

DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM
 (Use this form to submit changes to building and fire codes)

Address to submit to: DHCD, the Jackson Center 501 North Second Street Richmond, VA 23219-1321 Tel. No. (804) 371 – 7150 Fax No. (804) 371 – 7092 Email: bhcd@dhcd.state.va.us	10/20/06	Document No. _____ Committee Action: _____ BHCD Action: _____
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Submitted by: John Catlett Representing: _____
 Address: 401 Lafayette Street; Williamsburg VA 23185 Phone No.: (757) 220-6135
 Regulation Title: Virginia New Construction Code Section No(s): 111.2 (Revised 10/20/06)

~~Proposed Change: 111.2 Special inspection requirements. Special inspections shall be conducted under the supervision of registered design professionals and in accordance with Section 1704. Persons engaged in the testing and inspection of construction materials, and the facilities, equipment and procedures they use in the process, shall comply or other standards acceptable to the building official. The building official may require written documentation of personnel certifications and laboratory accreditation, when appropriate, as evidence of conformance with this section.~~

Special inspections shall be conducted when required by Section 1704; or when specified for specific or unique structural elements by the Registered Design Professionals (RDP) responsible for a building or structure's design and determined necessary by the building official. They shall be performed by individuals and agents that are qualified in accordance with the applicable provisions of ASTM E329 or be a RDP.

Individuals and or agencies conducting special inspections shall meet the requirements of Section 1703.

The permit applicant shall submit and the building official shall approve a statement and schedule of special inspections as required in Sections 1704.1.1 and 1705 as a requisite to the issuance of a building permit. The building official may require interim inspection reports and shall require a final report of special inspections as specified in Section 1704.1.2. All fees and costs related to the special inspections shall be the responsibility of the building owner.

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Special inspections shall be performed when required by Section 1704; or when specified for specific or unique structural elements by the Registered Design Professionals (RDP) responsible for a building or structure's design and determined necessary by the building official. They shall be performed by individuals and agents that are qualified in accordance with the applicable provisions of ASTM E329 or be a RDP.

All individuals or agents performing special inspection functions shall operate under the direct supervision of an RDP in responsible charge of special inspection activities; also known as the Special Inspector. The Special Inspector and their agents shall be independent from the person(s) or contractor responsible for the physical construction of the project requiring special inspections. The Special Inspector shall ensure that the individuals under their charge are performing only those special inspections or laboratory testing that are consistent with their knowledge, training and certification for the specified inspection or laboratory testing.

Individuals or firms responsible for laboratory testing and/or special inspections must satisfy the building official that they comply with the qualification, certification and experience requirements of ASTM E329 or the alternatives listed therein. Upon request by the building official, documentation shall be provided demonstrating the applicable agency's laboratory accreditation, when applicable, and individual resumes' indicating pertinent training, certifications and other qualifications shall be provided for special inspection personnel associated with the project. The building official may prescribe the manner of qualification documentation and frequency of updating information regarding agency or individual inspector approval.

Firms providing special inspection services or individual inspectors seeking approval of alternative certifications and/or qualifications not specifically listed in ASTM E329 may submit documentation demonstrating equivalency. This documentation may include evidence of meeting other recognized standards or alternative certifications to demonstrate that the minimum qualifications, certification and experience intended by ASTM E329 have been met. The building official may approve the credentials of the firm or individual after evaluating and determining that equivalency has been demonstrated.

The permit applicant shall submit and the building official shall approve a statement and schedule of special inspections as required in Sections 1704.1.1 and 1705 as a requisite to the issuance of a building permit. The building official may require interim inspection reports and shall require a final report of special inspections as specified in Section 1704.1.2. All fees and costs related to the special inspections shall be the responsibility of the building owner.

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Submitted by: <u>John Catlett</u> Representing: <u>VBCOA</u> Address: <u>401 Lafayette Street; Williamsburg VA 23185</u> Phone No.: <u>(757) 220-6135</u> Regulation Title: <u>Virginia New Construction Code</u> Section No(s): <u>IBC Sections 1703.1.1.1.1.2, 1.3; 1704.1</u>		
Proposed Change: <p>1703.1 Approved agency. An approved agency shall provide all information as necessary for the building official to determine that the agency meets the applicable requirements. <u>responsible for laboratory testing and/or special inspections must satisfy the building official that they comply with the qualification, certification and experience requirements of ASTM E329 or the alternatives listed therein.</u></p> <p>1703.1.1 Independent. An approved agency shall be objective and competent. The agency shall also disclose possible conflicts of interest so that objectivity can be confirmed. <u>The Special Inspector and their agents shall be independent from the person(s) or contractor responsible for the physical construction of the project requiring special inspections.</u></p> <p>1703.1.2 Equipment. An approved agency shall have adequate equipment to perform required tests. The equipment shall be periodically calibrated.</p> <p>1703.1.3 Personnel and laboratories. An approved agency shall employ experienced personnel educated in conducting, supervising and evaluating tests and/or inspections. <u>Upon request by the building official, documentation shall be provided demonstrating the applicable agency's laboratory accreditation, when applicable, and individual resumes' indicating pertinent training, certifications and other qualifications shall be provided for special inspection personnel associated with the project. The building official may prescribe the manner of qualification documentation and frequency of updating information regarding agency or individual inspector approval.</u></p> <p><u>Firms providing special inspection services or individual inspectors seeking approval of alternative certifications and/or qualifications not specifically listed in ASTM E329 may submit documentation demonstrating equivalency. This documentation may include evidence of meeting other recognized standards or alternative certifications to demonstrate that the minimum qualifications, certification and experience intended by ASTM E329 have been met. The building official may approve the credentials of the firm or individual after evaluating and determining that equivalency has been demonstrated.</u></p> <p>1704.1 General. Where application is made for construction as described in this section, the owner or the registered design professional in responsible charge acting as the owner's agent shall employ one or more special inspectors to provide inspections during construction on the types of work listed under Section 1704. The special inspector shall be a qualified person who shall demonstrate competence, to the satisfaction of the building official, for inspection of the particular type of construction or operation requiring special inspection. These inspections are in addition to the inspections specified in Section 109. All individuals or agents performing special inspection functions shall operate under the direct supervision of an RDP in responsible charge of special inspection activities; also known as the Special Inspector. The Special Inspector shall ensure that the individuals under their charge are performing only those special inspections or laboratory testing that are consistent with their knowledge, training and certification for the specified inspection or laboratory testing.</p>		

Supporting Statement: The current code language contains a reference to ASTM E329 when evaluating the certification or accreditation of an individual or laboratory conducting special inspection services. It also states that the building official can approve alternatives to ASTM E329. In actuality, ASTM E329 already contains language that allows this practice at the end of section 7.2.2, 7.2.3 and 7.2.4 respectively (attached). The proposed language allows the building official to accept alternatives to the laundry list of certifications as long as the intended qualifications are met.

The proposed code change also establishes that there shall be an RDP in responsible charge of special inspection activities and that special inspectors must be independent from contractor performing the physical construction activities. This would not preclude the RDP of record from performing SI functions.

Typically known as the "agent 1", the RDP in responsible charge is the person or firm responsible for the coordination of special inspection activities and reports. Other agents or laboratories may be hired to carry out the SI function, but the RDP in responsible charge of SI shall be responsible for their coordination.

The change sets out a procedure for considering alternative certifications and qualifications and for the issuing of reports.

ASTM E329 language:

7.2.2 A laboratory supervisor shall have at least five years experience performing tests on relevant construction materials. This person shall be able to demonstrate either by oral or written examination, or both, their ability to perform the tests normally required in the manner stipulated under ASTM or other governing test procedures and shall be capable of evaluating the test results in terms of specification compliance. Certification by ACI (American Concrete Institute) Laboratory Testing Technician, Grade II or NICET (National Institute for Certification of Engineering Technicians) Level III or higher, or certification by other qualified national, regional or state authorities as appropriate to the work, is required.

7.2.3 A field supervisor shall have at least five years inspection experience in the type of work being supervised. This person shall be able to demonstrate, either by oral or written examination, or both, their ability to perform correctly the required duties and shall be capable of evaluating the inspection or test results in terms of specification compliance. Certification by ACI (Concrete Construction Inspector or Concrete Transportation Construction Inspector), BOCA/ICBO Reinforced Concrete Special Inspector, NICET (Level III or higher), ASNT (Level II or III), AWS (CWI), or certification by other qualified national, regional or state authorities as appropriate to the work, is required.

7.2.4 *Inspector or Technician*—This person shall have sufficient education and on-the-job training or trade school training to properly perform the test or inspection to which the person is assigned. This person must be able to demonstrate competence for the test or inspection which is being conducted either by oral or written examination, or both. Certification by ACI (American Concrete Institute), BOCA/ICBO Reinforced Concrete Special Inspector, AWS (American Welding Society), ASNT (American Society for Nondestructive Testing), NICET (National Institute for Certification of Engineering Technicians), ICC (International Code Council), ICBO (International Council of Building Officials), BOCA (Building Officials Code Administration), as appropriate for the work being performed, or certification by other qualified national authorities as appropriate to the work; shall be considered as one means of documenting competency. The Inspector or Technician shall work under the direct supervision of personnel meeting the requirements of 7.2.2 or 7.2.3 (see Appendix X1).

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Submitted by: Robert Sullivan Representing: Nelligan Insulation, Inc.

Address: 2539 Fairview Avenue, Lynchburg, VA 24501 Phone No.: (434) 847-4774 or (434) 546-3632 (Cell)

Regulation Title: VIRGINIA CONSTRUCTION CODE (Part I) Section No(s): 113.3.6

Proposed Change: Insert [to include insulation as well as air-seal caulking and/or gasketing materials] so that 113.3.6 reads as follows:

"6. Inspection of energy conservation material, to include insulation as well as air-seal caulking and/or gasketing materials, prior to concealment."

Supporting Statement: Virginia will soon adopt the 2006 IECC which is greatly simplified when compared to the 2003 IECC and its predecessors. The 2006 IECC anticipates the fact that the vast majority of architects and builders rely upon "off-the-shelf" prescriptive measures e.g. fiberglass batting, blown or sprayed loose-fill, various foams etc. to comply with the building envelope performance requirements of the code.

It is well known that all installed building insulation materials perform better in conjunction with air-infiltration abatement materials. Studies have shown that approximately 25% of all infiltration occurs through the joint between the sole plate and the floor deck. The presence of simple bead of caulk at that joint may be verified visually concurrent with visual verification of installed wall insulation without added time, effort or manpower.

IECC Compliance Guide for Homes in Virginia (2006 IECC) includes Step-by-Step Instructions which reads:

- "2. Construct the building according to the envelope performance requirements and comply with certain other basic code requirements, which include:
- a. providing preventative maintenance manuals
 - b. attaching a permanent certificate listing insulation, window & HVAC performance information
 - c. installing temperature controls
 - d. limiting window and door leakage
 - e. caulking or sealing joints and penetrations
 - f. installing vapor retarders (in certain circumstances)
 - g. sealing and insulating ducts"

It is common practice for insulators to "chink" around window and door openings; however, it is not common practice for insulators to caulk and seal framing joints and penetrations unless requested to do so by builders and/or owners who recognize and desire the benefit of these measures.

Considering that rising energy costs is an on-going issue faced by all Virginians, and considering that the present code, as well as the soon to be adopted code, appears to require these measures, it seems appropriate to clarify the matter by inserting the proposed language to better ensure uniform enforcement among code jurisdictions.

Vernon Hodge

From: Emory Rodgers
Sent: Thursday, January 18, 2007 7:02 AM
To: Tomberlin, Guy; Vernon Hodge; Richard Bartell; Roger Robertson; JOHN CATLETT
Cc: Sandi Morris
Subject: RE: Bob Sullivan's Insulation Questions

Guy: Were the person to submit a code change expanding our minimum inspections, your point seem to oppose such a code change. Agree with you where problem lies when there is one. On Code Connection we always remain open to articles from our stakeholders but clearly understand such articles are not to be sale pitches for products. Since we have no such article on this issue, it is premature to conjecture if it would be accepted and included in the Spring edition. Thanks for your response and pointing out the complexity of such issues.

From: Tomberlin, Guy [mailto:Guy.Tomberlin@fairfaxcounty.gov]
Sent: Wednesday, January 17, 2007 7:56 AM
To: Emory Rodgers; Vernon Hodge; Richard Bartell; Roger Robertson; JOHN CATLETT
Cc: Sandi Morris
Subject: RE: Bob Sullivan's Insulation Questions

It is my opinion that these type intricate details pertaining to duct/insulation installations need not be included in the USBC. This is getting into micro management of how each jurisdiction inspects items required by the USBC. This could easily be heading for "leakage" test on duct work. I can write a book on the difficulties the code enforcement community would experience if duct leakage test were required. If a code change were approved on this level of detail then we will have every manufacture submitting proposals (basically their installation instructions) to reference to the details of their products. All the codes already cover this; they all say mgf installation instructions are enforceable. Look at fire caulking/stopping for example. This is defiantly a life safety issue yet according to industry more than 80% of failures are due to faulty installations. I could endorse more stringent code provisions for something like this way before we get down into the grass on duct sealing inspections. In my experience (more than 20 years) I have seen absolutely zero issues associated with duct sealing that have had a negative impact on the public safety and welfare of the citizens in VA. Please let me know if a code change gets submitted on this. I am sure our code committees will vehemently oppose this.

I am not sure this is a code connection item but it's not really my place to determine what makes it in that publication. However, if an article of this nature makes it in the code connection it seems only logical (fair) to start incorporating an "industry section" to allow all manufactures and vender s to promote their particular industries and products.

I believe I have talked to this gentleman and if he is the same person I believe he is; I found that his comments could easily be construed as more than offensive on how VA, as a whole, does their job performing inspections. Unfortunately during my conversation it was never clear to me that his negative comments on how poorly the VA code enforcement community performs their jobs was based on public safety or selling product.

Guy Tomberlin, CBO
 Land Development Services (LDS)
 12055 Government Center Parkway, Suite 630

1/18/2007

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Submitted by: John Catlett (Ron Clements)	Representing: VBCOA
Address: PO Box 40 Lori Road Chesterfield Va, 23832	Phone No.: (804) 751-4163
Regulation Title: Virginia Construction Code (VUSBC)	

Proposed Change:

310.1 Residential group R. (no text change)

R-1 Residential occupancies containing sleeping units where the occupants are primarily transient in nature, including:

- Boarding houses
- Hotels (transient)
- Motels (transient)

Exception: Bed and Breakfast and other transient boarding facilities with 10 or fewer occupants are permitted to be classified as group R-3 or R-5.

REMAINDER of the section is unchanged.

Supporting Statement: This is a change that was approved by the ICC General committee this 06/07 cycle (G49-06/07). This allows for conversion of small buildings and R-5 dwellings into "Bed and Breakfast" style inns with small occupant loads where just a few bedrooms are offered for boarders without requiring the buildings be brought into compliance as full R-1 facilities. The 10-occupant load was substantiated based on the use of that number for this purpose in a previous legacy code. Based on the use of this exemption in a previous legacy code and Virginia's previous use of up to 5 boarders not related to the residents that was the standard in BOCA to maintain an R-5 group designation we are convinced that this is a reasonable exception that maintains the needed level of safety at a reasonable cost. A similar exemption already exists in the 2006 code for group R-2 for congregate living facilities and a change was submitted and approved by committee (final vote pending) to the 2006 IBC to put this same exception into the 2007 supplement to the IBC.

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<p>Submitted by: _____ Representing: _____</p> <p>Address: _____ Phone No.: _____</p> <p>Regulation Title: __USBC for new construction_____ Section No(s): __310.1_____</p>		

Proposed Change:

310.1 Residential Group R. Residential Group R includes, among others, the use of a building or structure, or a portion thereof, for sleeping purposes when not classified as an Institutional Group I or when not regulated by the *International Residential Code* in accordance with Section 101.2. Residential occupancies shall include the following:

R-1 Residential occupancies containing sleeping units where the occupants are primarily transient in nature, including:

- Boarding houses (transient)
- Hotels (transient)
- Motels (transient)

R-2 Residential occupancies containing sleeping units or more than two dwelling units where the occupants are primarily permanent in nature, including:

- Apartment houses
- Boarding houses (not transient)
- Convents
- Dormitories
- Fraternities and sororities
- Hotels (nontransient)
- Monasteries
- Motels (nontransient)
- Vacation timeshare properties

Congregate living facilities with 16 or fewer occupants are permitted to comply with the construction requirements for Group R-3.

R-3 Residential occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-4 or I, including:

Buildings that do not contain more than two dwelling units.

Adult facilities that provide accommodations for five or fewer persons of any age for less than 24 hours.

Child care facilities that provide accommodations for five or fewer persons of any age for less than 24 hours.

Congregate living facilities with 16 or fewer persons.

Adult and child care facilities that are within a single family home are permitted to comply with the *International Residential Code*.

R-4 Residential occupancies shall include buildings arranged for occupancy as residential care/assisted living facilities including more than five but not more than 16 occupants, excluding staff.

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in this code, ~~or shall comply with the *International Residential Code*.~~

Supporting Statement:

To the exclusion of one- and two-family structures and multiple single-family dwellings (townhouses) not more than 3 stories in height, ensures consistency to require automatic fire sprinkler systems in all residential buildings.

USE AND OCCUPANCY CLASSIFICATION

A-5 Assembly uses intended for participation in or viewing outdoor activities including, but not limited to:

- Amusement park structures
- Bleachers
- Grandstands
- Stadiums

SECTION 304 BUSINESS GROUP B

304.1 Business Group B. Business Group B occupancy includes, among others, the use of a building or structure, or a portion thereof, for office, professional or service-type transactions, including storage of records and accounts. Business occupancies shall include, but not be limited to, the following:

- Airport traffic control towers
- Animal hospitals, kennels and pounds
- Banks
- Barber and beauty shops
- Car wash
- Civic administration
- Clinic—outpatient
- Dry cleaning and laundries: pick-up and delivery stations and self-service
- Educational occupancies for students above the 12th grade
- Electronic data processing
- Laboratories: testing and research
- Motor vehicle showrooms
- Post offices
- Print shops
- Professional services (architects, attorneys, dentists, physicians, engineers, etc.)
- Radio and television stations
- Telephone exchanges
- Training and skill development not within a school or academic program

SECTION 305 EDUCATIONAL GROUP E

305.1 Educational Group E. Educational Group E occupancy includes, among others, the use of a building or structure, or a portion thereof, by six or more persons at any one time for educational purposes through the 12th grade. Religious educational rooms and religious auditoriums, which are accessory to places of religious worship in accordance with Section 508.3.1 and have occupant loads of less than 100, shall be classified as A-3 occupancies.

305.2 Day care. The use of a building or structure, or portion thereof, for educational, supervision or personal care services for more than five children older than 2½ years of age, shall be classified as a Group E occupancy.

SECTION 306 FACTORY GROUP F

306.1 Factory Industrial Group F. Factory Industrial Group F occupancy includes, among others, the use of a building or

structure, or a portion thereof, for assembling, disassembling, fabricating, finishing, manufacturing, packaging, repair or processing operations that are not classified as a Group H hazardous or Group S storage occupancy.

306.2 Factory Industrial F-1 Moderate-hazard Occupancy. Factory industrial uses which are not classified as Factory Industrial F-2 Low Hazard shall be classified as F-1 Moderate Hazard and shall include, but not be limited to, the following:

- Aircraft
- Appliances
- Athletic equipment
- Automobiles and other motor vehicles
- Bakeries
- Beverages; over 12-percent alcohol content
- Bicycles
- Boats
- Brooms or brushes
- Business machines
- Cameras and photo equipment
- Canvas or similar fabric
- Carpets and rugs (includes cleaning)
- Clothing
- Construction and agricultural machinery
- Disinfectants
- Dry cleaning and dyeing
- Electric generation plants
- Electronics
- Engines (including rebuilding)
- Food processing
- Furniture
- Hemp products
- Jute products
- Laundries
- Leather products
- Machinery
- Metals
- Millwork (sash & door)
- Motion pictures and television filming (without spectators)
- Musical instruments
- Optical goods
- Paper mills or products
- Photographic film
- Plastic products
- Printing or publishing
- Recreational vehicles
- Refuse incineration
- Shoes
- Soaps and detergents
- Textiles
- Tobacco
- Trailers
- Upholstering
- Wood; distillation
- Woodworking (cabinet)

306.3 Factory Industrial F-2 Low-hazard Occupancy. Factory industrial uses that involve the fabrication or manufacturing of noncombustible materials which during finishing, packing or processing do not involve a significant fire hazard

[F] 307.6 High-hazard Group H-4. Buildings and structures which contain materials that are health hazards shall be classified as Group H-4. Such materials shall include, but not be limited to, the following:

- Corrosives
- Highly toxic materials
- Toxic materials

[F] 307.7 High-hazard Group H-5 structures. Semiconductor fabrication facilities and comparable research and development areas in which hazardous production materials (HPM) are used and the aggregate quantity of materials is in excess of those listed in Tables 307.1(1) and 307.1(2) shall be classified as Group H-5. Such facilities and areas shall be designed and constructed in accordance with Section 415.8.

[F] 307.8 Multiple hazards. Buildings and structures containing a material or materials representing hazards that are classified in one or more of Groups H-1, H-2, H-3 and H-4 shall conform to the code requirements for each of the occupancies so classified.

SECTION 308 INSTITUTIONAL GROUP I

308.1 Institutional Group I. Institutional Group I occupancy includes, among others, the use of a building or structure, or a portion thereof, in which people are cared for or live in a supervised environment, having physical limitations because of health or age are harbored for medical treatment or other care or treatment, or in which people are detained for penal or correctional purposes or in which the liberty of the occupants is restricted. Institutional occupancies shall be classified as Group I-1, I-2, I-3 or I-4.

308.2 Group I-1. This occupancy shall include buildings, structures or parts thereof housing more than 16 persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment that provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance from staff. This group shall include, but not be limited to, the following:

- Residential board and care facilities
- Assisted living facilities
- Halfway houses
- Group homes
- Congregate care facilities
- Social rehabilitation facilities
- Alcohol and drug centers
- Convalescent facilities

A facility such as the above with five or fewer persons shall be classified as a Group R-3 or shall comply with the *International Residential Code* in accordance with Section 101.2. A facility such as above, housing at least six and not more than 16 persons, shall be classified as Group R-4.

308.3 Group I-2. This occupancy shall include buildings and structures used for medical, surgical, psychiatric, nursing or custodial care on a 24-hour basis for more than five persons who are not capable of self-preservation. This group shall include, but not be limited to, the following:

- Hospitals
- Nursing homes (both intermediate care facilities and skilled nursing facilities)
- Mental hospitals
- Detoxification facilities

A facility such as the above with five or fewer persons shall be classified as Group R-3 or shall comply with the *International Residential Code* in accordance with Section 101.2.

308.3.1 Child care facility. A child care facility that provides care on a 24-hour basis to more than five children 2½ years of age or less shall be classified as Group I-2.

308.4 Group I-3. This occupancy shall include buildings and structures that are inhabited by more than five persons who are under restraint or security. An I-3 facility is occupied by persons who are generally incapable of self-preservation due to security measures not under the occupants' control. This group shall include, but not be limited to, the following:

- Prisons
- Jails
- Reformatories
- Detention centers
- Correctional centers
- Prerelease centers

Buildings of Group I-3 shall be classified as one of the occupancy conditions indicated in Sections 308.4.1 through 308.4.5 (see Section 408.1).

308.4.1 Condition 1. This occupancy condition shall include buildings in which free movement is allowed from sleeping areas, and other spaces where access or occupancy is permitted, to the exterior via means of egress without restraint. A Condition 1 facility is permitted to be constructed as Group R.

308.4.2 Condition 2. This occupancy condition shall include buildings in which free movement is allowed from sleeping areas and any other occupied smoke compartment to one or more other smoke compartments. Egress to the exterior is impeded by locked exits.

308.4.3 Condition 3. This occupancy condition shall include buildings in which free movement is allowed within individual smoke compartments, such as within a residential unit comprised of individual sleeping units and group activity spaces, where egress is impeded by remote-controlled release of means of egress from such a smoke compartment to another smoke compartment.

308.4.4 Condition 4. This occupancy condition shall include buildings in which free movement is restricted from an occupied space. Remote-controlled release is provided to permit movement from sleeping units, activity spaces and other occupied areas within the smoke compartment to other smoke compartments.

308.4.5 Condition 5. This occupancy condition shall include buildings in which free movement is restricted from an occupied space. Staff-controlled manual release is provided to permit movement from sleeping units, activity spaces and other occupied areas within the smoke compartment to other smoke compartments.

CHAPTER 3

USE AND OCCUPANCY CLASSIFICATION

SECTION 301 GENERAL

301.1 Scope. The provisions of this chapter shall control the classification of all buildings and structures as to use and occupancy.

SECTION 302 CLASSIFICATION

302.1 General. Structures or portions of structures shall be classified with respect to occupancy in one or more of the groups listed below. A room or space that is intended to be occupied at different times for different purposes shall comply with all of the requirements that are applicable to each of the purposes for which the room or space will be occupied. Structures with multiple occupancies or uses shall comply with Section 508. Where a structure is proposed for a purpose that is not specifically provided for in this code, such structure shall be classified in the group that the occupancy most nearly resembles, according to the fire safety and relative hazard involved.

1. Assembly (see Section 303): Groups A-1, A-2, A-3, A-4 and A-5
2. Business (see Section 304): Group B
3. Educational (see Section 305): Group E
4. Factory and Industrial (see Section 306): Groups F-1 and F-2
5. High Hazard (see Section 307): Groups H-1, H-2, H-3, H-4 and H-5
6. Institutional (see Section 308): Groups I-1, I-2, I-3 and I-4
7. Mercantile (see Section 309): Group M
8. Residential (see Section 310): Groups R-1, R-2, R-3 and R-4
9. Storage (see Section 311): Groups S-1 and S-2
10. Utility and Miscellaneous (see Section 312): Group U

SECTION 303 ASSEMBLY GROUP A

303.1 Assembly Group A. Assembly Group A occupancy includes, among others, the use of a building or structure, or a portion thereof, for the gathering of persons for purposes such as civic, social or religious functions; recreation, food or drink consumption; or awaiting transportation.

Exceptions:

1. A building used for assembly purposes with an occupant load of less than 50 persons shall be classified as a Group B occupancy.

2. A room or space used for assembly purposes with an occupant load of less than 50 persons and accessory to another occupancy shall be classified as a Group B occupancy or as part of that occupancy.
3. A room or space used for assembly purposes that is less than 750 square feet (70 m²) in area and is accessory to another occupancy shall be classified as a Group B occupancy or as part of that occupancy.

Assembly occupancies shall include the following:

A-1 Assembly uses, usually with fixed seating, intended for the production and viewing of the performing arts or motion pictures including, but not limited to:

- Motion picture theaters
- Symphony and concert halls
- Television and radio studios admitting an audience
- Theaters

A-2 Assembly uses intended for food and/or drink consumption including, but not limited to:

- Banquet halls
- Night clubs
- Restaurants
- Taverns and bars

A-3 Assembly uses intended for worship, recreation or amusement and other assembly uses not classified elsewhere in Group A including, but not limited to:

- Amusement arcades
- Art galleries
- Bowling alleys
- Places of religious worship
- Community halls
- Courtrooms
- Dance halls (not including food or drink consumption)
- Exhibition halls
- Funeral parlors
- Gymnasiums (without spectator seating)
- Indoor swimming pools (without spectator seating)
- Indoor tennis courts (without spectator seating)
- Lecture halls
- Libraries
- Museums
- Waiting areas in transportation terminals
- Pool and billiard parlors

A-4 Assembly uses intended for viewing of indoor sporting events and activities with spectator seating including, but not limited to:

- Arenas
- Skating rinks
- Swimming pools
- Tennis courts

A-5 Assembly uses intended for participation in or viewing outdoor activities including, but not limited to:

- Amusement park structures
- Bleachers
- Grandstands
- Stadiums

**SECTION 304
BUSINESS GROUP B**

304.1 Business Group B. Business Group B occupancy includes, among others, the use of a building or structure, or a portion thereof, for office, professional or service-type transactions, including storage of records and accounts. Business occupancies shall include, but not be limited to, the following:

- Airport traffic control towers
- Animal hospitals, kennels and pounds
- Banks
- Barber and beauty shops
- Car wash
- Civic administration
- Clinic—outpatient
- Dry cleaning and laundries: pick-up and delivery stations and self-service
- Educational occupancies for students above the 12th grade
- Electronic data processing
- Laboratories: testing and research
- Motor vehicle showrooms
- Post offices
- Print shops
- Professional services (architects, attorneys, dentists, physicians, engineers, etc.)
- Radio and television stations
- Telephone exchanges
- Training and skill development not within a school or academic program

**SECTION 305
EDUCATIONAL GROUP E**

305.1 Educational Group E. Educational Group E occupancy includes, among others, the use of a building or structure, or a portion thereof, by six or more persons at any one time for educational purposes through the 12th grade. Religious educational rooms and religious auditoriums, which are accessory to places of religious worship in accordance with Section 508.3.1 and have occupant loads of less than 100, shall be classified as A-3 occupancies.

305.2 Day care. The use of a building or structure, or portion thereof, for educational, supervision or personal care services for more than five children older than 2½ years of age, shall be classified as a Group E occupancy.

**SECTION 306
FACTORY GROUP F**

306.1 Factory Industrial Group F. Factory Industrial Group occupancy includes, among others, the use of a building or

structure, or a portion thereof, for assembling, disassembling, fabricating, finishing, manufacturing, packaging, repair or processing operations that are not classified as a Group H hazardous or Group S storage occupancy.

306.2 Factory Industrial F-1 Moderate-hazard Occupancy. Factory industrial uses which are not classified as Factory Industrial F-2 Low Hazard shall be classified as F-1 Moderate Hazard and shall include, but not be limited to, the following:

- Aircraft
- Appliances
- Athletic equipment
- Automobiles and other motor vehicles
- Bakeries
- Beverages; over 12-percent alcohol content
- Bicycles
- Boats
- Brooms or brushes
- Business machines
- Cameras and photo equipment
- Canvas or similar fabric
- Carpets and rugs (includes cleaning)
- Clothing
- Construction and agricultural machinery
- Disinfectants
- Dry cleaning and dyeing
- Electric generation plants
- Electronics
- Engines (including rebuilding)
- Food processing
- Furniture
- Hemp products
- Jute products
- Laundries
- Leather products
- Machinery
- Metals
- Millwork (sash & door)
- Motion pictures and television filming (without spectators)
- Musical instruments
- Optical goods
- Paper mills or products
- Photographic film
- Plastic products
- Printing or publishing
- Recreational vehicles
- Refuse incineration
- Shoes
- Soaps and detergents
- Textiles
- Tobacco
- Trailers
- Upholstering
- Wood; distillation
- Woodworking (cabinet)

306.3 Factory Industrial F-2 Low-hazard Occupancy. Factory industrial uses that involve the fabrication or manufacturing of noncombustible materials which during finishing, packing or processing do not involve a significant fire hazard

Vernon Hodge

From: Ballard, Brooks [Brooks.Ballard@vadoc.virginia.gov]
Sent: Tuesday, October 17, 2006 9:08 AM
To: Vernon Hodge
Cc: Jones, Bert; Hawkins, David; Casey, Robert; Les Harcum
Subject: Bldg Code VUSBC revisions for 2006 code.doc

Attachments: Bldg Code VUSBC revisions for 2006 code.doc



Bldg Code VUSBC
revisions for ...

Vernon,

Here are our code requests that we talked about in our meeting with you on. Meeting participants were Dave Hawkins, Bob Casey, Bert Jones, Les Harcum, you and me. Email addresses are in the cc line above.

As discussed yesterday, we will be working on the forms/supporting statements for them individually.

Thanks,
Brooks

<<Bldg Code VUSBC revisions for 2006 code.doc>>

CONTINUATIONS: (most of these were in originally in BOCA and were in the 2000 and 2003 VUSBC but are not in IBC 2006)

707.2 Shaft Enclosure Required (from BOCA and 2003 VUSBC) - (Exception 1 does not cover it)

Exception 14. A floor opening that complies with Section 408.5 in an occupancy in Group I-3.

Exception 15. Noncombustible shafts connecting communicating floor levels in an occupancy in Group I-3 where the area complies with Section 408.5. Where additional stories are located above or below, the shaft shall be permitted to continue with fire and smoke damper protection provided at the fire resistance rated floor/ceiling assembly between the noncommunicating stories.

715.4.3 Door assemblies in corridors and smoke barriers. (from 2003 VUSBC)

Exception 4: Horizontal sliding doors in smoke barriers that comply with 408.3 are permitted in smoke barriers in occupancies in Group I-3.

715.5.4 (from BOCA & 2003 VUSBC) *Exception : Security glazing protected on both sides by an automatic sprinkler system shall be permitted in doors and windows in smoke barriers in occupancies in Group I-3 and other groups within penal facilities. Individual panels of glazing shall not exceed 1296 sq in (.84 sq meters), shall be in a gasketed frame and installed in such a manner that the framing system will deflect without breaking (loading) glazing before the sprinkler system operates. The sprinkler system shall be designed to wet completely the entire surface of the affected glazing when actuated.*

906.1 General (Portable Fire Extinguishers) (from BOCA 1996 Sect. 921.2)

Exception 1: In all occupancies in Use Group I-3 at staff locations and access to portable extinguishers shall be permitted to be locked.

907.9 (from VUSBC 2003) *Location of appliances in Group I-3 occupancies. Wall-mounted alarm notification appliances in Group I-3 occupancies shall be permitted to be a maximum of 120 inches (3048 mm) above the floor or ground, measured to the bottom of the appliance and shall otherwise comply with Section 702.3.3.1 of ICC A117.1.*

909.6 (from 2003 VUSBC) *Pressurization method. When approved by the building official, the means of controlling smoke shall be permitted by pressure differences across smoke barriers. Maintenance of a tenable environment is not required in the smoke-control zone of fire origin.*

1008.1.8.8 Locking arrangements in correctional facilities. In occupancies in Groups A_3, A-4, B, E, F, I-3, M and S within penal facilities, doors in means of egress serving rooms or spaces occupied by persons whose movements must be controlled for security reasons shall be permitted to be locked in equipped with egress control devices which shall unlock manually and by at least one of the following means:

1. Actuation of an automatic fire suppression system required by Section 903.2
2. Actuation of a key-operated manual alarm station required by Section 907.2
3. A signal from a central control station

Table 1017.1 Corridor Fire-Resistance Rating (from BOCA and 2003 VUSBC)
Occupancy I – With Sprinkler System – required rating 0 (not 1 hour)

ADDITIONS (new requests):

Chapter 2 Definitions

Penal Facility. A building or groups of buildings occupied by persons under restraint or security due to criminal arrest or incarceration. These buildings or spaces may be designated as Use A-2, A-3, B, E, F, I-3, M and S.

Sallyport. A security vestibule with two or more doors where the intended purpose is to prevent continuous and unobstructed passage by allowing the release of only one door at a time. (The allowance for sallyport is in 408 but the definition did not make it)

308.4. Group I-3. This occupancy shall include buildings, and structures or spaces within buildings that are inhabited by more than five persons who are under restraint or security. An I-3 facility is occupied by persons who are generally incapable of self-preservation due to security measures not under the occupants' control. Buildings or spaces in this group not used for housing shall be permitted to be designated as Use A-2, A-3, B, E, F, I-3, M and S within penal facilities. This group shall include.....

408.3.6 One of the required vertical exit enclosures in each building shall be permitted to have security glazing installed

408.3.2 Sliding Doors. Where doors in a means of egress are of the horizontal sliding type, the force to slide the door, when unlocked, to its fully open position.....

408.8 Windowless Building. (Last sentence)Windowless buildings shall be provided with an engineered smoke control system to provide ventilation (mechanical or natural) in accordance with Section 909.8 for each windowless smoke compartment.

715.4 Fire door and shutter assemblies.

Exception 3: In Group I-3 and other Groups within penal facilities metal listing labels shall be permitted to be replaced with mylar listing labels and the metal listing labels and door listing documentation kept on file at the facility.

903.2.5 Group I. An automatic sprinkler system shall be provided throughout buildings within Group I fire area.

Exception 2: Plumbing chases not exceeding 9 SF in floor area in group I-3 occupancies.

Exception 3: In occupancies in Group I-3 and other groups within penal facilities, refrigerator rooms not exceeding 800 SF or freezer rooms not exceeding 1600 SF.

Exception 4: Shower stalls and drying areas in Group I-3 occupancies.

Exception 5: Under open grating stairs in Group I-3 occupancies and other groups within penal facilities.

1008.1.1 Size of Doors

Exception 9: Within penal facilities, guard tower cabs and other control point areas, access shall be permitted to be a hatch or trap door not less than 10 SF in area through the floor and having a minimum dimension of not less than 2 feet.

1008.1.2 Door Swing

Exception 2. Group I-3, other groups within a penal facility, and occupancies used as a place of detention.

1008.1.8.3 Locks and Latches

(exception 1 doesn't cover it like BOCA)

Exception 1: ~~Places of detention or restraint.~~ Penal facilities.

1008.1.8.5 Unlatching.

Exception 1. ~~Places of detention or restraint.~~ Penal facilities.

1009.3. Stair Treads and Risers

(from BOCA)

Exception 6: Stairways in penal facilities service guard towers, observation stations and control rooms not more than 250 SF (23 cu meters) in area shall be permitted to have risers not exceeding 8 inches (203 mm) in height and treads not less than 9 inches (229 mm) in depth.

1009.3.3 Profile.

Exception 2: ~~Solid~~ Completely open or nonsolid risers are not required shall be permitted for occupancies in Group I-3 and other groups within penal facilities.

1009.12 Ships Ladders. Ships ladders are limited to an element of a means of egress in guard towers, observation or control room not more than 250 SF (23sq m) in area located in a penal facility and which serves not more than 3 occupants and for access to unoccupied roofs.

1009.12.1 Handrails of ships ladders. Handrails shall be provided on both sides of ships ladders.

1009.12.2 Treads and risers of ships ladders. Ships ladders shall have a minimum projected tread of 5 inches (127 mm), a minimum tread depth of 8.5

inches (216 mm), a minimum tread width of 15 inches (612 mm) and a maximum riser height of 9.5 inches (241mm).

1011.1 Exit Signs

Exception 4: Exit signs are not required in sleeping rooms, ~~areas~~ dayrooms or dormitory spaces in occupancies in Group I-3.

Table P403.1 Minimum Number of Required Plumbing Fixtures

Occupancy	Description	Water Closets	Lavatories
I-3	Employees	1 per 25	1 per 35
	Reformatories, detention centers, and correctional centers, or penal facility dormitories		

P403.4 Required public toilet facilities.

Exception: Toilet and lavatory facilities shall not be required for inmate dining halls in penal facilities.

(Possibly - look at proposed language for 2006 VUSBC for changes from the 2003)

1004.1 VUSBC

Exception: Use Group I-3 and other groups within penal facilities.

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Address to submit to: DHCD, the Jackson Center 501 North Second Street Richmond, VA 23219-1321 Tel. No. (804) 371 – 7150 Fax No. (804) 371 – 7092 Email: bhcd@dhcd.state.va.us	Document No. _____ Committee Action: _____ BHCD Action: _____
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Submitted by: R. Ronald Jordan Representing: Mid-Atlantic Fire Safety Construction Advisory Council–Virginia Fire Safety Committee
 Address: c/o Virginia Masonry Association, P.O. Box 6783 Richmond, VA 23230 Phone No.: (804) 377-2080 (VMA phone)
(804) 228-4506 (Jordan direct)

Regulation Title: Uniform Statewide Building Code Section No(s): Table 503, Section 504.2 and Section 903.2.5 of 2006 IBC

Proposed Change:

1. Revise Table 503 as follows:

Portion of IBC Table 503
Allowable Height and Building Areas

Group		Type of Construction								
		Type I		Type II		Type III		Type IV	Type V	
		A	B	A	B	A	B	HT	A	B
		UL	160	65	55	65	55	65	50	40
I-4	S	UL	9	4	3	4	3	4	3	2
	A	UL	65,000	48,000	40,000	46,500	40,000	48,000	40,500	4,500
I-1	S	UL	4	2	1	1	NP	1	1	NP
	A	UL	UL	15,000	11,000	12,000	NP	12,000	9,500	NP
I-2	S	UL	4	2	1	1	NP	1	1	NP
	A	UL	UL	15,000	11,000	12,000	NP	12,000	9,500	NP
I-3	S	UL	4	2	1	2	1	2	2	1
	A	UL	UL	15,000	10,000	10,500	7,500	12,000	7,500	5,000

Note: Groups I-2 (hospitals and nursing homes) and I-3 (prisons) shown for informational purposes only.

2. In Section 504.2, revise Exception No. 1 to read:

1. Fire areas with an occupancy in Group I-1 or I-2 of Type IIB, III, IV or V construction.

3. Remove exception to Section 903.2.5 which permits NFPA 13R and NFPA 13D sprinkler systems in Group I-1 occupancies.

Supporting Statement: This change will require that assisted living facilities (occupancy Group I-1) be built to the same type of construction standards presently required for hospitals and nursing homes (Group I-2). It will require a balanced approach to fire protection design resulting in the same level of fire safety in facilities housing this growing and fragile segment of the population as currently provided for patients in hospitals and residents of nursing homes. Adoption of the change will combine the benefits of passive and active fire protection for (1) fire containment, using non-combustible construction materials for facilities more than one story in height; (2) smoke detection and alarms; and (3) fire suppression, using sprinklers.

Group	Calendar year w/ # of incidents	# of injuries	# of deaths	Total amount of prop. damage	
I-2 Hospitals	2004 / 20	1	0	27,502	
	2005 / 14	0	0	6,320	
	2006 / 17	0	0	14,080	
I-2 Hospice	2004 / 2	0	0	0	
	2005 / 1	0	0	0	
	2006 / 1	0	0	9,000	
I-1 Nursing Homes	2004 / 17	0	0	22,505	
	2005 / 22	0	0	45,002	
	2006 / 21	1	0	64,985	
Business	2004	Buildings 4 to 6 stories (inclusive)	0	0	332,350
		Buildings greater than 7 stories in height	0	0	115,120
Business	2005	Buildings 4 to 6 stories (inclusive)	0	0	2,300,600
		Buildings greater than 7 stories in height	1	0	381,403
Business	2006	Buildings 4 to 6 stories (inclusive)	0	0	148,600
		Buildings greater than 7 stories in height	0	0	11,127,328

Group	Calendar year w/ # of incidents	# of injuries	# of deaths	Total amount of prop. damage	Number of buildings where a type of Automatic Extinguishing System was present
A-2	2004 / 138	6	0	4,203,491	4
	2005 / 152	4	0	2,723,719	7
	2006 / 122	4	0	8,957,074	5

NOTE:

These figures were obtained through VFIRS which is structured on NFPA 901 and had to be correlated to the USBC Group classification of buildings. Therefore, the numbers shown above are approximated for Virginia.

Hodge, Vernon

From: Frank Hertzog [Frank@smokeguard.com]
Sent: Wednesday, February 14, 2007 6:08 PM
To: Hodge, Vernon
Cc: Mike Wheeler
Subject: Virginia Code Amendments for IBC 2006 adoption
Attachments: Virginia code change Rev 3 FH SSC 021407.doc; Virginia Code Change Form-Rev 3 021407.doc

Vernon:

Here are two code amendments that we have discussed at previous meetings, and are being submitted for further consideration in the Virginia code adoption process.

The first amendment deletes the deletion of Section 707.14.1, in effect adding it back into the VA building code. The second amendment offers an amendment to the language in Section 707.14.1, by adding "I-2" occupancies to Exception 4 of that section.

Please let me know if we need to provide any other information. Thank you.

Frank Hertzog
Executive Director
Smoke Safety Council
Office: 208 639-7860
Cell: 208 867-2382
fhertzog@smokeguard.com

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<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. _____</p> <p>Committee Action: _____</p> <p>BHCD Action: _____</p>
<p>Submitted by: Frank Hertzog Representing: Smoke Safety Council</p> <p>Address: 6775 SW 111th Ave, Ste 10, Beaverton, OR 97008 Office: (208) 639-7860</p> <p>Regulation Title: USBC, Part 1, Virginia Construction Code__ Section No(s): 707.14.1</p>		

Proposed Change:

Chapter 7 - Fire-Resistant-Rated Construction

~~Delete Section 707.14.1 of the IBC.~~

By deleting this proposed deletion, the following language from the IBC 2006, with one minor change at Section 707.14.1, Exception 4 would be included in the Virginia Construction Code:

707.14.1 Elevator lobby. An enclosed elevator lobby shall be provided at each floor where an elevator shaft enclosure connects more than three stories. The lobby shall separate the elevator shaft enclosure doors from each floor by fire partitions equal to the fire-resistance rating of the corridor and the required opening protection. Elevator lobbies shall have at least one means of egress complying with Chapter 10 and other provisions within this code.

Exceptions:

1. Enclosed elevator lobbies are not required at the street floor, provided the entire street floor is equipped with an automatic sprinkler system in accordance with Section 903.3.1.1.
2. Elevators not required to be located in a shaft in accordance with Section 707.2 are not required to have enclosed elevator lobbies.
3. Where additional doors are provided at the hoistway opening in accordance with Section 3002.6. Such doors shall be tested in accordance with UL 1784 without an artificial bottom seal.
4. In other than Group I-3, and buildings having occupied floors located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access, enclosed elevator lobbies are not required where the building is protected by an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
5. Smoke partitions shall be permitted in lieu of fire partitions to separate the elevator lobby at each floor where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
6. Enclosed elevator lobbies are not required where the elevator hoistway is pressurized in accordance with Section 707.14.2.

707.14.2 Enclosed elevator lobby pressurization alternative.

Where elevator hoistway pressurization is provided in lieu of required enclosed elevator lobbies, the pressurization system shall comply with this section.

707.14.2.1 Pressurization requirements. Elevator hoistways shall be pressurized to maintain a minimum positive pressure of 0.04 inches of water column and a maximum positive pressure of 0.06 inches of water column with respect to adjacent occupied space on all floors. This pressure shall be measured at the midpoint of each hoistway door, with all ground floor level hoistway doors open and all other hoistway doors closed. The supply air intake shall be from an outside, uncontaminated source located a minimum distance of 20 feet (6096 mm) from any air exhaust system or outlet.

707.14.2.2 Ducts for system. Any duct system that is part of the pressurization system shall be protected with the same fire-resistance rating as required for the elevator shaft enclosure.

707.14.2.3 Fan system. The fan system provided for the pressurization system shall be as required by this section.

707.14.2.3.1 Fire resistance. When located within the building, the fan system that provides the pressurization shall be protected with the same fire-resistance rating required for the elevator shaft enclosure.

707.14.2.3.2 Smoke detection. The fan system shall be equipped with a smoke detector that will automatically shut down the fan system when smoke is detected within the system.

707.14.2.3.3 Separate systems. A separate fan system shall be used for each bank of elevators.

707.14.2.3.4 Fan capacity. The supply fan shall either be adjustable with a capacity of at least 1,000 cfm (.4719 m³/s) per door, or that specified by a registered design professional to meet the requirements of a designed pressurization system.

707.14.2.4 Standby power. The pressurization system shall be provided with standby power from the same source as other required emergency systems for the building.

707.14.2.5 Activation of pressurization system. The elevator pressurization system shall be activated upon activation of the building fire alarm system or upon activation of the elevator lobby smoke detectors.

Supporting Statement:

While the legacy BOCA code did not require elevator shaft protection this life safety issue of protecting fire-rated corridors from smoke in elevator shafts in high rise buildings is addressed in the IBC. Since the inception of the IBC and through the last two code cycles elevator lobby separation has been thoroughly debated and included in each edition of the IBC through the last two code cycles. In so doing, the ICC established the minimum national requirements for life safety in the IBC relating to the need for elevator shaft protection in high rise buildings. This is stated in Section 101.3, where the IBC is established as the minimum building code standard for life safety.

The IBC incorporates over 200 trade-offs within the prescriptive requirements of the building code. Exceptions 1 and 4 to Section 707.14.1 in the IBC 2003 established specific sprinkler trade-offs for this section of the building code. Exception 4 limits the requirement to provide elevator lobbies to buildings over 4 stories with elevators opening fire rated corridors, with the addition of sprinklers in I, R, and H occupancies. Other occupancies were allowed sprinkler trade-offs, deleting the requirement to provide fire rated corridors if sprinklered.

The IBC 2006 has limited the requirement in Exception 4 in Section 707.14.1 to buildings over 75 feet. The 2006 IBC recognizes the level of fire protection and life safety afforded in fully sprinklered buildings less than 75 feet in height and has exempted those building from the lobby requirement.

Given the IBC 2006 will again establish the minimum national standards for life safety and that the ICC staff works to discourage amendments to the IBC which create many variations in the building codes from state to state, Virginia, by adopting this amendment, would align the Virginia Building Code with the minimum life safety standards provided for in the IBC 2006 for high rise buildings.

In addition, adding the provisions of IBC 2006 707.14.1 will also provide defend in place protection in I-3 occupancies previously not addressed in the VBC.

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Address to submit to: DHCD, the Jackson Center 501 North Second Street Richmond, VA 23219-1321 Tel. No. (804) 371 – 7150 Fax No. (804) 371 – 7092 Email: bhcd@dhcd.state.va.us		Document No. _____ Committee Action: _____ BHCD Action: _____
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Submitted by: Frank Hertzog _____ Representing: Smoke Safety Council _____

Address: 6775 SW 111th Ave, Ste 10, Beaverton, OR 97008 _____ Phone No.: 208 639-7860 _____

Regulation Title: Executive Director _____ Section No(s): 707.14.1, Exception 4 _____

Proposed Change:

707.14.1 Elevator lobby. No change to current language.

Exceptions:

1. No change to current language in IBC 2006.
2. No change to current language in IBC 2006.
3. No change to current language in IBC 2006.
4. In other than Group I-3, I-2, and buildings having occupied floors located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access, enclosed elevator lobbies are not required where the building is protected by an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
5. No change to current language in IBC 2006.
6. No change to current language in IBC 2006.

Supporting Statement:

This change adds I-2 (healthcare) occupancies back into Exception 4, and corrects an administrative error in the IBC 2003 code. I-2's were included in this exception in IBC 2000, and were left out of IBC 2003. I-2 occupancies cannot evacuate in the event of a fire, and must practice defend in place strategies to protect patients and staff. These strategies include evacuating patients into smoke compartments bounded by smoke barriers, as defined in the building code. The building code clearly defines smoke compartments as requiring protection at all walls and at the floor and ceiling. Hospital smoke compartment integrity cannot be maintained if unprotected elevators penetrate these spaces floor to floor. This change assures that protection is provided for patients from the effects of fire and smoke. For this reason, I-2s, like I-3s (confinement facilities), require special consideration in providing this protection, and should be included as one of the occupancies addressed in this exception, as indicated by the change submitted.

Addition of the I-2 occupancies in exception 4 of Section 707.14.1 was also unanimously recommended for approval by the Fire Safety Code Committee of ICC at the national ICC code hearings in Orlando in September, 2006. If approved by the governmental members of ICC at the ICC Final Action hearings in 2007 this change would be included in the 2007 Supplement to the IBC.

Group	Calendar year w/ # of incidents	# of injuries	# of deaths	Total amount of prop. damage	
I-2 Hospitals	2004 / 20	1	0	27,502	
	2005 / 14	0	0	6,320	
	2006 / 17	0	0	14,080	
I-2 Hospice	2004 / 2	0	0	0	
	2005 / 1	0	0	0	
	2006 / 1	0	0	9,000	
I-1 Nursing Homes	2004 / 17	0	0	22,505	
	2005 / 22	0	0	45,002	
	2006 / 21	1	0	64,985	
Business	2004	Buildings 4 to 6 stories (inclusive)	0	0	332,350
		Buildings greater than 7 stories in height	0	0	115,120
Business	2005	Buildings 4 to 6 stories (inclusive)	0	0	2,300,600
		Buildings greater than 7 stories in height	1	0	381,403
Business	2006	Buildings 4 to 6 stories (inclusive)	0	0	148,600
		Buildings greater than 7 stories in height	0	0	11,127,328

Group	Calendar year w/ # of incidents	# of injuries	# of deaths	Total amount of prop. damage	Number of buildings where a type of Automatic Extinguishing System was present
A-2	2004 / 138	6	0	4,203,491	4
	2005 / 152	4	0	2,723,719	7
	2006 / 122	4	0	8,957,074	5

NOTE:

These figures were obtained through VFIRS which is structured on NFPA 901 and had to be correlated to the USBC Group classification of buildings. Therefore, the numbers shown above are approximated for Virginia.

[F] WIRELESS PROTECTION SYSTEM. A system or a part of a system that can transmit and receive signals without the aid of wire.

[F] ZONE. A defined area within the protected premises. A zone can define an area from which a signal can be received, an area to which a signal can be sent or an area in which a form of control can be executed.

SECTION 903 AUTOMATIC SPRINKLER SYSTEMS

[F] 903.1 General. Automatic sprinkler systems shall comply with this section.

[F] 903.1.1 Alternative protection. Alternative automatic fire-extinguishing systems complying with Section 904 shall be permitted in lieu of automatic sprinkler protection where recognized by the applicable standard and approved by the fire code official.

[F] 903.2 Where required. Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in this section.

Exception: Spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries and standby engines, provided those spaces or areas are equipped throughout with an automatic fire alarm system and are separated from the remainder of the building by fire barriers consisting of not less than 1-hour fire-resistance-rated walls and 2-hour fire-resistance-rated floor/ceiling assemblies.

[F] 903.2.1 Group A. An automatic sprinkler system shall be provided throughout buildings and portions thereof used as Group A occupancies as provided in this section. For Group A-1, A-2, A-3 and A-4 occupancies, the automatic sprinkler system shall be provided throughout the floor area where the Group A-1, A-2, A-3 or A-4 occupancy is located, and in all floors between the Group A occupancy and the level of exit discharge. For Group A-5 occupancies, the automatic sprinkler system shall be provided in the spaces indicated in Section 903.2.1.5.

[F] 903.2.1.1 Group A-1. An automatic sprinkler system shall be provided for Group A-1 occupancies where one of the following conditions exists:

1. The fire area exceeds 12,000 square feet (1115 m²).
2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than the level of exit discharge.
4. The fire area contains a multitheater complex.

[F] 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; or

3. The fire area is located on a floor other than the level of exit discharge.

[F] 903.2.1.3 Group A-3. An automatic sprinkler system shall be provided for Group A-3 occupancies where one of the following conditions exists:

1. The fire area exceeds 12,000 square feet (1115 m²).
2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than the level of exit discharge.

Exception: Areas used exclusively as participant sports areas where the main floor area is located at the same level as the level of exit discharge of the main entrance and exit.

[F] 903.2.1.4 Group A-4. An automatic sprinkler system shall be provided for Group A-4 occupancies where one of the following conditions exists:

1. The fire area exceeds 12,000 square feet (1115 m²).
2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than the level of exit discharge.

Exception: Areas used exclusively as participant sports areas where the main floor area is located at the same level as the level of exit discharge of the main entrance and exit.

[F] 903.2.1.5 Group A-5. An automatic sprinkler system shall be provided for Group A-5 occupancies in the following areas: concession stands, retail areas, press boxes and other accessory use areas in excess of 1,000 square feet (93 m²).

[F] 903.2.2 Group E. An automatic sprinkler system shall be provided for Group E occupancies as follows:

1. Throughout all Group E fire areas greater than 20,000 square feet (1858 m²) in area.
2. Throughout every portion of educational buildings below the level of exit discharge.

Exception: An automatic sprinkler system is not required in any fire area or area below the level of exit discharge where every classroom throughout the building has at least one exterior exit door at ground level.

[F] 903.2.3 Group F-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group F-1 occupancy where one of the following conditions exists:

1. Where a Group F-1 fire area exceeds 12,000 square feet (1115 m²);
2. Where a Group F-1 fire area is located more than three stories above grade plane; or
3. Where the combined area of all Group F-1 fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m²).

Group	Calendar year w/ # of incidents	# of injuries	# of deaths	Total amount of prop. damage	
I-2 Hospitals	2004 / 20	1	0	27,502	
	2005 / 14	0	0	6,320	
	2006 / 17	0	0	14,080	
I-2 Hospice	2004 / 2	0	0	0	
	2005 / 1	0	0	0	
	2006 / 1	0	0	9,000	
I-1 Nursing Homes	2004 / 17	0	0	22,505	
	2005 / 22	0	0	45,002	
	2006 / 21	1	0	64,985	
Business	2004	Buildings 4 to 6 stories (inclusive)	0	0	332,350
		Buildings greater than 7 stories in height	0	0	115,120
Business	2005	Buildings 4 to 6 stories (inclusive)	0	0	2,300,600
		Buildings greater than 7 stories in height	1	0	381,403
Business	2006	Buildings 4 to 6 stories (inclusive)	0	0	148,600
		Buildings greater than 7 stories in height	0	0	11,127,328

Group	Calendar year w/ # of incidents	# of injuries	# of deaths	Total amount of prop. damage	Number of buildings where a type of Automatic Extinguishing System was present
A-2	2004 / 138	6	0	4,203,491	4
	2005 / 152	4	0	2,723,719	7
	2006 / 122	4	0	8,957,074	5

NOTE:

These figures were obtained through VFIRS which is structured on NFPA 901 and had to be correlated to the USBC Group classification of buildings. Therefore, the numbers shown above are approximated for Virginia.

where a person has a choice of two or more paths of egress travel to separate exits.

1014.5 Egress balconies. Balconies used for egress purposes shall conform to the same requirements as corridors for width, headroom, dead ends and projections.

1014.5.1 Wall separation. Exterior egress balconies shall be separated from the interior of the building by walls and opening protectives as required for corridors.

Exception: Separation is not required where the exterior egress balcony is served by at least two stairs and a dead-end travel condition does not require travel past an unprotected opening to reach a stair.

1014.5.2 Openness. The long side of an egress balcony 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.

SECTION 1015 EXIT AND EXIT ACCESS DOORWAYS

1015.1 Exit or exit access doorways required. Two exits or exit access doorways from any space shall be provided where one of the following conditions exists:

1. The occupant load of the space exceeds the values in Table 1015.1.
2. The common path of egress travel exceeds the limitations of Section 1014.3.
3. Where required by Sections 1015.3, 1015.4 and 1015.5.

Exception: Group I-2 occupancies shall comply with Section 1014.2.2.

TABLE 1015.1
SPACES WITH ONE MEANS OF EGRESS

OCCUPANCY	MAXIMUM OCCUPANT LOAD
A, B, E ^a , F, M, U	49
H-1, H-2, H-3	3
H-4, H-5, I-1, I-3, I-4, R	10
S	29

a. Day care maximum occupant load is 10.

1015.1.1 Three or more exits. Access to three or more exits shall be provided from a floor area where required by Section 1019.1.

1015.2 Exit or exit access doorway arrangement. Required exits shall be located in a manner that makes their availability obvious. Exits shall be unobstructed at all times. Exit and exit access doorways shall be arranged in accordance with Sections 1015.2.1 and 1015.2.2.

1015.2.1 Two exits or exit access doorways. Where two exits or exit access doorways are required from any portion of the exit access, the exit doors or exit access doorways shall be placed a distance apart equal to not less than one-half of the length of the maximum overall diagonal

dimension of the building or area to be served measured in a straight line between exit doors or exit access doorways. Interlocking or scissor stairs shall be counted as one exit stairway.

Exceptions:

1. Where exit enclosures are provided as a portion of the required exit and are interconnected by a 1-hour fire-resistance-rated corridor conforming to the requirements of Section 1017, the required exit separation shall be measured along the shortest direct line of travel within the corridor.
2. Where a building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2, the separation distance of the exit doors or exit access doorways shall not be less than one-third of the length of the maximum overall diagonal dimension of the area served.

1015.2.2 Three or more exits or exit access doorways. Where access to three or more exits is required, at least two exit doors or exit access doorways shall be arranged in accordance with the provisions of Section 1015.2.1.

1015.3 Boiler, incinerator and furnace rooms. Two exit access doorways are required in boiler, incinerator and furnace rooms where the area is over 500 square feet (46 m²) and any fuel-fired equipment exceeds 400,000 British thermal units (Btu) (422 000 KJ) input capacity. Where two exit access doorways are required, one is permitted to be a fixed ladder or an alternating tread device. Exit access doorways shall be separated by a horizontal distance equal to one-half the length of the maximum overall diagonal dimension of the room.

1015.4 Refrigeration machinery rooms. Machinery rooms larger than 1,000 square feet (93 m²) shall have not less than two exits or exit access doors. Where two exit access doorways are required, one such doorway is permitted to be served by a fixed ladder or an alternating tread device. Exit access doorways shall be separated by a horizontal distance equal to one-half the maximum horizontal dimension of room.

All portions of machinery rooms shall be within 150 feet (45 720 mm) of an exit or exit access doorway. An increase in travel distance is permitted in accordance with Section 1016.1.

Doors shall swing in the direction of egress travel, regardless of the occupant load served. Doors shall be tight fitting and self-closing.

1015.5 Refrigerated rooms or spaces. Rooms or spaces having a floor area of 1,000 square feet (93 m²) or more, containing a refrigerant evaporator and maintained at a temperature below 68°F (20°C), shall have access to not less than two exits or exit access doors.

Travel distance shall be determined as specified in Section 1016.1, but all portions of a refrigerated room or space shall be within 150 feet (45 720 mm) of an exit or exit access door where such rooms are not protected by an approved automatic

1017.5 Corridor continuity. Fire-resistance-rated corridors shall be continuous from the point of entry to an exit, and shall not be interrupted by intervening rooms.

Exception: Foyers, lobbies or reception rooms constructed as required for corridors shall not be construed as intervening rooms.

**SECTION 1018
EXITS**

1018.1 General. Exits shall comply with Sections 1018 through 1023 and the applicable requirements of Sections 1003 through 1013. An exit shall not be used for any purpose that interferes with its function as a means of egress. Once a given level of exit protection is achieved, such level of protection shall not be reduced until arrival at the exit discharge.

1018.2 Exterior exit doors. Buildings or structures used for human occupancy shall have at least one exterior door that meets the requirements of Section 1008.1.1.

1018.2.1 Detailed requirements. Exterior exit doors shall comply with the applicable requirements of Section 1008.1.

1018.2.2 Arrangement. Exterior exit doors shall lead directly to the exit discharge or the public way.

**SECTION 1019
NUMBER OF EXITS AND CONTINUITY**

1019.1 Minimum number of exits. All rooms and spaces within each story shall be provided with and have access to the minimum number of approved independent exits required by Table 1019.1 based on the occupant load of the story, except as modified in Section 1015.1 or 1019.2. For the purposes of this chapter, occupied roofs shall be provided with exits as required for stories. The required number of exits from any story, basement or individual space shall be maintained until arrival at grade or the public way.

**TABLE 1019.1
MINIMUM NUMBER OF EXITS FOR OCCUPANT LOAD**

OCCUPANT LOAD (persons per story)	MINIMUM NUMBER OF EXITS (per story)
1-500	2
501-1,000	3
More than 1,000	4

1019.1.1 Parking structures. Parking structures shall not have less than two exits from each parking tier, except that only one exit is required where vehicles are mechanically parked. Vehicle ramps shall not be considered as required exits unless pedestrian facilities are provided.

1019.1.2 Helistops. The means of egress from helistops shall comply with the provisions of this chapter, provided that landing areas located on buildings or structures shall have two or more exits. For landing platforms or roof areas less than 60 feet (18 288 mm) long, or less than 2,000 square feet (186 m²) in area, the second means of egress is permitted to be a fire escape or ladder leading to the floor below.

1019.2 Buildings with one exit. Only one exit shall be required in buildings as described below:

1. Buildings described in Table 1019.2, provided that the building has not more than one level below the first story above grade plane.
2. Buildings of Group R-3 occupancy.
3. Single-level buildings with the occupied space at the level of exit discharge provided that the story or space complies with Section 1015.1 as a space with one means of egress.

**TABLE 1019.2
BUILDINGS WITH ONE EXIT**

OCCUPANCY	MAXIMUM HEIGHT OF BUILDING ABOVE GRADE PLANE	MAXIMUM OCCUPANTS (OR DWELLING UNITS) PER FLOOR AND TRAVEL DISTANCE
A, B ^d , E ^c , F, M, U	1 Story	49 occupants and 75 feet travel distance
H-2, H-3	1 Story	3 occupants and 25 feet travel distance
H-4, H-5, I, R	1 Story	10 occupants and 75 feet travel distance
S ^a	1 Story	29 occupants and 100 feet travel distance
B ^b , F, M, S ^a	2 Stories	30 occupants and 75 feet travel distance
R-2	2 Stories ^c	4 dwelling units and 50 feet travel distance

For SI: 1 foot = 304.8 mm.

- a. For the required number of exits for open parking structures, see Section 1019.1.1.
- b. For the required number of exits for air traffic control towers, see Section 412.1.
- 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 1026 shall have a maximum height of three stories above grade plane.
- d. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 with an occupancy in Group B shall have a maximum travel distance of 100 feet.
- e. Day care maximum occupant load is 10.

1019.3 Exit continuity. Exits shall be continuous from the point of entry into the exit to the exit discharge.

1019.4 Exit door arrangement. Exit door arrangement shall meet the requirements of Sections 1015.2 through 1015.2.2.

**SECTION 1020
VERTICAL EXIT ENCLOSURES**

1020.1 Enclosures required. Interior exit stairways and interior exit ramps shall be enclosed with fire barriers constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both. Exit enclosures shall have a fire-resistance rating of not less than 2 hours where connecting four stories or more and not less than 1 hour where connecting less than four stories. The number of stories connected by the exit enclosure shall include any basements

SB 1077 Carbon monoxide detector; Board of Housing & Community Development to install in dwelling units.
 Frank M. Ruff | all patrons ... notes | add to my profiles

another bill?

Summary as passed Senate: (all summaries)

Board of Housing and Community Development; carbon monoxide detectors in certain rental dwelling units; report. Requires the installation of carbon monoxide detectors in college dormitories and assisted living facilities by July 1, 2010. The bill also requires the Board of Housing and Community Development to promulgate regulations to require the installation of carbon monoxide detectors in new college dormitories and assisted living facilities. In addition, the bill requires the Board and the Fire Services Board to jointly establish a working group to develop a public education program focusing on the dangers of carbon monoxide poisoning and preventive measures that may be taken.

Full text:

01/09/07 Senate: Prefiled and ordered printed; offered 01/10/07 071536812 (impact statement)
 02/01/07 Senate: Committee substitute printed 071594812-S1 (impact statement)

Status:

01/09/07 Senate: Prefiled and ordered printed; offered 01/10/07 071536812
 01/09/07 Senate: Referred to Committee on General Laws and Technology
 01/31/07 Senate: Reported from General Laws and Technology with substitute (8-Y 1-N)
 02/01/07 Senate: Committee substitute printed 071594812-S1
 02/02/07 Senate: Constitutional reading dispensed (40-Y 0-N)
 02/02/07 Senate: VOTE: (40-Y 0-N)
 02/05/07 Senate: Read second time
 02/05/07 Senate: Reading of substitute waived
 02/05/07 Senate: Committee substitute agreed to 071594812-S1
 02/05/07 Senate: Engrossed by Senate - committee substitute SB1077S1
 02/06/07 Senate: Read third time
 02/06/07 Senate: Passed Senate (39-Y 0-N)
 02/06/07 Senate: VOTE: (39-Y 0-N)
 02/06/07 Senate: Communicated to House
 02/07/07 House: Placed on Calendar
 02/07/07 House: Read first time
 02/07/07 House: Referred to Committee on General Laws
 02/08/07 House: Assigned GL sub: #1 Housing (Suit)
 02/15/07 House: Passed by in General Laws with letter
 02/15/07 House: Letter sent to Housing Study Commission

Rodgers, Emory

From: Payne, Kenney [kpayne@moseleyarchitects.com]
Sent: Thursday, February 08, 2007 11:49 AM
To: Rodgers, Emory
Subject: I code comments

Emory,

Below is an email I received from one of my colleagues. How would you propose these issues best be brought forward at this point...or, are we too late and these would need to be considered for the next code cycle? I realize some of these issues mention BCOM...which for our purposes here, we can ignore...but the concept of the issue would still remain.

Your thoughts please? Thank you.

Kenney

From: Pruitt, Tim
Sent: Wednesday, February 07, 2007 9:46 AM
To: Payne, Kenney
Cc: Hyder, Jeff
Subject: I code comments

Kenney:

Comments on 2006 Code, for what they're worth:



1004.3 Posting of occupant load. Every room or space that is an assembly occupancy shall have the occupant load of the room or space posted in a conspicuous place, near the main exit or exit access doorway from the room or space...

It would be nice to have a clear exception for accessory spaces, such as small conference rooms. Posting a room under 1000 sf just because it is called "assembly" seems strange when we don't do it in classrooms or offices of same size.

~~**TABLE 1004.1.1**~~

~~**MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT**~~

~~Occupant loads are always an argument. It would be great if the Code more clearly defined these and was more egalitarian about it. For instance, why do airports get to calculate 15 gross sf per person for waiting areas (all seating, few if any tables) while the rest of us have to use 7 net (or even 5 net depending upon the reviewer)? Airports also get to calculate concourses at 100 gross, while BCOM often makes us calculate "oversized" lobbies and atria using assembly numbers! If BCOM really wants to impose strange occupancy requirements (a la Coppa's infamous memorandum "OCCUPANT LOAD GUIDE FOR DESIGN OF FACILITIES ON STATE OWNED PROPERTY"), then such changes should be incorporated into the VUSBC.~~

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. _____</p> <p>Committee Action: _____</p> <p>BHCD Action: _____</p>
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Submitted by: Carrie Eddy _____ Representing: VDH/Office of Licensure and Certification (OLC)

Address: 3600 W. Broad Street, Ste. 216, Richmond, VA 23230 _____ Phone No.: 804.367.2157 _____

Regulation Title: Uniform Statewide Building Code (USBC) Section No(s): 2702.2 and 407.9 _____

Proposed Change:

407.9 Emergency power generators. Emergency power generators shall be provided for Group 1-2 hospitals (including outpatient surgical centers), nursing facilities, and dedicated hospice facilities in accordance with Section 407.9.1, 407.9.2 and 407.9.3.

- 407.9.1 Hospitals. For the supply of power to essential electrical systems, the requirements of Part III, 517.30 through 517.35 of the National Electrical Code/2005 Edition shall apply.
- 407.9.2 Nursing facilities, including extended care facilities such as dedicated hospice facilities. For the supply of power to essential electrical systems, the requirements of Part III, 517.40 (B) through 517.44 of the National Electrical Code/ 2005 Edition shall apply, excluding 517.44 (B) Exception 2.
- 407.9.3 Outpatient Surgical Centers. For the supply of power to essential electrical systems, the requirements of Part III, 517.45 of the National Electrical Code/2005 Edition shall apply.

2702.2 Where required: emergency and standby power systems shall be provided where required...

- 2702.2.20 Emergency power in hospitals, nursing facilities and outpatient surgical centers shall be supplied according to 407.9.1 through 407.9.3, as applicable.

Supporting Statement: The condition, physical plant and the overall environment of inpatient hospitals, outpatient surgical centers, nursing facilities, and dedicate hospice facilities must be developed and maintained in such a manner that the safety and well being of patients, clients and residents is assured. Emergency power and lighting to limit internal disruption and to provide continuity of vital services at all times is, therefore, essential.

The OLC proposes adding requirements to the USBC requiring that hospitals, nursing facilities, outpatient surgical hospitals, and dedicated hospice facilities have appropriate emergency power backup when normal operating conditions are disrupted due to power failures related to man-made or natural disasters. Currently, such stipulation is achieved through adherence to ancillary codes such as the Center for Medicare and Medicaid Services, the AIA Guidelines for Design and Construction of Health Care Facilities, and related NFPA standards. Continued reliance on national organization's standards for requiring generators is not prudent, as those standards are subject to change without due process in Virginia. The OLC believes that placing the appropriate requirement in the USBC assures that medical care facilities caring for the Commonwealth's sickest and most vulnerable citizens are prepared to provide at least the minimum emergency power should the need arise. It is OLC's understanding that all current operating hospitals, nursing facilities, dedicated hospice facilities and outpatient surgical centers have appropriate emergency power safeguards, therefore, it is not expected that approval and implementation of these proposed changes would result in added operating costs for current or future facilities.

Dean, Glenn

From: Dean, Glenn
Sent: Thursday, March 22, 2007 1:38 PM
To: Eddy, Carrie (VDH)
Cc: Altizer, Ed
Subject: Proposed code change for emergency power
Importance: High
Attachments: USBC and SFPC change for emergency and standby power in I2 facilities.doc

See attached.

I know it doesn't look like much of a change but I tried to craft it to be as simple as possible and be placed in the best (correct) locations within the code.

Since its being drafted for submission under your name, you're more than welcome to tweak it, especially as it relates to the supporting statement.

I expect I'll be handing this over to Emory tomorrow.

Glenn A. Dean, CBO, CFM
DHCD, State Fire Marshal's Office
Deputy State Fire Marshal / Fire Safety Engineer
501 North Second Street
Richmond, VA 23219
804/371-7182

**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. _____</p> <p>Committee Action: _____</p> <p>BHCD Action: _____</p>
<p>Submitted by: <u>Carrie Eddy</u> Representing: <u>Va. Dept. of Health</u></p> <p>Address: <u>3600 W. Broad Street, Richmond, VA</u> Phone No.: <u>804-367-2102</u></p> <p>Regulation Title: <u>2006 USBC</u> Section No(s): <u>407.8 and 2702.2</u></p>		

Proposed Change:

Add USBC Section 407.8 to read:

407.8 Emergency power systems. Emergency power shall be provided for medical life support equipment, operating, recovery, intensive care, emergency rooms, fire detection and alarms systems in any facility licensed by the Virginia Department of Health as a hospital, nursing home, or hospice facility.

Change USBC Section 2702.2.17 to read:

[F] **2702.2 Where required.** Emergency and standby power systems shall be provided where required by Sections 2702.2.1 through 2702.2.20.

[F] **2702.2.1 Group A occupancies.** Emergency power shall be provided for voice communication systems in Group A occupancies in accordance with Section 907.2.1.2.

[F] **2702.2.2 Smoke control systems.** Standby power shall be provided for smoke control systems in accordance with Section 909.11.

[F] **2702.2.3 Exit signs.** Emergency power shall be provided for exit signs in accordance with Section 1011.5.3.

[F] **2702.2.4 Means of egress illumination.** Emergency power shall be provided for means of egress illumination in accordance with Section 1006.3.

[F] **2702.2.5 Accessible means of egress elevators.** Standby power shall be provided for elevators that are part of an accessible means of egress in accordance with Section 1007.4.

[F] **2702.2.6 Accessible means of egress platform lifts.** Standby power in accordance with this section or ASME A18.1 shall be provided for platform lifts that are part of an accessible means of egress in accordance with Section 1007.5.

[F] **2702.2.7 Horizontal sliding doors.** Standby power shall be provided for horizontal sliding doors in accordance with Section 1008.1.3.3.

[F] **2702.2.8 Semiconductor fabrication facilities.** Emergency power shall be provided for semiconductor fabrication facilities in accordance with Section 415.8.10.

[F] **2702.2.9 Membrane structures.** Standby power shall be provided for auxiliary inflation systems in accordance with Section 3102.8.2. Emergency power shall be provided for exit signs in temporary tents and membrane structures in accordance with the *International Fire Code*.

[F] **2702.2.10 Hazardous materials.** Emergency or standby power shall be provided in occupancies with hazardous materials in accordance with Section 414.5.4.

[F] **2702.2.11 Highly toxic and toxic materials.** Emergency power shall be provided for occupancies with highly toxic or toxic materials in accordance with the *International Fire Code*.

[F] **2702.2.12 Organic peroxides.** Standby power shall be provided for occupancies with silane gas in accordance with the *International Fire Code*.

[F] **2702.2.13 Pyrophoric materials.** Emergency power shall be provided for occupancies with silane gas in accordance with the *International Fire Code*.

[F] **2702.2.14 Covered mall buildings.** Standby power shall be provided for voice/alarm communication systems in covered mall buildings in accordance with Section 402.13.

[F] **2702.2.15 High-rise buildings.** Emergency and standby power shall be provided in high-rise buildings in accordance with Sections 403.10 and 403.11.

[F] **2702.2.16 Underground buildings.** Emergency and standby power shall be provided in underground buildings in accordance with Sections 405.9 and 405.10.

[F] **2702.2.17 Group I-2 and I-3 occupancies.** Emergency power shall be provided in accordance with Section 407.8 for I-2 occupancies licensed by the Virginia Department of Health as a hospital, nursing, or hospice facility. Emergency power shall be provided for doors in Group I-3 occupancies in accordance with Section 408.4.2.

[F] **2702.2.18 Airport traffic control towers.** Standby power shall be provided in airport traffic control towers in accordance with Section 412.1.5.

[F] **2702.2.19 Elevators.** Standby power for elevators shall be provided as set forth in Section 3003.1.

[F] **2702.2.20 Smokeproof enclosures.** Standby power shall be provided for smokeproof enclosures as required by Section 909.20.

Supporting Statement:

This change is coordinated with federal standards to require similar emergency power supply sources in those facilities that are not required to comply with federal standards.

Rodgers, Emory

From: Hall, Jay
Sent: Friday, February 23, 2007 9:50 AM
To: Rodgers, Emory; McIver, Curtis
Subject: RE:

I will probably withdraw the change, and we can continue with the definition that we currently have. Emory is correct, tough to please all sides. And now "Et tu Brute?"

I never really formally submitted a change. I just circulated that email for comments.

Jay

From: Rodgers, Emory
Sent: Fri 2/23/2007 6:20 AM
To: McIver, Curtis
Cc: Hall, Jay
Subject: RE:

Passed onto Jay. In any case doubt if will be a change as not sure can please all the folks on all sides. Fire want them to be all A-2 nightclubs while other not as firm. Not sure if many building officials do issue as A—2 nightclubs like the churches and museums or those lodges that have ABC but don't allow public but members and guess and agree others do as you convey.

From: McIver, Curtis
Sent: Thursday, February 22, 2007 3:14 PM
To: Rodgers, Emory
Subject: RE:

Emory,

I've been looking over some of the code changes from your attached list and the workbooks. I'm not sure that the proposed change to the definition of NIGHTCLUB does what the supporting statement indicates that it does. Your summary and the supporting statement for the change says that by adding alcohol "for purchase" will exclude lodges, social halls, Moose clubs, museums, etc. from the definition of nightclub. Most Moose clubs, Fraternal Order of Eagles, and a lot of other similar types of lodges and social halls have an ABC license to sell beer to their members. That means "alcoholic beverages are available for purchase." Some museums have events like "Rocking Wednesdays" or whatever name and day they designate it where one day each week or once a month or some regular time they bring in a band or some entertainment, sell beer or wine and have a place where folks can dance to the music. That meets the three criteria for being a nightclub. The intent may not have been to include such places as nightclubs, but the proposed change might not exclude them completely as the supporting statement indicates.

Curtis L. McIver
State Building Code Administrator
Department of Housing and Community Development
501 North Second Street
Richmond, VA 23219
(804) 371-7160

From: Rodgers, Emory
Sent: Thursday, February 22, 2007 11:31 AM

DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM
 (Use this form to submit changes to building and fire codes)

Address to submit to: DHCD, the Jackson Center 501 North Second Street Richmond, VA 23219-1321 Tel. No. (804) 371 - 7150 Fax No. (804) 371 - 7092 Email: bhcd@dhcd.state.va.us	1/16/07	Document No. _____ Committee Action: _____ BHCD Action: _____
Submitted by: Guy Tomberlin, Fairfax County Representing: VA Building and Code Officials Association (VBCOA) and VA Plumbing and Mechanical Inspectors Association (VPMIA)		
Address: 12055 Government Center Pkwy., Suite 630 Fairfax, VA 22030 Phone No.: 703-324-1611		
Regulation Title: Part I Construction USBC Section No(s): Mechanical Code (IMC) Technical Amendments		
<p>507.2.2. Type II hoods. Type II hoods shall be installed where cooking or dishwashing appliances produce heat, steam, or products of combustion and do not produce grease or smoke, such as steamers, kettles, pasta cookers and dishwashing machines.</p> <p>Exceptions:</p> <ol style="list-style-type: none"> 1. Under-counter-type commercial dishwashing machines. 2. A Type II hood is not required for dishwashers and potwashers that are provided with heat and water vapor exhaust systems that are supplied by the appliance manufacturer and are installed in accordance with the manufacturer's instructions. 3. A single light-duty electric convection, bread, retherm or microwave oven <u>designed for counter top installation</u>. The additional heat and moisture loads generated by such appliances shall be accounted for in the design of the HVAC system. 4. A Type II hood is not required for the following electrically heated appliances: toasters, steam tables, popcorn poppers, hot dog cookers, coffee makers, rice cookers, egg cookers, holding/warming/<u>retherm</u> ovens. The additional heat and moisture loads generated by such appliances shall be accounted for in the design of the HVAC system. 		

Supporting Information

This is a clarification of this exceptions original intent. The existing item number 3 was added a two code cycles ago with the intent to only cover counter mounted equipment. However the IMC committee deleted the language "counter mounted" because of the lack of a clear definition as to what exactly is counter mounted. Designers and installers are abusing this section to promote the installation of large cabinet floor mounted bread and convection ovens without any type of hood. That was never the intent of item number 3. You not only have to consider the heat and moisture of these appliances generate but you must also take into account the heat that these food emit into the kitchen environment after they are removed from the appliance. Depending on the appliance size an additional load of 3 or 4 tons of cooling may be necessary for an average size kitchen utilizing this exception for a free standing or floor mounted appliance. Unfortunately, the designers who are taking advantage of this exception are not adding the required additional AC loads. The intent of number 3 was more to the effect what the new number 4 reflects. You will notice all of the items listed are typically small in size and low heat producing equipment. A five feet tall bread or convection oven is not any where near the same application as a toaster or a hot dog cooker.

In the ROH the committee stated that appliance size need not be an issue. Are Type II hoods needed or not, that is the question that needs to be answered? This proposal answers that important question, yes! If the HVAC system can always be sized to eliminate the Type II hood requirements than the code should say so. It's just not the case, Type II hoods are necessary in some applications. VA submitted this code text to the IMC more than two cycles ago to add the exception number 2. The proposal was and is intended to give small type embellishments relief from type II hood requirements when a small adjustment is preformed on the HVAC calculation. Unfortunately the committee removed the term "counter" before appliances (because lack of definition) and this section is now being abused and used as justification for huge heat and steam producing equipment to not require hoods. The unfortunate reality is HVAC systems are not being adjusted and these small establishments are not suitable for the employee or customer comfort. Heat, steam, and particulate matter are being recirculated throughout these spaces and creates the potential for unhealthy condition for anyone who occupies the space.

ventilation system to deliver outdoor air to the breathing zone. Ventilation systems designed using the new procedures will result in slightly lower outdoor rates for most occupancies compared to the current code, reducing first costs and energy costs.

Bibliography:

ANSI/ASHRAE Standard 62.1-2004 Ventilation for Acceptable Indoor Air Quality, American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., Atlanta, GA

Cost Impact: The code change proposal will not increase the cost of construction, and in some instances will reduce the first cost of construction. Engineering design effort and jurisdictional plan review processes will not be materially affected due to the availability and greater specificity of compliance tools.

Committee Action:

Approved as Submitted

Committee Reason: The proposal updates the outdoor air ventilation requirements to reflect the latest technology and to be consistent with the requirements of ASHRAE 62.1-2004. It updates the ventilation rates in Table 403.3, adds a table for system efficiency and replaces the previous common ventilation system requirements with single zone and multiple zone recirculation system requirements.

Assembly Action:

None

Individual Consideration Agenda

This item is on the agenda for individual consideration because public comments were submitted.

Public Comment 1:

Lawrence Brown, CBO, National Association of Home Builders (NAHB), requests Disapproval.

Commenter's Reason: The proposed approach to achieve ventilation is incredibly and unnecessarily complicated. There is no justification for the changes other than it would be "consistent with ventilation rate procedures defined in ANSI/ASHRAE Standard 62.1-2004." But, there are no study references or evidence that a 3 year old standard is usable or improves air quality. Also, some of the ventilation rates in the proposal are different than ASHRAE 62.1 (e.g. Garages, common for multiple units – 0.75 cfm/ft² - proposed vs. 1.5 in 62.1). In addition, some of the definitions (i.e., net occupiable floor area and occupiable floor space) are completely non conventional, difficult to calculate and different than other standard area calculations that are better understood. The claim that the cost impact of this proposal will "not increase and in some instances ... reduce the first cost" is completely unfounded. All this considered, there is absolutely no basis nor need to support exchanging the current IMC provisions with the proposed text.

Public Comment 2:

Ken Schoonover, P.E., KMS Associates, Inc., representing Airxchange, Inc., requests Disapproval.

Commenter's Reason: This proposal is premature. While ASHRAE 62-2004 may have evolved to this point based on recent research, it is not ready to be mandated as the required design criteria across the board for all buildings. The standard is heavy on the theoretical side and short on the practical realities and limitations of the construction industry today. There are enforceability problems with the proposal and the standard. There is a gaping hole in the standard wherever smoking is permitted in buildings. There are other minor problems with the language and format. ASHRAE 62-2004 needs to evolve further before it is suitable for use as the code-mandated basis for design of ALL buildings and structures.

ENFORCEMENT OFFICIALS – ARE YOUR PERMIT APPLICANTS EQUIPPED FOR THIS? Many buildings go up without the services of a design engineer. Will everyone who has to design and build be familiar enough with the calculation procedure to get it right? The proponent says engineering design effort will not be materially affected because of the availability of compliance tools. Are design-build contractors ready for this? Are these tools sufficiently available, well known and understood? If the answer is no, and I believe it is no, then this is premature.

NO DESIGN CRITERIA FOR SMOKING. The proposed ventilation rates are based on no smoking (proposed Section 403.3). Smoking rates in the U.S. are down and smoking bans may be growing, but indoor smoking is not universally prohibited and is not likely to be any time soon. The code will then require design by "accepted engineering practice". What is that? All that ASHRAE 62-2004 provides (Section 6.2.9 of the standard) is "Smoking areas shall have more ventilation and/or air cleaning than comparable no-smoking areas." How much is more? Section 6.2.9 goes on to say "Specific ventilation rate requirements cannot be determined until cognizant authorities determine the concentration of smoke that achieves an acceptable level of risk." There is no criteria.

ENFORCEMENT OFFICIALS – HOW WILL YOU ENFORCE VENTILATION FOR SMOKING AREAS? The term "accepted engineering practice" is widely recognized as vague, subjective and just plain poor code language. However, even if it is generally understood to mean ASHRAE 62-2004, there still is no meaningful, enforceable criteria. If the rate is increased by ANY amount over the rate from Table 403.3, or if air cleaners are used, regardless of how insufficient it might actually be, the design complies. Is this reasonable and appropriate standard? Can this be relied upon to ensure that the health and safety objective of the code and the standard will be achieved? More likely what you will do is trust the designer. That may work for structural design, but I'd refer you back to the first question above, is the industry equipped to deal with this standard across the board?

ENFORCEMENT WILL BE MORE DIFFICULT – Currently, the occupancy, the occupant load and the required ventilation rate for the space is specified. Relatively easy to determine if the design complies. The basic requirement proposed here, per 403.2, is airflow to the breathing zone. You will either have to assume that all of the required outdoor air delivered will actually reach the breathing zone, or relate the actual measured airflow rate to the engineers calculations, which factors in ventilation efficiency, system efficiency and calculation of net square footage. You cannot directly relate the measured rate to the required rate without these design variables and assumptions. Will you verify the validity of the designer's assumptions? What extent of review will be necessary when there is no design engineer involved? Have you seen the available compliance tools? Are you comfortable with them and do they meet your needs?

Other problems:

THE OCCUPANT LOAD RATES WILL NOT BE CONSISTENT WITH THE BUILDING CODE – The occupants/1,000 sq. ft. currently in Table 403.3 are consistent with the occupant load that the IBC uses for means of egress design. The proposal in many cases reduces the number (e.g. offices from 7 to 5; Classrooms from 50 to 25 or 35; library reading rooms from 20 to 10). The system can be designed for substantially fewer people than are allowed by the building code. This does not make sense.

BUILDING CONSTRUCTION NOW A FACTOR FOR SPACES NOT SPECIFICALLY LISTED IN TABLE 403.3 – When you have an occupancy not represented in Table 403.3, Section 403.3 would say that you use the listed occupancy classification that is most similar in terms of density, activity and “building construction”. What is meant by “building construction”? This is either an unknown factor that cannot be determined or enforced, or it is completely meaningless, since nothing in the occupancy listings relates to building construction. At best, this adds unnecessary confusion.

REFERENCES TO TABLE 403.3 NOTES ARE WRONG – Section 403.2.1(4) refers to note h. As proposed, there would no longer be a note h. If existing note i is to be relabeled note h to maintain alphabetical consistency, the text would be wrong. This is likely an unintended error, but are there other errors?

I ask you to disapprove this change for these reasons.

Final Action: AS AM AMPC___ D

M46-06/07 403.2, Chapter 15

Proposed Change as Submitted:

Proponent: Michael Burnetter, P.E., New York State Department of State Codes Division, representing himself

1. Revise as follows:

403.2 Outdoor air required. The minimum ventilation rate of outdoor air shall be determined in accordance with Section 403.3.

Exceptions:

1. Where the registered design professional demonstrates that an engineered ventilation system design will prevent the maximum concentration of contaminants from exceeding that obtainable by the rate of outdoor air ventilation determined in accordance with Section 403.3, the minimum required rate of outdoor air shall be reduced in accordance with such engineered system design.
2. Where the ventilation system is designed in accordance with ANSI/ASHRAE 62.1

2. Add standard to Chapter 15 as follows:

ASHRAE

Standard 62.1-2004 Ventilation for Acceptable Air Quality

Reason: The purpose of this proposal is to allow the use of ANSI/ASHRAE 62.1 as an acceptable alternative to section 403.2. The ANSI/ASHRAE 62.1-2004 is a reference standard already found in the IEBC. Adding this reference standard to the IMC will create a set of uniform codes. Currently, the exception allows for an engineered system but provides no further guidance. Should a code official or design engineer be looking for a detailed standard which may be relied upon as an acceptable compliance path for ventilation rates in addition to the prescriptive tables of the IMC or the broad brush “engineered system” exception, then incorporating this reference standard into the IMC would provide for that flexibility while having a detailed standard as a point of reference. As ASHRAE is the expert organization in the field of HVAC design, this standard can be viewed as a fully vetted and debated standard, the purpose of which is to guide the design and control of ventilation systems.

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

Analysis: Results of review of the proposed standard will be posted on the ICC website by August 20, 2006.

Note: The following analysis was not in the Code Change Proposal book but was published in the “Errata to the 2006/2007 Proposed Changes to the International Codes and Analysis of Proposed Reference Standards” provided at the code development hearings:

Analysis: Review of proposed new standard indicated that, in the opinion of ICC Staff, the standard did comply with ICC standards criteria.

Committee Action:

Approved as Submitted

Committee Reason: This change allows the designer of ventilation systems to use the latest version of ASHRAE 62.1 as an alternate to the requirements of Section 403.3 rather than having to have the design approved as an alternate means in accordance with Section 105.2.

Assembly Action:

None

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Submitted by: William J. Hall Representing: VA Building and Code Officials Association
 Address: P.O. Box 12164 Richmond VA 23241 Phone No.: 804-649-8471
 Regulation Title: Uniform Statewide Building Code Section No(s): 903.3.1.2.2

Proposed Change: revise to read

903.3.1.2.2 Attics. Sprinkler protection in accordance with 903.3.1.1 shall be provided for attics in buildings of Type III, IV or V construction in the following occupancies.

1. Group R-2 which are designed, or developed and marketed to senior citizens, 55 years of age or older.
2. Group I-1.

Supporting Statement:

As written, this section does not give any guidance on which standard the sprinkler protection in the attic is designed to. It is assumed to be in accordance with NFPA 13. This added language will provide a clear intent of design. In addition, an attic which is built with non-combustible material would be allowed to take advantage of exception #4 in **903.3.1.1.1 Exempt locations.**

Rodgers, Emory

From: Dean, Glenn
Sent: Wednesday, February 28, 2007 4:30 PM
To: Rodgers, Emory
Cc: Hodge, Vernon; Hall, Jay; Altizer, Ed; 'Shapiro, Steve'
Subject: RE:

Maybe the USBC should be changed to say the following:

903.3.1.2.2 Attics. Sprinkler protection in accordance with Section 903.3.1.1 shall be provided for in attics in buildings of Type III, IV or V construction in the following occupancies.

1. Group R-2 which are designed, or developed and marketed to senior citizens, 55 years of age or older.
2. Group I-1.

The practical application of this language could be applied by installing the riser and locate a dry-pipe valve just prior to the attic space. Somewhere before or below that dry-pipe valve you can branch off to supply your 13R system. The dry system in the attic would be calculated on the 13 standard.

This seems to be a messy way of fixing what I view as an "Oops!" Besides, I'm in the minority opinion that the above section shouldn't have been written in the first place. For the fires that were cited as justification for the above section, as I recall, the systems did what they were supposed to do.

Glenn A. Dean, CBO, CFM
 Deputy State Fire Marshal / Fire Safety Engineer
 804/371-7182

From: Rodgers, Emory
Sent: Wednesday, February 28, 2007 3:34 PM
To: stroutman@marlyndv.com
Cc: Hodge, Vernon; Dean, Glenn; Hall, Jay; Altizer, Ed; Shapiro, Steve
Subject:

Mr. Troutman: The 2002 and 2005 NEC do have some different text for emergency power for fire pumps in case one might be necessary for your proposed R-2 4 stories or less seniors building where the 2003 USBC now requires the attic to be sprinkled. It has already been pointed out clarification is necessary and will be in our 2006 regulatory process underway as to how and what type of sprinkler system is to be installed in the attic space. It wasn't the intent, I believe, to have NFPA 13R systems become NFPA 13 sprinkler systems for the R-2 4 stories or less apartment buildings by the USBC now requiring the attic space to be sprinkled.

Because of the USBC change, your sprinkler contractor is designing the attic space with a 13 system with a fire pump and emergency generator adding a significant cost of some \$169,000 to your 13R cost of \$270,000. That is an enormous cost factor assuming the fire pump and generator are really necessary. I suspect the attic space is also an insignificant square footage when compared to the 4 stories of 140 apartments and 175,000s.f.?

When the work group recommended to sprinkle the attics the concern and intent was to provide the seniors more time and warning to exit which the 13R system does for life safety system while the 13 is both life and property protection. Many 13R buildings also gain significant property protection when the fire occurs within the dwelling units or interior corridors and now from dry sprinkler heads off the 13R system for balconies and exterior breezeways.

Some of the former work group members likely thought since dozens of sprinkler heads could be installed in the 13R system for balconies and breezeways, then just extend dry heads into the attic space using the same 2-head design used for the habitable spaces while the fire protection experts understood the attic requirement to be a 13 design requirement in that 13R exempts attics. We will meet April 9th here at DHCD and you are invited to share your experiences. I see several options on how to clarify this matter that will be for a work group to digest this spring and early summer.

Specific to the generator issue the 2005 NEC could be used by the building official to approve a modification since one might construe that a separate service or tap ahead of the main clarifies and meets the reliability criteria.

**Proposed change to the 2003 International Fuel Gas Code (IFGC) Section 503.3.4
Ventilating hoods and exhaust systems**

Submitted by;
J.D. Mitchell, Fire Protection Field Supervisor
Loudoun County Department of Building and Development

Proposed change;
Section 503.3.4 of the IFGC needs to be changed to read, “ Where any cooking appliance or cooking equipment, either manually or automatically operated, in addition to any other automatically operated equipment is vented through a ventilating hood or exhaust system equipped with a damper or power means of exhaust, provisions shall be made to allow the flow of gas to the appliance or equipment ~~main burners~~ only when the damper is open to a position to properly vent the equipment and when the power means of exhaust is in operation.”

Rational;
Section 503.3.4 of the IFGC deals with when exhaust systems must be in operation. Although not specifically worded as such, this section will pertain to commercial cooking appliances found under kitchen hood exhaust systems. These appliances require the ventilation of grease laden vapors and products of combustion

The current wording of Section 503.3.4 states, “...Where automatically operated equipment is vented through a ventilating hood or exhaust system equipped with a damper or power means of exhaust, provisions shall be made to allow the flow of gas to the main burners only when the damper is open to a position to properly vent the equipment and when the power means of exhaust is in operation.”

This Section currently covers “automatic” appliances such as deep fryers, some griddles and ovens, all typically thermostatically controlled appliances. It will not cover ranges, char broilers, some griddles or wok tables, all typically manually controlled. These “manually” controlled appliances still generate grease laden vapors and products of combustion. The proposed change will clarify that all cooking equipment requires ventilation during operation.

Add a new Section to read;
503.3.4.1 Bypass lines and jumpers. Bypass lines and jumpers shall not be installed around any valve or electric solenoid allowing any gas to the appliances or equipment.

Rational;
These bypass lines are being installed on most every kitchen hood system in order to allow gas to keep pilots lit. A kitchen cooking appliance manufacturer was contacted and ask how these bypass lines would affect the operation of their appliance. These lines are not listed, tested nor approved for use with any appliance. Further, use of these lines will void the listing of the appliance. In order to receive a listing from Underwriters Laboratory or Factory Mutual, the appliances are tested with an X size gas line under X

gas pressure. If the appliance calls for a one inch gas line and 3 psi gas pressure, a ¼ inch copper bypass line is clearly not a one inch line and can adversely change the required gas pressure. Use of these lines may also contribute to incomplete combustion thus causing a carbon monoxide build up. A 10 burner range requiring a one inch gas line, but utilizing a ¼ inch copper bypass line, can have 6 to 8 burners operating however, it would be questionable if these burners are functioning correctly. As in this situation where the ventilating hood would be off and gas is being supplied via the bypass line, any products of combustion be it complete or incomplete would not be properly ventilated from the building.

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<p>Submitted by: Guy Tomberlin, Fairfax County</p> <p>Representing: VA Plumbing and Mechanical Inspectors Association (VPMIA)</p> <p>Address: 12055 Government Center Pkwy., Suite 630 Fairfax, VA 22030 Phone No.: 703-324-1611</p> <p>Regulation Title: USBC Part I New Construction - IFGC Technical Amendments Submitted by J D Mitchell.</p> <p>Section No(s): Section 503.3.4</p>		

Supporting statement of explanation:

**SECTION 505 (IFGC)
DIRECT-VENT, INTEGRAL VENT,
MECHANICAL VENT AND
VENTILATION/EXHAUST HOOD VENTING**

505.1 General. The installation of direct-vent and integral vent appliances shall be in accordance with Section 503. Mechanical venting systems and exhaust hood venting systems shall be designed and installed in accordance with Section 503.

505.1.1 Commercial cooking appliances vented by exhaust hoods. Where commercial cooking appliances are vented by means of the Type I or II kitchen exhaust hood system that serves such appliances, the exhaust system shall be fan powered and the appliances shall be interlocked with the exhaust hood system to prevent appliance operation when the exhaust hood system is not operating. Where a solenoid valve is installed in the gas piping as part of an interlock system, gas piping shall not be installed to bypass such valve. Dampers shall not be installed in the exhaust system.

Exception: An interlock between the cooking appliance(s) and the exhaust hood system shall not be required where heat sensors or other approved methods automatically activate the exhaust hood system when cooking operations occur.

This is the new text included in the 2006 International Fuel Gas Code (IFGC). It appears to adequately address the proponents concerns. The proponent's proposal and the new IFGC text actually achieve the same net effect. They both require all appliances to be interlocked and they both prohibit by-pass piping around solenoids. However, by using the newly worded text of Section 505.1.1 (which includes reference to Section 503) of 2006 IFGC eliminates the need for the proposed technical amendment to the USBC IFGC requirements.

Attn: State Building Code Administrator

Dear Sir:

The Washington Metropolitan Area Transit Authority (WMATA), created effective February 20, 1967, is an interstate compact agency and, by the terms of its enabling legislation, is an agency and instrumentality of the District of Columbia, State of Maryland, and Commonwealth of Virginia. WMATA was created by the aforementioned states and the District of Columbia to plan, finance, construct and operate a comprehensive mass transit system for the Washington Metropolitan Area.

WMATA is empowered by the signatory parties to:

1. Plan, Develop, Finance and Cause to be operated improved transit facilities, in coordination with transportation and general development planning for the Zone, as part of a balanced regional system of transportation, utilizing to their best advantage the various modes of transportation
2. To coordinate the operation of the public and privately owned or controlled transit facilities, to the fullest extent practicable, into a unified regional transit system without unnecessary duplicating service
3. To serve such other regional purposes and to perform such other functions as the signatories may authorize by appropriate legislation.

In the State of Virginia, at the present time WMATA is the technical manager and eventual owner and operator of the extension of the Metro system to the Dulles Airport. This project is scheduled in two separate contracts. The first contract is ongoing and consists of the extension of the Metro system from the West Falls Church Station to Wiehle Avenue in Fairfax County. This almost \$2 Billion project currently in design stage, is expected to break ground this year and completion of approximately 12 miles of alignment is expected in 2011. This 12 miles of alignment consists of stations, buildings, tunnels, aerial structures, and at grade structures. More information is available on our website www.wmata.com.

During the design effort for the Dulles Contract, WMATA noticed a deficiency in the building codes promulgated by the State of Virginia. The deficiency arises from the fact that current provision pertaining to FIRE PROTECTION in the 2003 International Building Code (IBC) or the Virginia Uniform Statewide Building Code (VUSBC) are not applicable to transit facilities and in particular underground transit structures. Fire protection requirements for transit and passenger railway facilities are more accurately depicted in the National Fire Protection Association Document # 130, referred to as NFPA 130. Therefore, we are proposing that the VUSBC include an amendment to Chapter 9 of the IBC. The proposed amendment is described in the attached Regulatory Code Change Form.

We were informed by your office that the 2006 edition of the VUSBC is scheduled to publish in 2008, at which time most of the construction on our major project in Virginia would be ongoing or close to completion. Hence, in the interim we request that you notify Building Officials and Inspectors in the County of Fairfax of the pending change and the necessity to maintain compliance with NFPA 130 during this transient period as construction on the Dulles Corridor Metrorail Project (DCMP) is ongoing.

We share your commitment to the citizens of Virginia and the general public at large and request that you support our effort to improve safety and enhance value for our customers.

Very truly yours,

M. Nasir Nasim, PE, PMP
Office of Chief Engineer- Facilities
Department of Planning, Development, Engineering and Construction
WMATA

3/24/2006

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Submitted by: M. Nasir Nasim, PE, PMP	Representing: Washington Metropolitan Area Transit Authority (W.M.A.T.A.)
Address: 600 Fifth St, NW, Washington, DC 20001	Phone No.: (202) 962-1397
Regulation Title: Virginia Uniform Statewide Building Code (VUSBC) Section No(s): Chapter 9 of International Building Code (IBC) and Chapter 35 of IBC	

Proposed Change:

Chapter 9 – Fire Protection Systems:

Include:

Fire protection requirements for the following transit and passenger rail systems shall be in accordance with NFPA 130:

1. New Passenger Rail Systems and extensions to existing passenger rail systems;
2. New Underground, Surface, and Elevated Fixed Guideway Transit Systems, including trainways, fixed guideway transit stations, and vehicle maintenance and storage areas and extensions to existing fixed guideway systems;
3. Life safety from fire in fixed guideway transit stations, trainways, and outdoor vehicle maintenance and storage areas;
4. Emergency procedures for new and existing transit and rail systems as identified in 1, 2 and 3 above

Chapter 35 – Referenced Standards

Include:

Reference to NFPA 130 – Standard for Fixed Guideway and Passenger Rail Systems, 2003 Edition.
 (NFPA is acronym for National Fire Protection Association - www.nfpa.org)

Supporting Statement:

Fire Protection Requirements of the VUSBC and IBC 2003 are not applicable to Fixed Guideway Transit and Passenger Rail Systems. Requirements of the NFPA 130 are more suited too, and more specifically apply to Fixed Guideway Transit and Passenger Rail Systems, reflect industry best practices and results of scientific and engineering testing and analysis.

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<p>Submitted by: Guy Tomberlin, Fairfax County Representing: VA Building and Code Officials Association (VBCOA) and VA Plumbing and Mechanical Inspectors Association (VPMIA)</p> <p>Address: 12055 Government Center Pkwy., Suite 630 Fairfax, VA 22030 Phone No.: 703-324-1611</p> <p>Regulation Title: _____ Section No(s): _____</p>		

Proposed Change:

Proposal:

Delete these definitions and terms with out substitution:

CONFINED SPACES. A space having a volume less than 50 cubic feet per 1,000 British thermal units per hour (Btu/h) (4.8 m³/kW) of the aggregate input rating of all appliances installed in that space.

UNCONFINED SPACE. A space having a volume not less than 50 cubic feet per 1,000 Btu/h (4.8m³/kW) of the aggregate input rating of all appliances installed in that space. Rooms communicating directly with the space in which the appliances are installed, through openings not furnished with doors, are considered a part of the unconfined space.

UNUSUALLY TIGHT CONSTRUCTION. Construction meeting the following requirements:

1. Walls exposed to the outdoor atmosphere having a continuous water vapor retarder with a rating of 1 perm [57 ng/(s · m · Pa)] or less with openings gasketed or sealed;
2. Openable windows and doors meeting the air leakage requirements of the *International Energy Conservation Code*, Section 402.4.2; and
3. Caulking or sealants are applied to areas, such as joints around window and door frames, between sole plates and floors, between wall ceiling joints, between wall panels, at penetrations for plumbing, electrical and gas lines and at other openings.

SECTION 701

GENERAL

701.1 Scope. The provisions of this chapter shall govern the requirements for combustion and dilution air for fuel burning appliances other than gas fired appliances. The requirements for combustion and dilution air for gas fired appliances shall be in accordance with the *International Fuel Gas Code*.

Liquid- and solid-fuel-burning appliances shall be provided with a supply of air for fuel combustion, draft hood dilution and ventilation of the space in which the appliance is installed, in accordance with the appliance manufactures installation instructions and NFPA 31. The methods of providing combustion air in this chapter do not apply to fireplaces, fireplace stoves and direct-vent appliances. This chapter shall not apply to natural gas or liquefied petroleum applications, the requirements for combustion and dilution air for gas-fired appliances shall be in accordance with the *International Fuel Gas Code*.

DELETE THE REMAINING TEXT OF THE ENTIRE CHAPTER 7

Supporting Statement:

This proposal was approved as submitted at the Public Hearings in FL.

These definitions have been deleted from the IFGC. They were used to determine if a structure needed the addition of outdoor air for combustion air.

Testing from the fuel gas industry has determined that "unusually tight", "unconfined space", and "confined space", are not factors of any relevance when determining if combustion air needs to be obtained from outdoors.

The provisions found in Chapter 7 are based on fuel gas provisions which are not germane to liquid or solid fuel appliances. NFPA 31 is a maintained document that contains the relevant information for liquid and solid fuel appliances. NFPA 31 is already a reference document in the IRC so there is not an increased cost to construction. As always the manufactures installation instructions are part of code requirements.

to restrain, correct or abate the violation or to require the removal or termination of the use of the building or structure involved. In cases where the locality so authorizes, the code official may issue or obtain a summons or warrant.

104.5.7 Penalties and abatement. Penalties for violations of this code shall be as set out in Section 36-106 of the Code of Virginia. The successful prosecution of a violation of the code shall not preclude the institution of appropriate legal action to require correction or abatement of a violation.

**SECTION 105
UNSAFE STRUCTURES OR STRUCTURES UNFIT FOR
HUMAN HABITATION**

105.1 General. This section shall apply to existing buildings or structures which are classified as unsafe or unfit for human occupancy. All such structures shall be made safe through compliance with this code or shall be vacated and secured against public entry; however, such vacant and secured structures shall still be subject to other applicable requirements of this code. Notwithstanding the above, when the code official determines that an unsafe structure or a structure unfit for human occupancy constitutes such a hazard that it should be razed or removed, then the code official shall be permitted to order the demolition of such structures in accordance with applicable requirements of this code.

Note: Buildings or structures which become unsafe during construction are regulated under the Virginia Construction Code.

105.2 Inspection of unsafe or unfit structures. The code official shall inspect any structure reported as unsafe or unfit for human habitation and shall prepare a report to be filed in the records of the local enforcing agency and a copy issued to the owner. The report shall include the use of the structure and a description of the nature and extent of any conditions found.

105.3 Unsafe conditions not related to maintenance. When the code official finds a condition that constitutes a serious and dangerous hazard to life or health in a building or structure constructed prior to the initial edition of the USBC and when that condition is of a cause other than improper maintenance or failure to comply with state or local building codes which were in effect when the building or structure was constructed, then the code official shall be permitted to order those minimum changes to the design or construction of the building or structure to remedy the condition.

105.3.1 Limitation to requirements for retrofitting. In accordance with Section 103.2, this code does not generally provide for requiring the retrofitting of any building or structure. However, conditions may exist in buildings or structures constructed prior to the initial edition of the USBC because of faulty design or equipment that constitute a danger to life or health or a serious hazard. Any changes to the design or construction required by the code official under this section shall be only to remedy the serious hazard or danger to life or health and such changes shall not be required to fully comply with the requirements of the Virginia Construction Code applicable to newly constructed buildings or structures.

105.4 Notice of unsafe structure or structure unfit for human occupancy. When a building or structure is determined to be unsafe or unfit for human occupancy by the code official, a written notice of unsafe structure or structure unfit for human occupancy shall be issued in person to the owner, the owner's agent or the person in control of such structure. The notice shall specify the corrections necessary to comply with this code, or if the structure is required to be demolished, the notice shall specify the time period within which the demolition must occur. Requirements in Section 104.5.4 for notices of violation are also applicable to notices issued under this section to the extent that any such requirements are not in conflict with the requirements of this section. In addition, the notice shall contain a statement requiring the person receiving to notice to either accept or reject the terms of the notice.

Note: Whenever possible, the notice should also be given to any tenants of the affected building.

105.5 Posting of notice. If the notice is unable to be issued in person as required by Section 105.4, then the notice shall be sent by registered or certified mail to the last known address of the responsible party and a copy of the notice shall be posted in a conspicuous place on the premises.

105.6 Posting of placard. In the case of a structure unfit for human habitation, at the time the notice is issued, a placard with the following wording shall be posted at the entrance to the building: "THIS STRUCTURE IS UNFIT FOR HABITATION AND ITS USE OR OCCUPANCY HAS BEEN PROHIBITED BY THE CODE OFFICIAL." In the case of an unsafe structure, if the notice is not complied with, a placard with the above wording shall be posted at the entrance to the building. After a building is placarded, entering the building shall be prohibited except as authorized by the code official to make inspections, to perform required repairs or to

demolish the building. In addition, the placard shall not be removed until the building is determined by the code official to be safe to occupy, nor shall the placard be defaced.

105.7 Revocation of certificate of occupancy. If a notice of unsafe structure or structure unfit for human habitation is not complied with within the time period stipulated on the notice, the code official shall be permitted to request the local building department to revoke the certificate of occupancy issued under the Virginia Construction Code.

105.8 Vacant and open structures. When an unsafe structure or a structure unfit for human habitation is open for public entry at the time a placard is issued under Section 105.6, the code official shall be permitted to authorize the necessary work to make such structure secure against public entry whether or not legal action to compel compliance has been instituted.

105.9 Emergency repairs and demolition. To the extent permitted by the locality, the code official may authorize emergency repairs to unsafe structures or structures unfit for human habitation when it is determined that there is an immediate danger of any portion of the unsafe structure or structure unfit for human habitation collapsing or falling and when life is endangered. Emergency repairs may also be authorized where there is a code violation resulting in the immediate serious and imminent threat to the life and safety of the occupants. The code official shall be permitted to authorize the necessary work to make the structure temporarily safe whether or not legal action to compel compliance has been instituted. In addition, whenever an owner of an unsafe structure or structure unfit for human habitation fails to comply with a notice to demolish issued under Section 105.4 in the time period stipulated, the code official shall be permitted to cause the structure to be demolished. In accordance with Sections 15.2-906 and 15.2-1115 of the Code of Virginia, the legal counsel of the locality may be requested to institute appropriate action against the property owner to recover the costs associated with any such emergency repairs or demolition and every such charge that remains unpaid shall constitute a lien against the property on which the emergency repairs or demolition were made and shall be enforceable in the same manner as provided in Articles 3 (Section 58.1-3490 et seq.) and 4 (Section 58.1-3965 et seq.) of Chapter 39 of Title 58.1 of the Code of Virginia.

Note: Code officials and local governing bodies should be aware that other statutes and court decisions may impact on matters relating to demolition, in particular whether newspaper publication is required if the owner cannot be located and whether the demolition order must

be delayed until the owner has been given the opportunity for a hearing.

105.10 Closing of streets. When necessary for public safety, the code official shall be permitted to order the temporary closing of sidewalks, streets, public ways or premises adjacent to unsafe or unfit structures and prohibit the use of such spaces.

SECTION 106 APPEALS

106.1 Establishment of appeals board. In accordance with Section 36-105 of the Code of Virginia, there shall be established within each local enforcing agency a LBBCA. Whenever a county or a municipality does not have such a LBBCA, the local governing body shall enter into an agreement with the local governing body of another county or municipality or with some other agency, or a state agency approved by DHCD for such appeals resulting therefrom. Fees may be levied by the local governing body in order to defray the cost of such appeals. The LBBCA for hearing appeals under the Virginia Construction Code shall be permitted to serve as the appeals board required by this section.

106.2 Membership of board. The LBBCA shall consist of at least five members appointed by the locality for a specific term of office established by written policy. Alternate members may be appointed to serve in the absence of any regular members and as such, shall have the full power and authority of the regular members. Regular and alternate members may be reappointed. Written records of current membership, including a record of the current chairman and secretary shall be maintained in the office of the locality. In order to provide continuity, the terms of the members may be of different length so that less than half will expire in any one-year period.

106.3 Officers and qualifications of members. The LBBCA shall annually select one of its regular members to serve as chairman. When the chairman is not present at an appeal hearing, the members present shall select an acting chairman. The locality or the chief executive officer of the locality shall appoint a secretary to the LBBCA to maintain a detailed record of all proceedings. Members of the LBBCA shall be selected by the locality on the basis of their ability to render fair and competent decisions regarding application of the USBC and shall to the extent possible, represent different occupational or professional fields relating to the construction industry. At least one member should be an experienced builder; at least one member should be an RDP, and at least one member should be an experienced property manager.

104.5.1 Delegation of authority. The code official may delegate powers and duties except where such authority is limited by the local government. When such delegations are made, the code official shall be responsible for assuring that they are carried out in accordance with the provisions of this code.

104.5.2 Issuance of modifications. Upon written application by an owner or an owner's agent, the code official may approve a modification of any provision of this code provided the spirit and intent of the code are observed and public health, welfare and safety are assured. The decision of the code official concerning a modification shall be made in writing and the application for a modification and the decision of the code official concerning such modification shall be retained in the permanent records of the local enforcing agency.

104.5.2.1 Substantiation of modification. The code official may require or may consider a statement from a professional engineer, architect or other person competent in the subject area of the application as to the equivalency of the proposed modification.

104.5.3 Inspections. The code official may inspect buildings or structures to determine compliance with this code and shall carry proper credentials when performing such inspections.

104.5.4 Notices, reports and orders. Upon findings by the code official that violations of this code exist, the code official shall issue a correction notice or notice of violation to the owner or the person responsible for the maintenance of the structure.

104.5.4.1 Correction notice. The correction notice shall be a written notice of the defective conditions. The correction notice shall require correction of the violation or violations within a reasonable time unless an emergency condition exists as provided under the unsafe building provisions of Section 105. Upon request, the correction notice shall reference the code section that serves as the basis for the defects and shall state that such defects shall be corrected and reinspected in a reasonable time designated by the code official.

104.5.4.2 Notice of violation. If the code official determines there are violations of this code other than those for unsafe structures, unsafe equipment or structures unfit for human occupancy under Section 105, the code official may issue a notice of violation to be

communicated promptly in writing to the owner or the person responsible for the maintenance or use of the building or structure in lieu of a correction notice as provided for in Section 104.5.4.1. In addition, the code official shall issue a notice of violation for any uncorrected violation remaining from a correction notice established in Section 104.5.4.1. A notice of violation shall be issued by the code official before initiating legal proceedings unless the conditions violate the unsafe building conditions of Section 105 and the provisions established therein are followed. The code official shall provide the section numbers to the owner for any code provision cited in the notice of violation. The notice shall require correction of the violation or violations within a reasonable time unless an emergency condition exists as provided under the building provisions of Section 105. The owner or person to whom the notice of violation has been issued shall be responsible for contacting the code official within the time frame established for any reinspections to assure the violations have been corrected. The code official will be responsible for making such inspection and verifying the violations have been corrected. In addition, the notice of violation shall indicate the right of appeal by referencing the appeals section of this code.

Note: Work done to correct violations of this code is generally subject to the permit, inspection and approval provisions of the Virginia Construction Code.

104.5.5 Coordination of inspections. The code official shall coordinate inspections and administrative orders with any other state or local agencies having related inspection authority and shall coordinate those inspections required by the Virginia Statewide Fire Prevention Code (13 VAC 5-51) for maintenance of fire protection devices, equipment and assemblies so that the owners and occupants will not be subjected to numerous inspections or conflicting orders.

Note: The Fire Prevention Code requires the fire official to coordinate such inspections with the code official.

104.5.6 Further action when violation not corrected. If the responsible party has not complied with the notice of violation, the code official shall submit a written request to the legal counsel of the locality to institute the appropriate legal proceedings

to restrain, correct or abate the violation or to require the removal or termination of the use of the building or structure involved. In cases where the locality so authorizes, the code official may issue or obtain a summons or warrant.

104.5.7 Penalties and abatement. Penalties for violations of this code shall be as set out in Section 36-106 of the Code of Virginia. The successful prosecution of a violation of the code shall not preclude the institution of appropriate legal action to require correction or abatement of a violation.

SECTION 105 UNSAFE STRUCTURES OR STRUCTURES UNFIT FOR HUMAN HABITATION

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105.2 Inspection of unsafe or unfit structures. The code official shall inspect any structure reported as unsafe or unfit for human habitation and shall prepare a report to be filed in the records of the local enforcing agency and a copy issued to the owner. The report shall include the use of the structure and a description of the nature and extent of any conditions found.

105.3 Unsafe conditions not related to maintenance. When the code official finds a condition that constitutes a serious and dangerous hazard to life or health in a building or structure constructed prior to the initial edition of the USBC and when that condition is of a cause other than improper maintenance or failure to comply with state or local building codes which were in effect when the building or structure was constructed, then the code official shall be permitted to order those minimum changes to the design or construction of the building or structure to remedy the condition.

105.3.1 Limitation to requirements for retrofitting. In accordance with Section 103.2, this code does not generally provide for requiring the retrofitting of any building or structure. However, conditions may exist in buildings or structures constructed prior to the initial edition of the USBC because of faulty design or equipment that constitute a danger to life or health or a serious hazard. Any changes to the design or construction required by the code official under this section shall be only to remedy the serious hazard or danger to life or health and such changes shall not be required to fully comply with the requirements of the Virginia Construction Code applicable to newly constructed buildings or structures.

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Note: Whenever possible, the notice should also be given to any tenants of the affected building.

105.5 Posting of notice. If the notice is unable to be issued in person as required by Section 105.4, then the notice shall be sent by registered or certified mail to the last known address of the responsible party and a copy of the notice shall be posted in a conspicuous place on the premises.

105.6 Posting of placard. In the case of a structure unfit for human habitation, at the time the notice is issued, a placard with the following wording shall be posted at the entrance to the building: "THIS STRUCTURE IS UNFIT FOR HABITATION AND ITS USE OR OCCUPANCY HAS BEEN PROHIBITED BY THE CODE OFFICIAL." In the case of an unsafe structure, if the notice is not complied with, a placard with the above wording shall be posted at the entrance to the building. After a building is placarded, entering the building shall be prohibited except as authorized by the code official to make inspections, to perform required repairs or to

Chapter 3

GENERAL REQUIREMENTS

Delete Section 302.1 of the IPMC.

Change Section 302.2 of the IPMC to read:

302.2 Grading and drainage. All premises shall be graded and maintained to protect the foundation walls or slab of the structure from the accumulation and drainage of surface or stagnant water in accordance with the Virginia Construction Code.

Change Section 302.3 of the IPMC to read:

Sidewalks and driveways. All sidewalks, walkways, stairs, driveways, parking spaces and similar spaces regulated under the Virginia Construction Code shall be kept in a proper state of repair, and maintained free from hazardous conditions. Stairs shall comply with the requirements of Sections 305 and 702.

Delete Section 302.4 of the IPMC.

Change Section 302.5 of the IPMC to read:

302.5 Rodent harborage. All structures and adjacent premises shall be kept free from rodent harborage and infestation where such harborage or infestation adversely affects the structures.

Delete Sections 302.8 and 302.9 of the IPMC.

Change Section 304.7 of the IPMC to read:

304.7 Roofs and drainage. The roof and flashing shall be sound, tight and not have defects that admit rain. Roof drainage shall be adequate to prevent dampness or deterioration in the walls or interior portion of the structure. Roof drains, gutters and downspouts shall be maintained in good repair and free from obstructions. Roof water shall be discharged in a manner to protect the foundation or slab of buildings and structures from the accumulation of roof drainage.

Change Section 304.14 of the IPMC to read:

304.14 Insect screens. During the period from April 1 to December 1, every door, window and other outside opening required for ventilation of habitable rooms, food preparation areas, food service areas or any areas where products to be included or utilized

in food for human consumption are processed, manufactured, packaged or stored, shall be supplied with approved tightly fitting screens of not less than 16 mesh per inch (16 mesh per 25 mm) and every swinging door shall have a self-closing device in good working conditions.

Exception: Screens shall not be required where other approved means, such as air curtains or insect repellent fans, are employed.

Delete Sections 304.18, 304.18.1, 304.18.2 and 304.18.3 of the IPMC.

Add Section 305.7 to the IPMC to read:

305.7 Lead-based paint. Interior and exterior painted surfaces of dwellings and child care facilities, including fences and outbuildings, that contain lead levels equal to or greater than 1.0 milligram per square centimeter or in excess of 0.50% lead by weight shall be maintained in a condition free from peeling, chipping and flaking paint or removed or covered in an approved manner. Any surface to be covered shall first be identified by approved warning as to the lead content of such surface.

Change Section 307.1 of the IPMC to read as follows and delete the remaining provisions of Section 307:

307.1 Accumulation of rubbish and garbage. The interior of every structure shall be free from excessive accumulation of rubbish or garbage.

Change Section 308.1 of the IPMC to read:

308.1 Infestation. This section shall apply to the extent that insect and rodent infestation adversely affects a structure. All structures shall be kept free from insect and rodent infestation. All structures in which insects or rodents are found shall be promptly exterminated by approved processes that will not be injurious to human health. After extermination, proper precautions shall be taken to prevent reinfestation.

Supporting Statement:

Language in the 2003 IRC Commentary suggests that "interior living conditions including odor, moisture and disease transmission" play a major role in interior living conditions. The Commentary further states that the "IRC regulates room sizes to assist in maintaining a safe and comfortable interior environment". The Commentary also states that not only is room size regulated but the number of occupants, ceiling height and ventilation all have an impact on the floor area of habitable spaces. This suggests that the intent of the IRC is to in some fashion regulate not only light and ventilation but occupant load also. The language contained in the 2006 version of the IPMC is both ambiguous and subjective rendering difficult to apply and impossible to enforce. The 2006 Edition fails to recognize the intent of the IRC to regulate occupant loads in residential structures. Therefore, this proposal is to retain the language contained in the subject sections the 2003 Edition of the IPMC in the administrative chapter of the Virginia Maintenance Code.

DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM
 (Use this form to submit changes to building and fire codes)

Address to submit to: DHCD, the Jackson Center 501 North Second Street Richmond, VA 23219-1321 Tel. No. (804) 371 - 7150 Fax No. (804) 371 - 7092 Email: bhcd@dhcd.state.va.us		Document No. _____ Committee Action: _____ BHCD Action: _____
Submitted by: <u>Ralston W. McInnis</u> Representing: <u>VBCOA Property Maintenance Committee</u> Address: <u>400 Granby Street - Norfolk, VA 23510</u> Phone No.: <u>(757) 664-6563</u> Regulation Title: <u>Overcrowding</u> Section No(s): <u>404.5 (IPMC)</u>		

Proposed Change:

404.4.1 Room area. Every living room shall contain at least 120 square feet (11.2m²) and every bedroom shall contain at least 70 square feet (6.5m²)- and every bedroom occupied by more than one person shall contain at least 50 square feet (4.6m²) of floor area for each occupant thereof.

~~**404.5 Overcrowding.** The number of persons occupying a dwelling unit shall not create conditions, that in the opinion of the code official, endangers the life, health, safety or welfare of the occupants.~~

404.5 Overcrowding. Dwelling units shall not be occupied by more occupants than permitted by the minimum area requirements of Table 404.5.

**TABLE 404.5
MINIMUM AREA REQUIREMENTS**

SPACE	MINIMUM AREA IN SQUARE FEET		
	1-2 OCCUPANTS	3-5 OCCUPANTS	6 OR MORE OCCUPANTS
Living room a,b	120	120	150
Dining room a,b	No requirement	80	100
Bedrooms	Shall comply with section 404.4.1		

For SI: 1square foot=0.093 m².

- a. See Section 404.5.2 for combined living room/dinning room spaces.
- b. See Section 404.5.1 for limitations on determining the minimum occupancy area for sleeping purposes.

404.5.1 Sleeping area. The minimum occupancy area required by Table 404.5 shall not be included as a sleeping area in determining the minimum occupancy area for sleeping purposes. All sleeping areas shall comply with Section 404.4.

404.5.2 Combined spaces. Combined living room and dining room spaces shall comply with the requirements of Table 404.5 if the total area is equal to that required for separate rooms and if the space is located so as to function as a combination living room/dining room.

Supporting Statement:

Language in the 2003 IRC Commentary suggests that "interior living conditions including odor, moisture and disease transmission" play a major role in interior living conditions. The Commentary further states that the "IRC regulates room sizes to assist in maintaining a safe and comfortable interior environment". The Commentary also states that not only is room size regulated but the number of occupants, ceiling height and ventilation all have an impact on the floor area of habitable spaces. This suggests that the intent of the IRC is to in some fashion regulate not only light and ventilation but occupant load also. The language contained in the 2006 version of the IPMC is both ambiguous and subjective rendering difficult to apply and impossible to enforce. The 2006 Edition fails to recognize the intent of the IRC to regulate occupant loads in residential structures. Therefore, this proposal is to retain the language contained in the subject sections the 2003 Edition of the IPMC in the administrative chapter of the Virginia Maintenance Code.

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Submitted by: <u>Ralston McInnis</u>	Representing: <u>VBCOA Property Maintenance Committee</u>
Address: <u>400 Granby - Norfolk, VA23510</u>	Phone No.: <u>(757) 664-6563</u>
Regulation Title: <u>Minimum Room Areas;</u>	Section No(s): <u>Section R304.2.1 (IRC)</u>

Proposed Change:
R304.2.1 Bedroom Requirements. Every bedroom occupied by more than one person shall contain at least 50 square feet (4.6 m2) of floor area for each occupant thereof.

R304.2.2 Overcrowding.
Dwelling units shall not be occupied by more occupants than permitted by the minimum area requirements of Table R304.2.2.

**TABLE 404.5
 MINIMUM AREA REQUIREMENTS**

SPACE	MINIMUM AREA IN SQUARE FEET		
	1-2 OCCUPANTS	3-5 OCCUPANTS	6 OR MORE OCCUPANTS
Living room a,b	120	120	150
Dining room a,b	No requirement	80	100
Bedrooms	Shall comply with section 404.4.1		

For SI: 1 square foot = 0.093 m2.

- a. See Section 404.5.2 for combined living room/dining room spaces.
- b. See Section 404.5.1 for limitations on determining the minimum occupancy area for sleeping purposes.

R304.2.2.1 Sleeping area.
The minimum occupancy area required by Table R304.2.2 shall not be included as a sleeping area in determining the minimum occupancy area for sleeping purposes. All sleeping areas shall comply with Section R304.2.

R304.2.2.2 Combined spaces.
Combined living room and dining room spaces shall comply with the requirements of Table R304.2.2 if the total area is equal to that required for separate rooms and if the space is located so as to function as a combination living room/dining room.

Supporting Statement:

Language in the 2003 IRC Commentary suggests that "interior living conditions including odor, moisture and disease transmission" play a major role in interior living conditions. The Commentary further states that the "IRC regulates room sizes to assist in maintaining a safe and comfortable interior environment". The Commentary also states that not only is room size regulated but the number of occupants, ceiling height and ventilation all have an impact on the floor area of habitable spaces. This suggests that the intent of the IRC is to in some fashion regulate not only light and ventilation but occupant load also. The language contained in the 2006 version of the IPMC is both ambiguous and subjective rendering difficult to apply and impossible to enforce. The 2006 Edition fails to recognize the intent of the IRC to regulate occupant loads in residential structures. Therefore, this proposal is to retain the language contained in the subject sections the 2003 Edition of the IPMC in the administrative chapter of the Virginia Maintenance Code.

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<p>Submitted by: <u> </u> Raiston McInnis <u> </u> Representing: <u> </u> VBCOA Property Maintenance Committee</p> <p>Address: <u> </u> 400 Granby, Norfolk, VA 23510 <u> </u> Phone No.: (757) 664 6563 <u> </u></p> <p>Regulation Title: <u> </u> Virginia Maintenance Code; Enforcement Generally <u> </u> Section No(s): Section 104 <u> </u></p>		
<p>Proposed Change: ADD</p> <p>Note: <u>Section 104.5.4.3</u> Work done to correct violations of this code is generally subject to the permit, inspection and approval provisions of the Virginia Construction Code.</p>		
<p>Supporting Statement: The International Property Maintenance Code requires existing structures and premises that are not in compliance with the code to be altered or repaired to meet the code. The note found as an addendum to Section 104.5.4.2 does not rise to the level of an enforceable standard. This change will allow the inspector/technical assistant to apply/enforce the minimum repair provisions of the Virginia Construction Code.</p>		

Vernon Hodge

From: Vernon Hodge
Sent: Monday, January 08, 2007 12:46 PM
To: 'Tom Coghill'
Cc: Alan McMahan; Emory Rodgers
Subject: Regulation of Fire Service Mains

Tom,

This email is in response to your prior email to me concerning the application of the Virginia Uniform Statewide Building Code (USBC) to fire service mains serving fire protection systems such as water sprinkler systems in buildings.

You have indicated that your locality has determined that the fire service mains are part of the fire protection systems of a building and therefore the International Building Code (IBC)'s reference to the International Fire Code (IFC) under the USBC makes the IFC provisions for fire protection systems applicable, which includes a reference to the National Fire Protection Association (NFPA)'s Standard No. 24 for fire service mains. That determination hinges on the fire service mains being encompassed by the definition of a "fire protection system" in the IBC and IFC, which definitions are identical.

Unfortunately, I have to disagree with that determination. In my opinion, fire service mains which are directly associated with a building fall under the definition of the "water supply system" rather than the definition of "fire protection system." Under the USBC, as the fire service main that is directly associated with a building is part of the water supply system, any applicable requirements of Chapter 29 of the IBC and therefore the International Plumbing Code would be applicable to fire service mains. In addition, Section 903.3.5 of the IBC addresses the water supply for automatic sprinkler systems and references the NFPA sprinkler standards and well as requiring backflow protection in accordance with both applicable provisions of the IBC and the International Plumbing Code. The NFPA sprinkler standards do have some requirements for fire service mains, however, they do not reference NFPA 24.

Therefore, I would say that the appropriate authority for the enforcement of Section 508 of the IFC for fire service mains which are not directly associated with a building would be the local fire official enforcing the Virginia Statewide Fire Prevention Code (SFPC), as the IFC is a referenced standard under the SFPC. It is difficult to draw the point of demarcation between the jurisdiction of the USBC versus the jurisdiction of the SFPC for fire mains. The Memorandum of Agreement which we entered with the Virginia Department of Health says that the USBC governs the water supply from the meter into the building. That might preclude the IFC provisions from being applicable, as the SFPC can only regulate those systems and equipment not regulated by the USBC. State law (which is copied verbatim in Section 103.1 of the USBC) states that the USBC only regulates the construction of a building and the equipment therein. If therein means the same as within, then an argument could be made that the water service lines outside of the building aren't regulated by the USBC and are therefore able to be regulated by the SFPC. However, that would seem to conflict with the Memorandum from the Health Department.

A possible alternative would be to only consider the domestic water mains subject to the Health Department Memorandum and use the wording in Section 103.1 of the USBC to reinforce that the fire mains are subject to the SFPC (because they are outside of the building) and therefore Section 508 of the IFC is applicable.

This is an area that we may have to address in the code change process and perhaps even in state law. If the end result is that you are trying to determine whether the fire official or the building official is responsible for the fire service mains, a local government can delegate authority under either code, so even if the authority is under the SFPC, the fire official could delegate to the USBC plan reviewers and inspectors the authority to control them.

I hope this response helps clarify the issue. Please let me know whether I may be of further assistance.

Vernon

SBCE CARFL 106

1/8/2007

Vernon Hodge

From: Tom Coghill [tcoghill@james-city.va.us]
Sent: Wednesday, January 03, 2007 2:00 PM
To: Vernon Hodge
Subject: FW: Private fire service mains and AHJ

Mr. Hodge,

Please see Mr. McMahan's response below. We look forward to hearing from you when you return.

Best regards,

Tom Coghill
Chief Plans Examiner
JCC Code Compliance
757-253-6821

-----Original Message-----

From: Alan McMahan [mailto:Alan.McMahan@dhcd.virginia.gov]
Sent: Thursday, December 28, 2006 9:15 AM
To: Tom Coghill
Subject: FW: Private fire service mains and AHJ

Tom,

Good morning and happy holidays! As you can see immediately below, Vernon forwarded your email to me for a response, via our general technical assistance email.

With respect to your question, I agree with your code interpretation that the local Building Official is the AHJ when it comes to regulating private fire service mains via NFPA 24.

It is very logical how you progressed from IBC Section 901.2 to 902.1 and then to IFC Section 508.2.1.

For another good opinion (hopeful he'll concur), please contact Vernon after he returns from vacation. Frankly, he'll probably get more into the administrative provisions than I did.

Please let me know if you need additional assistance.

Regards,

Alan McMahan, CBO
State Building Codes Senior Engineer
State Building Code Administrative Office

-----Original Message-----

From: Vernon Hodge
Sent: Tuesday, December 19, 2006 8:55 PM
To: Usbc
Cc: tcoghill@james-city.va.us
Subject: FW: Private fire service mains and AHJ

Tom, I am forwarding your message to our general technical assistance email address. I am off until after the first of the year, but checking emails occasionally. Your question is a complicated one as it involves not only the application of the I-Codes, but also our administrative provisions and scoping requirements. I'll be glad to speak with you about it in more detail when returning to the office.

Take care and have a great holiday.

Vernon Hodge, DHCD Regulatory Specialist

-----Original Message-----

From: Tom Coghill [mailto:tcoghill@james-city.va.us]
Sent: Tue 12/19/2006 4:42 PM
To: Vernon Hodge
Cc: John Black
Subject: Private fire service mains and AHJ

Dear Mr. Hodge,

Does the building official have the authority to regulate the design and construction of private fire service mains through NFPA 24 even though this standard is not directly referenced by the International Building Code?

Background:

In our jurisdiction, when a building fire protection system is required, the water purveyor will typically provide a branch line stub off of the municipal water main. This branch line is controlled under the authority of the water purveyor and includes at least one fire hydrant. The building owner is required to install a detector check valve and other appurtenances associated with the fire protection system downstream of this valve and this portion of the line, which feeds the building sprinkler system, is considered to be the private fire main.

We have recently been challenged on this but it is our opinion that the building official is the authority having jurisdiction for the design and construction of private fire service mains. Section 901.2 of the International Building Code states that fire protection systems shall be "installed, repaired, operated and maintained in accordance with the International Fire Code." A fire protection system is defined in IBC Section 902.1 as "approved devices, equipment and systems or combinations of systems used to detect a fire, activate an alarm, extinguish or control a fire, control or manage smoke and products of a fire or any combination thereof." It seems clear that a private fire service main is a part of the fire protection system and that IBC Section 901.2 gives the building official the authority to enforce Section 508.2.1 of the International Fire Code and thereby, NFPA 24, for

the design and construction of private fire service mains.

I would appreciate hearing if you agree or disagree.

Best regards,

Tom Coghill

Chief Plans Examiner

James City County

unapproved devices shall not be permitted inside or located within 20 feet (6096 mm) of the tent, canopy or membrane structures while open to the public unless approved by the fire code official.

2404.8 Fireworks. Fireworks shall not be used within 100 feet (30 480 mm) of tents, canopies or membrane structures.

2404.9 Spot lighting. Spot or effect lighting shall only be by electricity, and all combustible construction located within 6 feet (1829 mm) of such equipment shall be protected with approved noncombustible insulation not less than 9.25 inches (235 mm) thick.

2404.10 Safety film. Motion pictures shall not be displayed in tents, canopies or membrane structures unless the motion picture film is safety film.

2404.11 Clearance. There shall be a minimum clearance of at least 3 feet (914 mm) between the fabric envelope and all contents located inside the tent or membrane structure.

2404.12 Portable fire extinguishers. Portable fire extinguishers shall be provided as required by Section 906.

2404.13 Fire protection equipment. Fire hose lines, water supplies and other auxiliary fire equipment shall be maintained at the site in such numbers and sizes as required by the fire code official.

2404.14 Occupant load factors. The occupant load allowed in an assembly structure, or portion thereof, shall be determined in accordance with Chapter 10.

2404.15 Heating and cooking equipment. Heating and cooking equipment shall be in accordance with Sections 2404.15.1 through 2404.15.7.

2404.15.1 Installation. Heating or cooking equipment, tanks, piping, hoses, fittings, valves, tubing and other related components shall be installed as specified in the *International Mechanical Code* and the *International Fuel Gas Code*, and shall be approved by the fire code official.

2404.15.2 Venting. Gas, liquid and solid fuel-burning equipment designed to be vented shall be vented to the outside air as specified in the *International Fuel Gas Code* and the *International Mechanical Code*. Such vents shall be equipped with approved spark arresters when required. Where vents or flues are used, all portions of the tent, canopy or membrane structure shall be not less than 12 inches (305 mm) from the flue or vent.

2404.15.3 Location. Cooking and heating equipment shall not be located within 10 feet (3048 mm) of exits or combustible materials.

2404.15.4 Operations. Operations such as warming of foods, cooking demonstrations and similar operations that use solid flammables, butane or other similar devices which do not pose an ignition hazard, shall be approved.

2404.15.5 Cooking tents. Tents where cooking is performed shall be separated from other tents, canopies or membrane structures by a minimum of 20 feet (6096 mm).

2404.15.6 Outdoor cooking. Outdoor cooking that produces sparks or grease-laden vapors shall not be performed

within 20 feet (6096 mm) of a tent, canopy or membrane structure.

2404.15.7 Electrical heating and cooking equipment. Electrical cooking and heating equipment shall comply with the ICC *Electrical Code*.

2404.16 LP-gas. The storage, handling and use of LP-gas and LP-gas equipment shall be in accordance with Sections 2406.16.1 through 2404.16.3.

2404.16.1 General. LP-gas equipment such as tanks, piping, hoses, fittings, valves, tubing and other related components shall be approved and in accordance with Chapter 38 and with the *International Fuel Gas Code*.

2404.16.2 Location of containers. LP-gas containers shall be located outside. Safety release valves shall be pointed away from the tent, canopy or membrane structure.

2404.16.2.1 Containers 500 gallons or less. Portable LP-gas containers with a capacity of 500 gallons (1893 L) or less shall have a minimum separation between the container and structure not less than 10 feet (3048 mm).

2404.16.2.2 Containers more than 500 gallons. Portable LP-gas containers with a capacity of more than 500 gallons (1893 L) shall have a minimum separation between the container and structures not less than 25 feet (7620 mm).

2404.16.3 Protection and security. Portable LP-gas containers, piping, valves and fittings which are located outside and are being used to fuel equipment inside a tent, canopy or membrane structure shall be adequately protected to prevent tampering, damage by vehicles or other hazards and shall be located in an approved location. Portable LP-gas containers shall be securely fastened in place to prevent unauthorized movement.

2404.17 Flammable and combustible liquids. The storage of flammable and combustible liquids and the use of flammable-liquid-fueled equipment shall be in accordance with Sections 2404.17.1 through 2404.17.3.

2404.17.1 Use. Flammable-liquid-fueled equipment shall not be used in tents, canopies or membrane structures.

2404.17.2 Flammable and combustible liquid storage. Flammable and combustible liquids shall be stored outside in an approved manner not less than 50 feet (15 240 mm) from tents, canopies or membrane structures. Storage shall be in accordance with Chapter 34.

2404.17.3 Refueling. Refueling shall be performed in an approved location not less than 20 feet (6096 mm) from tents, canopies or membrane structures.

2404.18 Display of motor vehicles. Liquid- and gas-fueled vehicles and equipment used for display within tents, canopies or membrane structures shall be in accordance with Sections 2404.18.1 through 2404.18.5.3.

2404.18.1 Batteries. Batteries shall be disconnected in an appropriate manner.

2404.18.2 Fuel systems. Vehicles or equipment shall not be fueled or defueled within the tent, canopy or membrane structure.

DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM
 (Use this form to submit changes to building and fire codes)

Address to submit to: DHCD, the Jackson Center 501 North Second Street Richmond, VA 23219-1321 Tel. No. (804) 371 - 7150 Fax No. (804) 371 - 7092 Email: bhcd@dhcd.state.va.us		Document No. _____ Committee Action: _____ BHCD Action: _____
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Submitted by: Dennis Mitchell _____ Representing: __ Fire Services Board

Address: __ 512 Redbud Lane_ Bluemont VA 20135 _____
 Phone No.: __ 703-777-0219 _____

Regulation Title: _Statewide Fire Prevention Code Part II _____ Section No(s): Wildland-Urban Interface Code

Proposed Change: Create: SFPC Part II Wild-land- Urban Interface Code
 Delete chapter one and replace with chapter one of the SFPC.

Change 103.1 **General** The following document is adopted and incorporated by reference to be an enforceable part of SFPC .International Wild-land-Urban Interface Code

Delete Ignition Resistant Construction from the definitions

Change section 302.1 **Declaration**. The legislative body shall declare the wild-land interface areas within the jurisdiction. The wild-land interface areas shall be based on the findings of fact [see appendix E]. The wild-land interface area boundary shall correspond to natural or man made features and include a minimum of 640-50 acres ~~unless a smaller area is approved by the legislative body through assessment of fuel types and physical characteristics affecting wild-land fire behavior.~~ The remainder unchanged.

Delete section 402.1.2 and 402.2.2 Water Supply

Delete all of section 403 Access

Delete all of section 404 Water Supply

Delete all of chapter 5 Special Building Construction

Delete section 602 Automatic Sprinkler Systems

Appendix A,E, and F are for information purposes only.

Supporting Statement: There has been more structural fire loss from wild land fires east of the Mississippi river than west. The provisions in the IWUIC are meant to reduce the risk of damage to structures due to fire. The construction provisions have been purposely left out of this document since they would have to be incorporated into the USBC. The VA Department of Forestry already uses part of this code to evaluate interface areas. The provisions of this code are already authorized for adoption by a locality to incorporate into the Fire Prevention Code. By adopting this code we will be making it a **uniform code** for adoption.

Rodgers, Emory

From: Rodgers, Emory

Sent: Friday, March 02, 2007 7:58 AM

To: Dennis Mitchell

Dennis: Just wanted to give you some background why staff didn't include your code change in the draft regulations. Vernon informed me that you might consider asking it be moved forward at this time. Last spring when we exchanged comments and possible issues with the introduction of the IUWIC into the SFPC and the USBC, it was my advice to move deliberately and to have the stakeholders fully involved and given all the relevant information and let them put on the table issues as they saw them so the stakeholders could then see where consensus might be achieved and that is why those few changes approved for the draft regulations don't contain very complex and highly controversial code changes.

In the list of some 50 plus items and submitted code changes that we have scheduled meetings for April 9th and June 18th, the goal would be to reach consensus and to form work groups on the biggie items that the IUWIC would be one for our 2006 cycle. I believe going through these meetings, the public comment periods and the public hearing in July that by September you and all the parties will have a much better understanding so the BHCD and the C&S Committee can make the best decision on this one and you would be able to discern the best course of action to proceed.

Here are some things that have been identified before and some new items:

- Code change and supporting statement will need clean-up and revisions like is 605 in or out now and that SFPC Chapter 1 needs to be tailored, as we did in the USBC Part II and III, for the new IUWIC.
- Depending how the code change is submitted there needs to be legal clearance from our legal counsel on whether we need legislative approval to authorize localities to establish these interface areas as was necessary for opening burning. It is possible regulations can be developed for the fire official that avoids this issue.
- The format in the IEWIC where notes or "see Appendix E" isn't appropriate regulatory language. We also need to very specific on how the appendices would be allowed to be referenced and used thus requiring a thorough review with stakeholders.
- When we advised stakeholders, such as HBAV, about the change from 640 to 50 acres that clearly was a contentious issue.
- The IFC Sections 304, 305, 307, 311, 315, 503, 505, 506 and perhaps others now enforceable under the SFPC need to be coordinated with the IUWIC.
- There needs to be discussions on cost impacts on the new construction and those provisions for existing buildings that are new and not now in the SFPC/IFC such as street names and addresses and for staffing at the local level.
- Not many are familiar with the risk assessment models and should all risk categories be in the regulations or localities be free to adopt.
- The fire apparatus, driveway and turn-around requirements for new buildings could be controversial issues. My own mountain place would not meet the 12 feet driveway requirement nor could I have built it that way.
- In IUWIC Section 603 what are the issues for existing properties to comply with tree canopies or vegetation removal.
- Section 607 might need some modification as my mountain friends store, not a cord, firewood on their porch/deck/next to the house for overnight use or when snow is predicted.
- Do we need SFPC changes in the operational permit section for any of this especially if permit fees would be the manner local government would do enforcement.

The time necessary for staff to do a new Part II that is properly formatted, per the administrative regulations, with the above noted issues further supports a strategy to lay out all the issues and then craft the code change into

proper regulatory language and format. I believe this approach will serve you well in your effort to achieve the best results with more overall support and lesser opposition from key stakeholders.

Let me know your thoughts and always glad to discuss with you any aspects of your code change.

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. _____</p> <p>Committee Action: _____</p> <p>BHCD Action: _____</p>
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Submitted by: DHCD Staff (Administrative and Technical Support Office) Representing: _____

Regulation Title: 2003 SFPC Section No(s): 108.5.12

Proposed Change:

108.5.12 Temporary membrane structures, and tents and canopies. A construction permit is required to erect an air-supported temporary membrane structure or a tent having an area in excess of 900 square feet (84 m²), or a canopy in excess of 700 square feet (65 m²).

Exceptions:

1. Tents used exclusively for recreational camping purposes.
2. Tents and air-supported structures that cover an area of 900 square feet (84 m²) or less, including all connecting areas or spaces with a common means of egress or entrance and with an occupant load of 50 or less persons.
3. Funeral tents and curtains or extensions attached thereto, when used for funeral services.
4. Fabric canopies and awnings open on all sides which comply with all of the following:
 - 4.1. Individual canopies shall have a maximum size of 700 square feet (65 m²).
 - 4.2. The aggregate area of multiple canopies placed side by side without a fire break clearance of 12 feet shall not exceed 700 square feet (65 m²) total.
 - 4.3. A minimum clearance of 12 feet (3658 mm) to structures and other tents shall be maintained.

Supporting Statement:

To more closely resemble the provisions found in the USBC.

Commonwealth of Virginia, Housing & Community Development Department
REGULATORY CHANGE FORM (to submit changes to building and fire codes)

Submit to: DHCD, the Jackson Center, 501 North Second Street, Richmond, VA 23219-1321
Tel. No. (804) 371 – 7150, Fax No. (804) 371 – 7092, E-mail: bhcd@dhcd.state.va.us

Ref. Document No. _____ Committee Action: _____
BHCD Action: _____

Regulation Title: Statewide Fire Prevention Code

Section No(s): 107.11 and 108.4

Submitted by: William Andrews

Representing: City of Richmond's Fire Prevention Office

Address: 550 East Marshall Street, Room 202, Richmond, Virginia 23219

Phone No.: (804) 646-0621 E-mail: William.Andrews@RichmondGov.com

Proposed Changes: Add to Section 107.11 to read: "Revocation of permit: The fire official may revoke, or suspend, a permit or approval issued under the SFPC if conditions of the permit have been violated, or if the approved application, data or plans contain misrepresentation as to material fact, repeated minor accidents, or a hazardous incident results in damages and response of emergency crews. The fire official may deny issuance of another permit where applicant has history of unsafe activities.

Add to Section 108.4, to read: "The fire official is authorized to revoke, or suspend, an operational permit
....."

" 8. Repeated accidents involving permit activity, or a hazardous incident resulting in damages and response of emergency crews. "

The fire official may deny issuance of a permit where applicant has history of unsafe activity.

Supporting Statement: Current code lacks provisions for revoking, suspending, or denying a permit despite repeated accidents which endanger workers, property, or emergency crews. Although no violation of code exist, the fire official needs clear authority to suspend or revoke permits to avoid repeated accidents. Fire official should be allowed to temporarily "suspend" permit while additional safety procedures are implemented, errors in application are corrected, or other minor concerns resolved. Without such authority in state code, defense attorneys might successfully argue the "Dillion Rule" limited fire officials from adopting local procedures for such revoking or suspension of these permits. Above referenced section numbers from 2003 VSFPC; recommend these changes be made in 2006 VSFPC; and suggest combine the two sections which both specify revoking permits.

Rodgers, Emory

From: Rodgers, Emory
Sent: Tuesday, February 27, 2007 1:30 PM
To: Dean, Glenn
Subject: Re: Request change in 2006 VSFPC

Good

----- Original Message -----

From: Dean, Glenn
To: Andrews, William - Fire <William.Andrews@richmondgov.com>
Cc: ebg5x@Virginia.EDU <ebg5x@Virginia.EDU>; Rodgers, Emory
Sent: Tue Feb 27 13:22:08 2007
Subject: RE: Request change in 2006 VSFPC

Your request for consideration of a code change has made rounds and I'm reporting the results. As recently as last Friday, February 23rd the Fire Services Board Code Committee took up the matter and while nobody spoke against the concept due to some measure of empathy, neither did anybody spoke in favor of the proposal as it's written. I'm also in agreement with the assessment. The principal concerns are;

1. Essentially the language was far too vague and subjective. By example, what is a minor accident versus a major accident? And the word "accident" has connotations of something that may be out of the control of the permit holder.
2. The trigger for the response of an emergency crew may be counter productive in that, stuff happens and the response of an emergency crew due to an accident is the nature of the beast.
3. The language is far too reaching. The denial of a permit because the "applicant has a history of unsafe activities" steps into a legal arena nobody seems to want to enter. Besides, the pumping or dumping of gasoline into a service station's underground fuel tanks can be interpreted as an unsafe activity. The spray painting of a vehicle can be viewed as an unsafe activity. The use of explosives is definitely an unsafe activity. These are just a few activities that can be viewed as inherently unsafe. Because a permit applicant is involved in such activities, and they have this "history of unsafe activities", do you deny a permit because of that? The proposed wording is subjective.
4. It's felt that the SFPC already provides sufficient authority to place conditions upon a permitted activity if the fire official feels it prudent. Of course, placing conditions on a permit at the time of application, or a subsequent revocation or suspension of a permit because the conditions of the permit were felt to have been violated can be the basis for appeal.

At this point the ball is back in your court, so to speak. While your proposal was not formally introduced into the state's code adoption/change process, you can proceed with your proposal as written, consider and modify the language to address the concerns exemplified above, or drop the matter entirely. What's your pleasure?

Glenn A. Dean, CBO, CFM

Deputy State Fire Marshal / Fire Safety Engineer

804/371-7182

From: Andrews, William - Fire [mailto:William.Andrews@richmondgov.com]
Posted At: Tuesday, February 20, 2007 2:49 PM **Posted To:** Statefiremarshal
Conversation: Request change in 2006 VSFPC
Subject: Request change in 2006 VSFPC

Please consider the attached request for change in the 2006 Virginia Statewide Fire

Prevention Code. As is, fire official legally obligated to issue permit, and may not have authority to suspend or revoke a permit despite repeated accidents involving permitted activity, whatever damages occur; if no code violation occurs. Fires, hazardous spills, or other damages or injuries (maybe to firefighters or public) should be just cause to suspend permit until adequate safeguards inacted, or to revoke permit and/or deny permit application due to problem history. Recommend combining sections 107.11 and 108.4 since both deal with suspend or revoking permit. "Suspension" of permit should mean temporarily not allowing activity, without needing to re-apply and issue another permit when suspension period ends. As is Section 107.10 indicates "Suspension" of permit causes permit to become invalid if activity is not commenced or is suspended or abandoned for over 6 months. Fire official should have authority to "suspend" permit due to other concerns than lack of activity (such as activity demonstrated as un-safe, although not clearly violating code).

Assistant Fire Marshal William Andrews desk phone 646-0621
William.Andrews@RichmondGov.com

City of Richmond