an Appendix results in the requirements for a code modification review each time one of these systems is proposed. Once this option is inserted into the body of the code it becomes a designers choice whether to take advantage of recycling or not. This proposal has also been submitted on the National level. The impact is this creates another option for industry to utilize, enabling greater energy/water savings.

Submittal Information

Date Submitted: July 2, 2009

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: tsu@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 2009 Code Change Cycle

Code Change Number: C-2901.1.1 (Appendix C)(b)

Proponent Information

(Check one): Individual Government Entity Company

Name: Guy Tomberlin

Representing: Myself

Mailing Address: 12055 Government Center Parkway, Suite 630
Fairfax, VA 22035

Email Address: guy.tomberlin@fairfaxcounty.gov

Telephone Number: 703-324-1611

Proposal Information Include Appendix

Code(s) and Section(s): Incorporate Appendix C of the IPC into the body of the code.

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

New USBC/IPC

Section R2901.1.1 Use of Appendix C for Gray water recycling systems. In addition to the other applicable provisions of this code, gray water recycling systems shall comply with the provisions in Appendix C of the IPC.

2901.1.1.1 Rain water re-use. Where approved rainwater re-use shall be permitted when installed in accordance with the IPC Appendix C provisions for gray water recycling systems. Rainwater and gray water systems shall not be interconnected.

Note to staff – renumber existing sections accordingly.

Supporting Statement (including intent, need, and impact of the proposal): This technology has developed into a system that results in a safe installation with a huge energy conserving advantage. In today's "Green" environment this is a much needed step in the right direction for plumbing systems. Currently being located in an Appendix results in the requirements for a code modification review each time one of these systems is proposed. Once this option is inserted into the body of the code it becomes a designers choice whether to take advantage of recycling or not. The words "where approved" are incorporated into the text due to the facts that other agencies may be involved in the decision making process such as Health Dept or Department of Environmental Quality. The impact is this creates another option for industry to utilize, enabling greater energy/water savings.

Submittal Information

Date Submitted: July 2, 2009

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

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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-3001.2.1**

Nature of Change:

To reference the newest addendum to the traditional elevator standard and to add a new standard for the evaluation of newer design or non-traditional elevators to the USBC.

Proponent: James D. Lawrence, representing the International Association of Elevator Consultants

Staff Comments:

The proposal was not received in time to be vetted through the workgroup process; however, it was discussed at one meeting of DHCD staff with the Virginia Building and Code Officials Association. It was recognized that the standard has merit for facilitating the acceptance of newer or non-traditional elevators for which the normal ASME A17.1 standard does not provide complete coverage for. It was also noted that the '08 addendum to ASME A17.1 authorizes the use of the new A17.7 standard, which might be sufficient rather than actually referencing the new standard. The proponent did not provide a copy of either the '08 addendum to the ASME A17.1 standard or the new A17.7 standard and was informed that copies needed to be provided.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: C-3001.2.1

Proponent Information

(Check one): Individual Government Entity Company

Name: James D. Lawrence

Representing: IAEC (International Association of Elevator Consultants, formerly NAVEP)

Mailing Address: 4214 Colas Point Way, Glen Allen, VA 23060

Email Address: jlawrence9@aol.com

Telephone Number: 804.747.0971

Proposal Information

Code(s) and Section(s): IBC - Chapter 35 Referenced Standards

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

change the referenced standards in Chapter 35 of the IBC as follows:

ASME

Add A17.1a-2008/CSA B44a-08 Addenda to ASME A17.1-2007/CSA B44-07

Add A17.7-2007/CSA B44.7-07 Performance-based safety code for elevators and escalators

ADD The following paragraph *

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

1. A17.1a addendum covers clarifications, corrections, deletions and additions and updates the elevator referenced standard to the most recent, available version of A17.1 issued Dec 5, 2008 and effective June 5, 2009.
2. A17.7 provides a means for demonstrating safety of design for new technology elevator products and will be helpful to the AHJ community. This new performance-based code provides an objective and structured method for establishing design and product safety for newly introduced designs and technologies that are not specifically covered in A17.1. A17.7 was published and effective in 2007 and uses Accredited Elevator/Escalator Certification Organization (AECO) authorized by ANSI, ASME or SCC.

Submittal Information

* 3001.2.1 Performance-based safety code for elevators and escalators A17.7/CSA B44 may be used as an acceptable alternative to A17.1/CSA B44

Date Submitted: 12/1/09

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 E. Main St., Suite 300
Richmond, VA 23219

Email Address: tsu@dhcd.virginia.gov

Fax Number: (804) 371-7092

Phone Numbers: (804) 371-7140 or (804) 371-7150



authority having jurisdiction will establish the effective date for their local regulations.

(07)
(05S)

SECTION 1.2 PURPOSE AND EXCEPTIONS

1.2.1 Purpose

The purpose of this Code is to provide for the safety of life and limb, and to promote the public welfare. Compliance with this Code shall be achieved by

(a) conformance with the requirements in ASME A17.1/CSA B44; or

(b) conformance with some of the requirements in ASME A17.1/CSA B44 and for systems, subsystems, components, or functions that do not conform with certain requirements in ASME A17.1/CSA B44, conform with the applicable requirements in ASME A17.7/CSA B44.7; or

(c) conformance with the requirements in ASME A17.7/CSA B44.7

1.2.2 Exceptions to ASME A17.1

The provisions of this Code are not intended to prevent the use of systems, methods, or devices of equivalent or superior quality, strength, fire resistance, effectiveness, durability, and safety to those prescribed by this Code, provided that there is technical documentation to demonstrate the equivalency of the system, method, or device.

1.2.2.1 The specific requirements of this Code shall be permitted to be modified by the authority having jurisdiction based upon technical documentation or physical performance verification to allow alternative arrangements that will assure safety equivalent to that which would be provided by conformance to the corresponding requirements of this Code.

1.2.2.2 This Code contains requirements that are also covered in the National Building Code of Canada (NBCC). Reference to the NBCC is recognition that said requirements are not within the scope of this Code in Canada.

In jurisdictions not enforcing the NBCC, the use of the NBCC is not intended.

1.2.2.3 Exceptions shall be based on the requirements of 1.2.2.1.

(07)
(a)

SECTION 1.3 DEFINITIONS

Section 1.3 defines various terms used in this Code. In addition, some nomenclature and terminology used in the elevator industry and other ASME publications are defined.

access switch: see *hoistway access switch*.

alteration: any change to equipment, including its parts, components, and/or subsystems, other than maintenance, repair, or replacement.

alteration, as part of an: a repair or replacement that is included with other work that is classified as an alteration.

alternate level: a floor level identified by the building code or fire authority, other than the designated level.

annunciator, car: an electrical device in the car that indicates visually the landings at which an elevator landing signal registering device has been actuated.

applied frame entrance: a wraparound or partial addition to an existing entrance frame used to improve the appearance or to provide the required clearances.

approved: acceptable to the authority having jurisdiction.

authority having jurisdiction: the organization, office, or individual responsible for enforcement of this Code. Where compliance with this Code has been mandated by legislation or regulation, the "authority having jurisdiction" is the regulatory authority (see *regulatory authority*).

authorized personnel: persons who have been instructed in the operation of the equipment and designated by the owner to use the equipment.

automatic transfer device: a power-operated mechanism that automatically moves a load consisting of a cart, tote box, pallet, wheeled vehicle, box, or other similar object from and/or to the car.

auxiliary power lowering device: an alternatively powered auxiliary control system that will, upon failure of the main power supply, allow a hydraulic elevator to descend to a lower landing.

brake, driving machine, elevator, dumbwaiter, or material lift: an electromechanically or electrohydraulically released spring, or gravity applied device, that is part of the electric driving machine of the elevator, dumbwaiter, or material lift used to apply a controlled force at a braking surface to hold or retard the elevator, dumbwaiter, or material lift. See Nonmandatory Appendix F.

electrohydraulically released: a means of release in which an electric current applied to a solenoid valve or the motor of a hydraulic pump directs pressurized hydraulic fluid to an actuator (such as a hydraulic jack) that overcomes a resisting force (such as a spring) as long as the electric current flows.

electromechanically released: a means of release in which an electric current applied to an actuator (such as a solenoid) causes an electromagnetic force that overcomes a resisting force (such as a spring) as long as the electric current flows.

brake, driving machine, escalator, or moving walk: an electromechanical device that is part of the electric driving machine of the escalator or moving walk, used to

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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-3008.1**

Nature of Change:

To limit the application of the new occupant evacuation elevator provisions in the International Building Code to only elevators in buildings higher than 420 feet.

Proponent: Ray Pylant, Building Official, representing Fairfax County Building Department

Staff Comments:

The proposal was not received in time to be reviewed by the workgroups. The concern raised is that occupant evaluation elevators are not as safe as traditional exits, such as rated stairways, so their use as an acceptable means of egress should not be permitted in other than super-high-rise buildings, where necessary for mass evacuation.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

H:\My Documents\2009 Va-2009 International Codes\Code changes\2009Code_Change_FormPrintable.doc

Code Change Number: C-3008.1

Proponent Information

(Check one): Individual Government Entity Company

Name: Ray Pylant, Building Official

Representing: Fairfax County

Mailing Address: 12055 Government Center Parkway, Suite 444, Fairfax, VA 22035-5504

Email Address: Ray.Pylant@fairfaxcounty.gov

Telephone Number: 703-324-1910

Proposal Information

Code(s) and Section(s): 2009 IBC Section 3008, Occupant Evacuation Elevators

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

Change Section 3008.1 as follows:

3008.1 General. Where elevators in buildings greater than 420 feet (128 m) in building height are to be used for occupant self-evacuation during fires, all passenger elevators for general public use shall comply with this section. ~~Where other elevators are used for occupant self-evacuation, they shall also comply with this section.~~

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

Section 3008, *Occupant Evacuation Elevators*, was established to provide an alternative to the "additional exit stairway" now prescribed by Section 403.5.2 for high-rise buildings more than 420 feet in building height. However, Section 3008 does not restrict its application to just such buildings, thereby allowing elevators to be configured under its provisions regardless of building height. To make passenger elevators able to continue to operate in a fire emergency, Section 3008 removes certain safety features that are otherwise required for passenger elevators, such as fire sprinklers in machinery spaces (in fully sprinklered buildings) and heat shunt trips that kill mainline power before the elevator safeties and controls are compromised by fire or water. Given the large numbers of people who might need evacuation from very tall buildings in a fire emergency, the logic is understandable. In smaller buildings with fewer people where traditional evacuation methods work, however, the use of elevators for self evacuation in a fire emergency would needlessly raise the hazard level.

Submittal Information

Date Submitted: January 22, 2010

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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-3102.5**

Nature of Change:

To add a provision specifically dealing with construction not extending over a lot line.

Proponent: John Catlett, Building Official, representing the City of Alexandria Building Department

Staff Comments:

The proponent offers language from the BOCA Code with some modifications. The BOCA Code was the model code used as the basis for the USBC prior to the merger of the three nationally recognized model code organizations to form the International Code Council. Staff notes that the language suggested may be administrative in nature and if necessary, should be placed in Chapter 1 of the USBC. Section 108.1 of the USBC already requires a permit if a lot line is moved. To only put the language in Chapter 32 of the IBC (which is only for encroachments into the public right of way) would raise issues of whether it was applicable on adjacent private lots. In addition, if a building was constructed under the IRC (USBC Group R-5), it was also be questionable whether a provision in Chapter 32 of the IBC would be applicable. Staff further notes that the definition of “building line” in both the IBC and the IRC specifically prohibits building across a lot line. This change was not fully vetted through the workgroup process as the proposal came in after the first round of workgroup meetings; however it was considered by a DHCD-sponsored meeting with VBCOA and a number of similar issues were raised.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: C-3102.5

Proponent Information

(Check one): Individual Government Entity Company

Name: John Catlett

Representing: City of Alexandria

Mailing Address: 301 King Street, Room 4200, Alexandria, va 22314

Email Address: john.catlett@alexandriava.gov

Telephone Number: 703.746.4200

Proposal Information

Code(s) and Section(s): USBC Construction Code (New) IBC 3201.5

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

3201.5 Encroachments of buildings and structures to building line.

Except as provided herein, a part of any building hereinafter erected and additions to an existing building heretofore erected shall not project beyond the lot lines or building line where such lines are established by zoning laws or any other statute controlling building construction. This shall not affect an existing building or structure that may have been constructed over one or more lot or building lines unless being added to and the addition will be placed over one or more lot lines.

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

It appears to be the intent of the building code to generally not allow buildings and structures to be built over property lines. The ICC has several terms, code provisions and definitions that indicate this position.

First the ICC defines building line as the following:

BUILDING LINE. The line established by law, beyond which a building shall not extend, except as specifically provided by law.

However, the term is only used in one other section of the code pertaining to fire escapes.

The ICC defines Fire Separation Distance as the following:

FIRE SEPARATION DISTANCE. The distance measured from the building face to one of the following:

1. The closest interior lot line;
2. To the centerline of a street, an alley or public way; or
3. To an imaginary line between two buildings on the property.

The application of Fire Separation Distance is found in 406.3.7

406.3.7 Fire separation distance. Exterior walls and openings in exterior walls shall comply with Tables 601 and 602. The distance to an adjacent lot line shall be determined in accordance with Table 602 and Section 704.

The ICC defines Lot Lines as the following:

LOT LINE. A line dividing one lot from another, or from a street or any public place.

There are numerous references to a lot line throughout all of the ICC codes. Most notable is the reference to walls constructed on a lot line, or Party Walls.

705.1.1 Party walls. Any wall located on a lot line between adjacent buildings, which is used or adapted for joint service between the two buildings, shall be constructed as a firewall in accordance with Section 705. Party walls shall be constructed without openings and shall create separate buildings.

Although it is clear that building placement is governed by the distance from the lot line (fire separation distance/exterior wall ratings, openings allowed, vent termination distance, etc.), there is no clear code provision that prohibits construction over an established line. The language regarding Party walls is also not clear. It does not state that a building cannot be placed over a lot line. It only provides requirements if a wall is constructed on a lot line. There is no mandatory language that states a wall will be constructed if the building is placed over the lot line.

The 1996 BOCA National Building Code had very clear language in Section 3202.1 that stated:

"Except as provided herein, a part of any building hereinafter erected and additions to an existing building heretofore erected shall not project beyond the lot lines or beyond the building line where such lines are established by zoning laws or any other statute controlling building construction."

The intent of this change (3201.5) is to add back similar language to clarify that buildings and structures are to be constructed on one property. This will tie all of the other provisions that indicate this intent.

The building official can utilize the modification provisions of Section 106 when one or more properties, under the same ownership, are utilized for one building. There are some local zoning regulations that provide benefit should each lot be maintained as originally platted and not combined. This can also provide savings to the property owner. The building official could consider an easement that cannot be revoked, keeping the properties from being sold separately, and establish the outer lot lines of the combined lots as the fire separation distance. However, this should be the exception to a required provision requiring only one lot.

Submittal Information

Date Submitted: August 24, 2009

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: tsu@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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-3109.3**

Nature of Change:

To delete the standards for commercial swimming pool construction.

Proponent: Ron Clements, representing the Chesterfield County Building Inspection Department

Staff Comments:

The proposal was considered by the workgroups. There were differing opinions over whether the standards are necessary. They were originally added to the USBC since the IBC did not have standards for pool design. Without the standards, Chapter 16 (the structural design chapter) of the IBC was typically applied with no specific provisions for pools. The legacy (BOCA) code used under the USBC did have some pool design criteria in its structural design chapter, but that did not make it into the IBC. The design criteria that was in the BOCA Code is in the ANSI/NSPI standards, but the standards have many aspects of pool design not regulated by the USBC and this was causing confusion over how far to apply the standards. It was suggested that a proposal should be submitted to just bring in the design standards which were in the BOCA Code. No proposal has been submitted for that however.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: C-3109.3

Proponent Information

(Check one): Individual Government Entity Company

Name: Ron Clements

Representing: Chesterfield County Building Inspections

Mailing Address: 9800 Government Center Parkway, Chesterfield County VA, 23832

Email Address: clementsro@chesterfield.gov

Telephone Number: (804) 751-6143

Proposal Information

Code(s) and Section(s): VA Construction code section 3109.3

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

Delete the reference to ANSI/NSPI-1 and ANSI/NSPI-2 entirely and use the 2009 IBC section 3109.3 without ammendment.

Delete: "shall be designed and constructed in comformance with ANSI/NSPI-1 or ANSI/NSPI-2, as applicable"

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

These two standards were submitted to the ICC General committee for reference by the IBC but the code change was denied because the standards have many problems that made them unusable as reference standards. As a plan review engineer that has attempted to use the documents to review commercial pool plans, and a past member of the ICC General committee that reviewed these documents, I can attest the the fact that they are very poor standards. The majority of the substance of these standards are addressing aspects of pools and spas outside of the scope of the building code and it leaves the code user questioning what is enforceable or intended to be enforced. Some examples from the standards are:

5.2.1 Control of sand for beach pool environments; 5.3 Structural design in accordance with accepted engineering practices but no reference to an engineering standard; 5.4 freeze protection requirements for pool shells, filters, pumps, and "other" components not listed; 5.6 regulating colors and finishes of the pool; 6.8 maximum user loads; section 7 regulating the walking area (deck) around the pool; 7.1.16 hose bibs and cross connection that should be regulated by the plumbing code; 7.2 Deck equipment regulations for starting blocks and diving equipment; 8.1.1.1 regulates water clarity; 8.1.2 regulating circulation, 8.2 regulating water velocity; 8.4 regulating guage requirements on pool equipment; secion 9 regulation filtration; section 10 regulating pump sizing; section 12 regulation surface skimming; section 19 regulating dressing rooms and facilities; section 19.6 regulating required bathroom facilities that appear to override the Plumbing code; Section 20 regulating spectator areas; section 21 regulation food consumption within the pool; section 22 regulation management of the pool.

I could go on but you get the point. If there is a specific aspect of pool design that is not addressed by the IBC the specific aspect should be placed into the IBC without reference to the standard, or the specific section should be referenced.

The 2009 IBC regulates the fence or barrier required around the pool and required entrapment avoidance is regulated through a reference to the ANSI/APSP-7 standard for entrapment avoidance. Note that ANSI NSPI-1 also has a section on entrapment avoidance that is no longer valid based on the 2009 reference to ANSI/APSP-7.

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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-3109.5.1**

Nature of Change:

To reference an additional national standard for drains in pools.

Proponent: Felix Sarfo-Kantanka, Jr., representing the Pool Safety Council

Staff Comments:

The proposal was considered by the workgroups. It was generally discussed that the current ANSI/ASME A112.19.17 standards provided compliance with the federal law and were adequate in assuring pool drain safety. It was also noted that the ASTM standard might advance the need to use a particular safety device. In addition it was noted that an identical proposal had been submitted to the International Codes and was unsuccessful in obtaining approval.

The proposal was tentatively disapproved at the Codes and Standards Committee meeting of December 14, 2009 unless public comment is received during the Compilation Document comment period.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: Chapter 35 C-3109.5.1

Proponent Information

(Check one): Individual Government Entity Company

Name: Felix Sarfo-Kantanka, Jr.

Representing: Pool Safety Council

Mailing Address: McGuireWoods Consulting LLC, One James Center, 901 East Cary Street,
Richmond, Virginia 23219-4030

Email Address: fsarfo-kantanka@mwcllc.com

Telephone Number: 804-775-1901

Proposal Information

Code(s) and Section(s): Section 3109.5 of the International Building Code

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

Revise as follows:

Part 1

Add new Section to read as:

3109.5 Entrapment avoidance. Suction outlets shall be designed and installed in accordance with ANSI/APSP-7.

3109.5.1 Vacuum relief system required. All pool and spa single- or multiple-outlet circulation systems that incorporate submerged suction outlet fittings shall be equipped with an approved or engineered vacuum relief system as follows:

1. Safety vacuum release systems conforming to ASME A112.19.17 or ASTM F 2387; or
2. An approved gravity drainage system.

Part 2

Add the following Standards to Chapter 35 as:

ANSI/ASME A112.19.17-09 "Manufactured Safety Vacuum Release Systems (SVRS) For Residential and Commercial Swimming Pool, Spa, Hot Tub and Wading Pool Suction Systems."

ASTM F 2387-04 "Standard Specification for Manufactured Safety Vacuum Release Systems (SVRS) For Swimming Pools, Spas, Hot Tubs."

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

This Code change provides a final layer of protection against potential entrapments. While the APSP-7 provides partial protection against entrapment, it does not protect swimmers or waders in the event that problems occur with improperly designed pools, some types of blocked drains, etc. These events can and do occur and when they occur, this proposal provides a mechanism to help prevent entrapment.

Submittal Information

Date Submitted: September 8, 2009

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 Centre
600 E. Main St., Ste. 300
Richmond, VA 23219

Email Address: tsu@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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-Appendix E**

Nature of Change:

To authorize the use of Appendix E of the IBC for supplemental accessibility provisions as part of the USBC.

Proponent: DHCD Staff

Staff Comments:

The proposal was not developed in time for consideration by the workgroups as it resulted from correspondence with the Federal Department of Justice and DHCD staff in efforts to seek certification of the USBC by the Department of Justice as being equal or exceeding the requirements of the Americans with Disabilities Act (ADA). The appendix in the IBC provides those additional accessibility requirements necessary to gain compatibility with the new ADA/ABA Guidelines approved by the U. S. Access Board and which are to be incorporated as part of the ADA.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: C-Appendix E

Proponent Information

(Check one): Individual Government Entity Company

Name: DHCD Staff

Representing: _____

Mailing Address: _____

Email Address: _____

Telephone Number: _____

Proposal Information

Code(s) and Section(s): Appendix E of the International Building Code (IBC)

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

13 VAC 5-63-395. Appendix E Supplementary Accessibility Requirements.

Appendix E of the IBC shall be part of this code.

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

This proposal is necessary as part of DHCD's efforts to obtain certification from the U.S. Department of Justice (DOJ) for the USBC being equivalent or exceeding the requirements of the Americans with Disabilities Act (ADA). The U.S. Access Board has published new guidelines (the ADA/ABA Accessibility Guidelines) which are being incorporated into DOJ's regulations implementing the ADA. The new guidelines extend into areas of accessibility not covered by the initial ADA Guidelines, such as telephones, mailboxes, speaker's platforms and vending machines. The U.S. Access Board has worked with the International Code Council to place these new requirements in the IBC; however, they have been located in an appendix to the IBC. Appendices to the International Codes are not automatically made part of the USBC through its incorporation of the IBC by reference, so this provision needs to be added to the USBC to enable the use of the IBC appendix. While some of the aspects of accessibility in Appendix E of the IBC may be questioned as to whether they are within the scope of the USBC as construction typically only extends to those permanent parts of a building, to the extent possible, all of Appendix E needs to become part of the USBC in order to achieve certification for the USBC by DOJ. Therefore, if applicability issues surface and it is determined that any areas of Appendix E are outside of the scope of the USBC, then changes to the statutory authority for the USBC will have to be pursued to enable the full use of the appendix.

Submittal Information

Date Submitted: December 9, 2009

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