

CODES AND STANDARDS COMMITTEE
2009 CODE CHANGE CYCLE – BOOK 6

BOARD OF HOUSING AND COMMUNITY DEVELOPMENT
FINAL REGULATION PACKAGE – 2009 CODE CHANGE CYCLE

For the July 26, 2010 Board of Housing and Community Development Meeting

OPENING STATEMENT

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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-308.1**

Nature of Change: Assisted Living Facilities

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: State Fire Marshal's Office (with DHCD staff changes at the direction of the Codes and Standards Committee)

Email Address: _____ Telephone Number: _____

Proposal Information

Code(s) and Section(s): USBC, VCC, Section 308.2 and 310.1

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

Add the following exception to IBC Section 308.2 as shown:

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:

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

Exception: In Group I-1 occupancies, not more than five of the residents may require physical assistance from staff to respond to an emergency situation when all residents that may require the physical assistance reside on a single level of exit discharge.

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.

Change the Group R-4 requirements in IBC Section 310.1 as follows:

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 provided the building is protected by an automatic sprinkler system installed in accordance with Section 903.2.7.

(continued next page)

Exceptions:

1. Group homes licensed by the Virginia Department of Behavioral Health and Developmental Services that house no more than eight persons with one or more resident counselors shall be classified as Group R-2, R-3, R-4 or R-5. Not more than five of the persons may require physical assistance from staff to respond to an emergency situation.
2. In Group R-4 occupancies, not more than five of the residents may require physical assistance from staff to respond to an emergency situation when all residents that may require the physical assistance from staff reside on a single level of exit discharge of exit discharge and other than using a ramp, a change of elevation using steps or stairs is not within the path of egress to an exit door.
3. Assisted living facilities licensed by the Virginia Department of Social Services that house no more than eight persons, with one or more resident counselors, and all of the residents are capable of responding to an emergency situation without physical assistance from staff, may be classified as Group R-2, R-3 or R-5.
4. Assisted living facilities licensed by the Virginia Department of Social Services that house no more than eight persons, with one or more resident counselors, may be classified as Group R-5 when in compliance with all of the following:
 - 4.1. The building is protected by an automatic sprinkler system installed in accordance with Section 903.3 or Section P2904 of the IRC.
 - 4.2. Not more than five of the residents may require physical assistance from staff to respond to an emergency situation.
 - 4.3. All residents that may require physical assistance from staff to respond to an emergency situation reside on a single level of exit discharge and other than using a ramp, a change in elevation using steps or stairs is not within the path of egress to an exit door.

Change the definition of "Residential care/assisted living facilities" in Section 310.2 to read as follows:

Residential care/assisted living facilities. Any congregate residential setting that provides or coordinates personal and health care services, 24-hour supervision and assistance for the maintenance or care of four or more adults who are aged, infirm or disabled and who are cared for in a primarily residential setting, and provides for the protection, general supervision and oversight of the physical and mental well-being of aged, infirmed or disabled individuals. Residents are capable of self-evacuation.

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

Submittal Information

Date Submitted: _____

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

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)

The Jackson Center

501 N. 2nd Street

Richmond, VA 23219-1321

Email Address: taso@dhcd.virginia.gov

Fax Number: (804) 371-7092

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



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

2009 Code Change Cycle – Code Change Evaluation Form

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

Nature of Change: Carbon Monoxide Groups R and I

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Virginia Fire Chiefs Association, Inc. (with suggested revisions by DHCD Staff at the direction of the Codes and Standards Committee)

Email Address: _____ Telephone Number: _____

Proposal Information

Code(s) and Section(s): USBC (VCC and VMC) and SFPC

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

In the VCC, add the following new section to the IBC:

908.7 Carbon monoxide alarms. Carbon monoxide alarms shall be provided in new buildings and structures in accordance with this section.

908.7.1 Alarm requirements. Carbon monoxide alarms shall be single station, hard wired, plug-in or battery type, listed as complying with UL 2034, and shall be installed in accordance with this code and the manufacturer's installation instructions.

908.7.2 Where required. Carbon monoxide alarms shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms in dwelling units and outside of, but in the immediate vicinity of, each sleeping unit in all Group R occupancies located within buildings containing fuel-fired appliances or where a dwelling unit or sleeping unit in a Group R occupancy is attached to a Group U private garage.

In the VMC, add the following new section to the IPMC:

305.7 Carbon monoxide alarms. Carbon monoxide alarms shall be maintained as approved.

In the SFPC, add the following new section to the IFC:

908.7 Carbon monoxide alarms. Carbon monoxide alarms shall be maintained as approved.

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

Submittal Information

Date Submitted: _____

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

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

2009 Code Change Cycle – Code Change Evaluation Form

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

Nature of Change: Accessibility Churches

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: DHCD Staff (at the direction of the Codes and Standards Committee)

Email Address: _____ Telephone Number: _____

Proposal Information

Code(s) and Section(s): USBC, VCC, Section 1103.2.16

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

Change the proposed regulation as follows (changes shown within brackets):

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

1103.2.16 Raised and lowered areas in places of religious worship. Raised or lowered areas in places of religious worship are not required to be accessible or to be served by an accessible route provided such areas are used exclusively for the performance of religious ceremonies and are located within an accessible story or mezzanine.]

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

The language above accomplishes the revision of Fairfax County's consensus proposal to delete the 1000 square foot limitation at the direction of the Codes and Standards Committee and place the language in its own section for accessibility in places of religious worship. While Section 1103.2.7 is shown stricken, the end result is only to delete the state amendment where the religious worship language was added in the proposed regulation. Section 1103.2.7 will still be as written in the IBC for other types of raised areas.

Submittal Information

Date Submitted: _____

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

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)

The Jackson Center

501 N. 2nd Street

Richmond, VA 23219-1321

Email Address: taso@dhcd.virginia.gov

Fax Number: (804) 371-7092

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

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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-1301 (IECC 402.4.2 & IRC N1103.2.2.1)**

Nature of Change: Duct Testing

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: DHCD Staff (at the direction of the Codes and Standards Committee)

Email Address: _____

Telephone Number: _____

Proposal Information

Code(s) and Section(s): USBC, VCC, IECC Section 403.2.2 and IRC Section N1103.2.2

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

Make the following change to the IECC and IRC (IRC provisions shown in parentheses)

403.2.2 (N1103.2.2) Sealing. All ducts, air handlers, filter boxes and building cavities used as ducts shall be sealed. Joints and seams shall comply with Section M1601.4.1 of the International Residential Code.

403.2.2.1 (N1103.2.2.1) Testing option. Duct tightness shall be verified by either of the following:

1. Postconstruction test: (no change to existing text)
2. Rough-in test: (no change to existing text)

Exceptions: Duct tightness test is not required if the air handler and all ducts are located within conditioned space.

When this option is chosen, testing shall be performed by approved qualified individuals, testing agencies or contractors. Testing and results shall be as prescribed in Section 403.2.2 (N1103.2.2) and approved recognized industry standards.

403.2.2.2 (N1103.2.2.2) Visual inspection option. In addition to the inspection of ducts otherwise required by this code, when the air handler and all ducts are not within conditioned space and this option is chosen to verify duct tightness, duct tightness shall be considered acceptable when the requirements of Section 403.2.2 (N1103.2.2) are field verified.

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

Submittal Information

Date Submitted: _____

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

Please submit the proposal to:

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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-310.6 (R313.1)(1)**

Nature of Change: Common Wall in Townhouses

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: DHCD Staff (at the direction of the Codes and Standards Committee) _____

Email Address: _____ Telephone Number: _____

Proposal Information

Code(s) and Section(s): USBC, VCC, IRC Section R302.2 _____

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

Modify the language in the proposed 2009 USBC addressing the common wall in townhouses in the IRC as follows (changes shown in brackets):

3. Change the exception in Section R302.2 to require a common two-hour fire-resistive-rated wall instead of a one-hour fire-resistive-rated wall [, unless the townhouse development is fully sprinklered as provided for in Section R313.1, in which case a common one-hour fire-resistive-rated wall shall be permitted between townhouses] .

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

Submittal Information

Date Submitted: _____

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

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
The Jackson Center
501 N. 2nd Street
Richmond, VA 23219-1321
Email Address: taso@dhcd.virginia.gov
Fax Number: (804) 371-7092
Phone Numbers: (804) 371-7140 or (804) 371-7150



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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-310.6 (R313.1)(2)**

Nature of Change: Exterior Walls

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: _____

Proponent Information (Check one): Individual Government Entity Company

Name: DHCD Staff (at the direction of the Codes and Standards Committee) _____

Email Address: _____ Telephone Number: _____

Proposal Information

Code(s) and Section(s): USBC, VCC, IRC Table R302.1 _____

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

Change Table R302.1 of the IRC as follows:

Table R302.1 EXTERIOR WALLS			
EXTERIOR WALL ELEMENT		MINIMUM FIRE-RESISTANCE RATING	MINIMUM FIRE SEPARATION DISTANCE
Walls	(Fire-resistance rated)	1 hour-tested in accordance with ASTM E 119 or UL 263 with exposure from both sides	< 5 feet ^a
	(Not fire-resistance rated)	0 hours	≥5 feet ^a
Projections	(Fire-resistance rated)	1 hour on the underside	≥2 feet to 5 feet ^a
	(Not fire-resistance rated)	0 hours	5 feet ^a
Openings in walls	Not allowed	N/A	< 3 feet
	25% maximum of wall area	0 hours	3 feet
	Unlimited	0 hours	5 feet ^a
Penetrations	All	Comply with Section R317.3	< 5 feet ^a
		None required	5 feet ^a

For SI: 1 foot = 304.8 mm.
N/A = Not Applicable

a. The minimum fire separation distance shall be reduced to 3 feet in developments which are fully sprinklered as provided for in Sections R313.1 or R313.2.

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

Submittal Information

Date Submitted: _____

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

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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-310.6 (R313.1)(3)**

Nature of Change: Fire Apparatus Access Roads

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: DHCD Staff (at the direction of the Codes and Standards Committee) _____

Email Address: _____ Telephone Number: _____

Proposal Information

Code(s) and Section(s): SFPC Section 503.2.1 _____

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

Add new exception to Section 503.2.1 of the IFC as follows:
Exception: Fire apparatus access roads exclusively serving single family dwelling or townhouse developments which are fully sprinklered as provided for in Sections R313.1 or R313.2 of the International Residential Code shall have an unobstructed width of not less than 18 feet (5486 mm), exclusive of shoulders.

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

Submittal Information

Date Submitted: _____

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

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
The Jackson Center
501 N. 2nd Street
Richmond, VA 23219-1321
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VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-310.6 (R313.1)(4)(a)**

Nature of Change: Fire Flow – Chapter 5

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: C-310.6(R313.1)(4)(a)

Proponent Information

(Check one): Individual Government Entity Company

Name: DHCD Staff (at the direction of the Codes and Standards Committee)

Email Address: _____

Telephone Number: _____

Proposal Information

Code(s) and Section(s): SFPC Sections 507.3.1 and 507.3.2

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

Add new Section 507.3.1 and Table 507.3.1 to the IFC as follows:

507.3.1 Fire flow requirements for fully sprinklered residential developments. The fire flow requirements in Table 507.3.1 shall be permitted to be used for determining fire flow in single family dwelling and townhouse developments which are fully sprinklered as provided for in Sections R313.1 or R313.2 of the International Residential Code.

Table 507.3.1
Minimum Required Fire-flow and Flow Duration for Fully Sprinklered Single Family Dwelling and Townhouse Developments

<u>Fire-flow Calculation Area (square feet)^{ac}</u>	<u>Fire-flow (gallons per minute)^b</u>	<u>Flow Duration (in hours)</u>
<u>0-5,000</u>	<u>1,000</u>	<u>2</u>
<u>5,001-7,200</u>	<u>1,250</u>	
<u>7,201-8,200</u>	<u>1,500</u>	
<u>8,201-9,500</u>	<u>1,750</u>	
<u>9,501-11,300</u>	<u>2,000</u>	
<u>11,301-13,000</u>	<u>2,250</u>	

For SI: 1 square foot = 0.0929 m², 1 gallon per minute = 3.785 L/m, 1 pound per square inch = 6.895 kPa.

- a. The fire flow calculation area shall be the total floor area of all floor levels within the exterior walls, and under the horizontal projections of the roof of a building.
- b. Measured at 20 psi residual pressure.
- c. Fire-flow and duration requirements for calculation areas exceeding 13,000 square feet are subject to approval by the fire code official.

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

Submittal Information

Date Submitted: _____

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

Please submit the proposal to:

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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-310.6 (R313.1)(4)(b)**

Nature of Change: Fire Flow – Appendix B

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: C-310.6 (R313.1) (4) (b)

Proponent Information

(Check one): Individual Government Entity Company

Name: DHCD Staff (at the direction of the Codes and Standards Committee)

Email Address: _____

Telephone Number: _____

Proposal Information

Code(s) and Section(s): SFPC Sections 507.3.1 and 507.3.2

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

Add new Sections 507.3.1 and 507.3.2 to the IFC as follows:

507.3.1 Fire flow requirements for fully sprinklered residential developments. Notwithstanding Section 103.1.2, the fire flow requirements in Table B105.1 of Appendix B of the IFC, as modified by Section 507.3.2, shall be permitted to be used for determining fire flow in single family dwelling and townhouse developments which are fully sprinklered as provided for in Sections R313.1 or R313.2 of the International Residential Code.

507.3.2 Modifications to Table B105.1. The first six rows of columns five and six of Table B105.1 of Appendix B of the IFC shall be modified as shown below for the use of Table B105.1 in Section 507.3.1:

<u>Type 5-B</u>	<u>FIRE-FLOW</u> <u>(gallons per minute)</u>
<u>0-5,000</u>	<u>1,000</u>
<u>5,001-7,200</u>	<u>1,250</u>
<u>7,201-8,200</u>	<u>1,500</u>
<u>8,201-9,500</u>	<u>1,750</u>
<u>9,501-11,300</u>	<u>2,000</u>
<u>11,301-13,000</u>	<u>2,250</u>

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

Submittal Information

Date Submitted: _____

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

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)

The Jackson Center

501 N. 2nd Street

Email Address: taso@dhcd.virginia.gov

Fax Number: (804) 371-7092

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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-310.6 (R313.1)(5)(a)**

Nature of Change: Fire Hydrants – Chapter 5

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: _____

Proponent Information (Check one): Individual Government Entity Company

Name: DHCD Staff (at the direction of the Codes and Standards Committee) _____

Email Address: _____ Telephone Number: _____

Proposal Information

Code(s) and Section(s): SFPC Section 507.5.1.1 and Table 507.5.1.1 _____

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

Add new Section 507.5.1.1 and Table 507.5.1.1 to the IFC as follows:

507.5.1.1 Fire hydrant requirements for fully sprinklered residential developments. The number and distribution of fire hydrants in Table 507.5.1.1 shall be permitted to be used in single family dwelling and townhouse developments which are fully sprinklered as provided for in Sections R313.1 or R313.2 of the International Residential Code.

Table 507.5.1.1
Number and Distribution of Fire Hydrants in Fully Sprinklered Single Family Dwelling and Townhouse Developments

<u>Fire-flow Requirements (gpm)</u>	<u>Minimum Number of Hydrants</u>	<u>Average Spacing Between Hydrants^{abc} (feet)</u>	<u>Maximum Distance From Any Point on Street or Road Frontage to a Hydrant^d</u>
1,750 or less	1	1,000	500
2,000-2,250	2	900	450
2,500	3	900	450
3,000	3	800	450
3,500-4,000	4	700	420
4,500-5,000	5	600	360
5,500	6	600	360
6,000	6	500	300
6,500-7,000	7	500	300
7,500 or more	8 or more ^e	400	240

For SI: 1 foot = 304.8 mm, 1 gallon per minute = 3.785 L/m

a. Reduce by 100 feet for dead-end streets or roads.

b. Where streets are provided with median dividers which cannot be crossed by fire fighters pulling hose lines, or where arterial streets are provided with four or more traffic lanes and have a traffic count or more than 30,000 vehicles per day, hydrant spacing shall average 500 feet on each side of the street and be arranged on an alternating basis up to a fire-flow requirement of 7,000 gallons per minute and 400 feet for higher fire-flow requirements.

c. Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire problems, fire hydrants shall be provided at spacing not to exceed 1,000 square feet to provide for transportation hazards.

d. Reduce by 50 feet for dead-end streets or roads.

e. One hydrant for each 1,000 gallons per minute or fraction thereof.

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

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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-310.6 (R313.1)(5)(b)**

Nature of Change: Fire Hydrants – Appendix C

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: DHCD Staff (at the direction of the Codes and Standards Committee) _____

Email Address: _____ Telephone Number: _____

Proposal Information

Code(s) and Section(s): SFPC Section 507.5.1.1 _____

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

Add new Section 507.5.1.1 to the IFC as follows:
507.5.1.1 Fire hydrant requirements for fully sprinklered residential developments. Notwithstanding Section 103.1.2, the number and distribution of fire hydrants in Table C105.1 of Appendix C of the IFC shall be permitted to be used in single family dwelling and townhouse developments which are fully sprinklered as provided for in Sections R313.1 or R313.2 of the International Residential Code, with the spacing and distances of fire hydrants indicated in Table C105.1 increased by 100%.

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

Submittal Information

Date Submitted: _____

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

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
The Jackson Center
501 N. 2nd Street
Richmond, VA 23219-1321
Email Address: taso@dhcd.virginia.gov
Fax Number: (804) 371-7092
Phone Numbers: (804) 371-7140 or (804) 371-7150



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

2009 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. F-506.3**

Nature of Change: Elevator Service Keys

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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

Code Change Form for the 2009 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: DHCD Staff (at the direction of the Codes and Standards Committee)

Proposal Information

Code(s) and Section(s): SFPC Section 506 and USBC Section 3003.2.1

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

Change the title of Section 506 to the SFPC to read as follows:

KEY BOXES AND ELEVATOR FIRE SERVICE KEYS

Add new Section 506.3 to the SFPC to read as follows:

506.3 Standardized fire service elevator keys. All buildings with elevators equipped with Phase I emergency recall or Phase II emergency in-car operation, or buildings equipped with fire service access or occupant evacuation elevators shall be equipped to operate with a standardized fire service key approved by the fire code official.

Exception: Where providing a standardized key is not possible due to the existing non-standard elevator equipment, the owner shall be permitted to place the building's non-standardized fire service elevator keys in a key box installed in accordance with Section 506.1.

506.3.1 Requirements for standardized fire service keys. Standardized fire service elevator keys shall comply with all of the following:

1. All fire service elevator keys within the jurisdiction shall be uniform and specific for the jurisdiction. Keys shall be cut to a uniform key code.
2. Fire service elevator keys shall be a patent protected design to prevent unauthorized duplication.
3. Fire service elevator keys subject to these rules shall be engraved with the words "DO NOT DUPLICATE."

506.3.2 Access to standardized fire service keys. Access to standardized fire service elevator keys shall be restricted to the following persons or groups:

1. Elevator owners or their authorized agents.
2. Elevator contractors.
3. Elevator inspectors of the jurisdiction.
4. Fire code officials of the jurisdiction.
5. The fire department and other emergency response agencies designated by the fire code official and the code official responsible for the enforcement of Part III, Maintenance, of the USBC.

506.3.3 Duplication or distribution of keys. No person may duplicate a standardized fire service elevator key or issue, give, or sell a duplicated key unless in accordance with this code.

506.3.4 Responsibility to provide keys. The building owner shall provide up to three standardized fire service elevator keys, if required by the fire code official, upon installation of a standardized fire service key switch or switches in the building.

Add new Section 3003.2.1 to the USBC to read:

3003.2.1 Standardized fire service keys. Where a key is required to operate the emergency function of an elevator, the key shall be a standardized fire service key in accordance with the Virginia Statewide Fire Prevention Code (13 VAC 5-51).

Virginia Department of Housing and Community Development
Division of Building and Fire Regulation

2009 Code Change Cycle
Final Regulations for Review by the BHCD at the July 26, 2010 Meeting

UNIFORM STATEWIDE BUILDING CODE, PART I – VIRGINIA CONSTRUCTION CODE

Note: Only those provisions having changes between proposed and final regulations are shown – brackets are used to identify the changes comprising the final regulations.

Chapter 1 - Administration

102.3 Exemptions. The following are exempt from this code:

1. Equipment ~~and~~, related wiring, and poles and towers supporting the related wiring installed by a provider of publicly regulated utility service or a franchised cable television operator and electrical equipment and related wiring used for radio, broadcast or cable television, telecommunications or information service transmission. The exemption shall apply only if under applicable federal and state law the ownership and control of the equipment and wiring is by the service provider or its affiliates. Such exempt equipment and wiring shall be located on either [~~public~~] rights-of-way or [~~private~~] property for which the service provider has rights of occupancy and entry; however, the structures, including their service equipment, housing or supporting such exempt equipment and wiring shall be subject to the USBC. The installation of equipment and wiring exempted by this section shall not create an unsafe condition prohibited by the USBC.
2. Manufacturing and processing machines [that do not produce or process hazardous materials regulated by this code] , including all of the following service equipment associated with the manufacturing or processing machines.
 - 2.1. Electrical equipment connected after the last disconnecting means.
 - 2.2. Plumbing piping and equipment connected after the last shutoff valve or backflow device and before the equipment drain trap.
 - 2.3. Gas piping and equipment connected after the outlet shutoff valve.

[Manufacturing and processing machines that produce or process hazardous materials regulated by this code are only required to comply with the code provisions regulating the hazardous materials.]

(Items 3-6 unchanged)

7. Federally owned buildings and structures unless federal law specifically requires a permit from the locality. [Underground storage tank installations, modifications and removals shall comply with this code in accordance with federal law.]

103.3 Change of occupancy. No change [of occupancy] shall be made in [~~the existing occupancy classification of~~] any structure when the current USBC requires a greater degree of accessibility, structural strength, fire protection, means of egress, ventilation or sanitation. When such a greater degree is required, the owner or the owner's agent shall make written application to the local building department for a new certificate of occupancy and shall obtain the new certificate of occupancy prior to the [new] use of the structure [~~under the new occupancy classification~~] . When impractical to achieve compliance with this code for the new [~~occupancy classification use~~] , the building official shall consider modifications upon application and as provided for in Section 106.3.

Exception: This section shall not be construed to permit noncompliance with any applicable flood load or flood-resistant construction requirements of this code.

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

1. Special inspection requirements in Chapters 2 - 35.
2. Chapter 34, Existing Structures, except that Section ~~3410~~ 3412, Compliance Alternatives, shall not be used to comply with the retrofit requirements identified in Section 103.7 and shall not be construed to permit noncompliance with any applicable flood load or flood-resistant construction requirements of this code.
3. Testing requirements and requirements for the submittal of construction documents in any of the ICC codes referenced in Chapter 35 [and in the IRC] .

(Items 4 and 5 unchanged)

[6. Section R101.2 of the IRC.]

104.1 Scope of enforcement. This section establishes the requirements for enforcement of the USBC in accordance with Section 36-105 of the Code of Virginia. Enforcement of the provisions of the USBC for construction and rehabilitation shall be the responsibility of the local building department. Whenever a county or municipality does not have such a building department, 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 enforcement. For the purposes of this section, towns with a population of less than 3,500 may elect to administer and enforce the USBC; however, where the town does not elect to administer and enforce the code, the county in which the town is situated shall administer and enforce the code for the town. In the event such town is situated in two or more counties, those counties shall administer and enforce the USBC for that portion of the town [~~which is~~] situated within their respective boundaries.

107.2 Code academy fee levy. In accordance with subdivision 7 of Section 36-137 of the Code of Virginia, the local building department shall collect a ~~1.75%~~ 2.0% levy of fees charged for [building] permits issued under this code and transmit it quarterly to DHCD to support training programs of the Virginia Building Code Academy. ~~The foregoing levy shall remain effective until July 1, 2009, after which time the fee levy shall be increased to 2.0%.~~ Localities that maintain individual or regional training academies accredited by DHCD shall retain such levy.

108.2 Exemptions from application for permit. Application for a permit shall be made to the building official and a permit shall be obtained prior to the commencement of any of the following activities, except that applications for emergency construction, alterations or equipment replacement shall be submitted by the end of the first working day that follows the day such work commences. In addition, the building official may authorize work to commence pending the receipt of an application or the issuance of a permit.

(Item 1 unchanged)

2. [~~Detached~~ One story detached] accessory structures used as tool and storage sheds, playhouses or similar uses, provided the floor area does not exceed [~~150~~ 200] square feet [~~(14 m²)~~ (18 m²)] and the structures are not [~~accessory to~~ classified as] a Group [~~F~~ F-1] or H occupancy.

(Items 3-9 unchanged)

10. Ordinary repairs that include the following.

- 10.1. Replacement of windows and doors [with windows and doors of similar operation and opening dimensions that do not require changes to the existing framed opening and] that are not required to be fire rated in Group R-2 where serving a single dwelling unit and in Groups R-3, R-4 and R-5.

116.4 Issuance of certificate for [~~existing pre-USBC~~] buildings or structures. [~~Upon written request from the owner or the owner's agent, or as otherwise determined necessary by the building official, a certificate of occupancy shall be issued for an existing building or structure provided~~ When a building or structure was constructed prior to being subject to the initial edition of the USBC and the local building department does not have a certificate of occupancy for the building or structure, the owner or owner's agent may submit a written request for a certificate to be created. The building official, after receipt of the request, shall issue a certificate provided a determination is made that] there are no current violations of the Virginia Maintenance Code or the Virginia Statewide Fire Prevention Code (13 VAC 5-51) and the occupancy classification of the building or structure has not changed. [~~An inspection shall be performed prior to the issuance of the certificate and such~~ Such] buildings and structures shall not be prevented from continued use.

[Exception: When no certificate exists, but the local building department has records indicating that a certificate did exist, then the building official may either verify in writing that a certificate did exist, or issue a certificate based upon the records.]

119.5 Right of appeal; filing of appeal application. [~~The owner of a building or structure, the owner's agent or any other person involved in the design or construction of a building or structure may appeal a decision of the building official concerning the~~ Any person aggrieved by the local building department's] application of the USBC [~~to such building or structure and may also appeal a or the~~] refusal [~~by the building official~~] to grant a modification to the provisions of the USBC pertaining to such building or structure may appeal to the LBBCA] . The applicant shall submit a written request for appeal to the LBBCA within 30 calendar days of the receipt of the decision being appealed. The application shall contain the name and address of the owner of the building or structure and in addition, the name and address of the person appealing, when the applicant is not the owner. A copy of the

building official's decision shall be submitted along with the application for appeal and maintained as part of the record. The application shall be marked by the LBBCA to indicate the date received. Failure to submit an application for appeal within the time limit established by this section shall constitute acceptance of a building official's decision.

Note: To the extent that a decision of a building official pertains to amusement devices there may be a right of appeal under the VADR.

IBC Chapter 2 - Definitions

Add the following definitions to Section 202 of the IBC to read:

[Aboveground liquid fertilizer storage tank (ALFST). A device that contains an accumulation of liquid fertilizer (i) constructed of nonearthen materials, such as concrete, steel or plastic, that provide structural support, (ii) having a capacity of 100,000 gallons (378 500 L) or greater, and (iii) the volume of which is more than 90 percent above the surface of the ground. The term does not include any wastewater treatment or wastewater storage tank, utility or industry pollution control equipment.]

Building regulations. Any law, rule, resolution, regulation, ordinance or code, general or special, or compilation thereof, heretofore or hereafter enacted or adopted by the Commonwealth or any county or municipality, including departments, boards, bureaus, commissions, or other agencies thereof, relating to construction, reconstruction, alteration, conversion, repair, maintenance, or use of structures and buildings and installation of equipment therein. The term does not include zoning ordinances or other land use controls that do not affect the manner of construction or materials to be used in the erection, alteration or repair of a building or structure.

[Change of occupancy. A change in the use or occupancy of any building or structure which would place the building or structure in a different division of the same group of occupancies or in a different group of occupancies; or a change in the purpose or level of activity within a building or structure that involves a change in application of the requirements of this code.]

Construction. The construction, reconstruction, alteration, repair, or conversion of buildings and structures.

Day-night average sound level (Ldn). See Section 1202.1.

DHCD. The Virginia Department of Housing and Community Development.

Emergency communication equipment. See Section 902.1.

Emergency public safety personnel. See Section 902.1.

Equipment. Plumbing, heating, electrical, ventilating, air-conditioning and refrigeration equipment, elevators, dumbwaiters, escalators, and other mechanical additions or installations.

Farm building or structure. A building or structure not used for residential purposes, located on property where farming operations take place, and used primarily for any of the following uses or combination thereof:

1. Storage, handling, production, display, sampling or sale of agricultural, horticultural, floricultural or silvicultural products produced in the farm.
2. Sheltering, raising, handling, processing or sale of agricultural animals or agricultural animal products.
3. Business or office uses relating to the farm operations.
4. Use of farm machinery or equipment or maintenance or storage of vehicles, machinery or equipment on the farm.
5. Storage or use of supplies and materials used on the farm.
6. Implementation of best management practices associated with farm operations.

[Hospice facility. See Section 308.3.1]

Industrialized building. A combination of one or more sections or modules, subject to state regulations and including the necessary electrical, plumbing, heating, ventilating and other service systems, manufactured off-site and transported to the point of use for installation or erection, with or without other specified components, to comprise a finished building. Manufactured homes shall not be considered industrialized buildings for the purpose of this code.

LBBCA. Local board of building code appeals (LBBCA). See Section 119.1.

[Liquid fertilizer. A fluid in which a fertilizer is in true solution. This term does not include anhydrous ammonia or a solution used in pollution control.]

Local building department. The agency or agencies of any local governing body charged with the administration, supervision, or enforcement of this code, approval of construction documents, inspection of buildings or structures, or issuance of permits, licenses, certificates or similar documents.

Local governing body. The governing body of any city, county or town in this Commonwealth.

Locality. A city, county or town in this Commonwealth.

Manufactured home. A structure subject to federal regulation, which is transportable in one or more sections; is eight body feet or more in width and 40 body feet or more in length in the traveling mode, or is 320 or more square feet when erected on site; is built on a permanent chassis; is designed to be used as a single-family dwelling, with or without a permanent foundation, when connected to the required utilities; and includes the plumbing, heating, air-conditioning, and electrical systems contained in the structure.

Night club. Any building in which the main use is a place of public assembly that provides exhibition, performance or other forms of entertainment; serves alcoholic beverages; and provides music and space for dancing.

Skirting. A weather-resistant material used to enclose the space from the bottom of the manufactured home to grade.

Sound transmission class (STC) rating. See Section 1202.1.

State regulated care facility (SRCF). A building with an occupancy in Group R-2, R-3, R-4 or R-5 occupied by persons in the care of others where program oversight is provided by the Virginia Department of Social Services, the Virginia Department of ~~Mental Health, Mental Retardation and Substance Abuse~~ Behavioral Health and Developmental Services, the Virginia Department of Education or the Virginia Department of Juvenile Justice.

State Review Board. The Virginia State Building Code Technical Review Board as established under § 36-108 of the Code of Virginia.

Technical assistant. Any person employed by or under an extended contract to a local building department or local enforcing agency for enforcing the USBC, including but not limited to inspectors and plans reviewers. For the purpose of this definition, an extended contract shall be a contract with an aggregate term of 18 months or longer.

[Technical production area. See Section 410.2.]

VADR. The Virginia Amusement Device Regulations (13VAC5-31).

VCS. The Virginia Certification Standards (13VAC5-21).

Working day. A day other than Saturday, Sunday or a legal local, state or national holiday.

Change the following definitions in Section 202 of the IBC to read:

[Ambulatory health care facility. Buildings or portions thereof that are licensed by the Virginia Department of Health as outpatient surgical hospitals.]

(Remainder of definitions in this section unchanged)

Delete the following definitions from Section 202 of the IBC:

Agricultural, building.

Existing ~~building structure~~.

[Fly gallery.

Gridiron.]

IBC Chapter 3 – Use and Occupancy Classification

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:

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

(Remainder of section unchanged)

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

Child care facilities
[~~Convalescent facilities~~]
Detoxification facilities
[~~Hospice facilities~~]
Hospitals
Mental hospitals
Nursing homes

[Exception: Hospice facilities occupied by 16 or less occupants, excluding staff, are permitted to be classified as Group R-4.]

308.3.1 Definitions. The following words and terms shall, for the purposes of this section and as used elsewhere in this code, have the meanings shown herein.

Child care facilities. Facilities that provide care on a 24-hour basis to more than five children, 2½ years of age or less.

Detoxification facilities. Facilities that serve patients who are provided treatment for substance abuse on a 24-hour basis and who are incapable of self-preservation or who are harmful to themselves or others.

[Hospice facility. An institution, place, or building owned or operated by a hospice provider and licensed by the Virginia Department of Health as a hospice facility to provide room, board, and palliative and supportive medical and other health services to terminally ill patients and their families, including respite and symptom management, on a 24-hour basis to individuals requiring such care pursuant to the orders of a physician.]

(Remainder of section unchanged)

Change occupancy classifications “R-1” and “R-4” and add new occupancy classification “R-5” to Section 310 of the IBC to read:

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

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

Congregate living facilities (transient) with 10 or fewer occupants are permitted to comply with the construction requirements for Group R-3.

Exceptions:

1. Nonproprietor occupied bed and breakfast and other transient boarding facilities not more than three stories above grade plane in height with a maximum of 10 occupants total are permitted to be classified as either Group R-3 or Group R-5 provided that smoke alarms are installed in compliance with Section 907.2.10.1.2 for Group R-3 or Section 313.1 of the International Residential Code for Group R-5.
2. Proprietor occupied bed and breakfast and other transient boarding facilities not more than three stories above grade plane in height, that are also occupied as the residence of the proprietor, with a maximum of five guest room sleeping units provided for the transient occupants are permitted to be classified as either Group R-3 or R-5 provided that smoke alarms are installed in compliance with Section 907.2.10.1.2 for Group R-3 or Section 313.1 of the International Residential Code for Group R-5.

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 [and buildings arranged for occupancy as hospice facilities with 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 with the ~~additional requirement to provide [IRC provided the building is protected by an automatic sprinkler system installed in accordance with Section 903.2.7]~~ .

[~~Exception~~ Exceptions:

1. Group R-4 residential care/assisted living facilities with any number of occupants permitted and Group R-4 hospice facilities with five or fewer occupants are permitted to comply with the IRC provided the building is protected by an automatic sprinkler system in accordance with IRC Section P2904 or IBC Section 903.3.
2.] ~~Group homes licensed by the Virginia Department of Mental Health, Mental Retardation and Substance Abuse~~ Behavioral Health and Developmental Services or [assisted living facilities licensed by] the Virginia Department of Social Services that house no more than eight persons with one or more resident counselors shall be classified as Group R-2, R-3, R-4 or R-5. Not more than five of the persons may require physical assistance from staff to respond to an emergency situation.

R-5 Residential occupancies in detached one- and two-family dwellings, townhouses and accessory structures within the scope of the International Residential Code, also referred to as the “IRC.”

[Change the following definition in Section 310.2 to read:

Residential care/assisted living facilities. A building or part thereof housing persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment which provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance from staff. This classification 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 abuse centers.]

IRC Changes

[Change Section R301.2.2.1.1 to read:

R301.2.2.1.1 Alternate determination of seismic design category. The Seismic Design Categories and corresponding Short Period Design Spectral Response Accelerations, S_{DS} shown in Figure R301.2(2) are based on soil Site Class D, as defined in Section 1613.5.2 of the International Building Code. If soil conditions are other than Site Class D, the Short Period Design Spectral Response Accelerations, S_{DS} , for a site can be determined according to Section 1613.5 of the International Building Code. The value of S_{DS} determined according to Section 1613.5 of the International Building Code is permitted to be used to set the seismic design category according to Table R301.2.2.1.1, and to interpolate between values in Tables R602.10.3(3), R603.7 and other seismic design requirements of this code.

Delete Section R301.2.2.3 and all subsections.

Delete Section R301.2.2.4.

Change the exception to Item 1 of Section R301.3 to read:

Exception: For wood framed wall buildings with bracing in accordance with Section R602.10, the wall stud clear height used to determine the maximum permitted story height may be increased to 12 feet (3658 mm) without requiring an engineered design for the building wind and seismic force resisting systems.]

Change Section R302.1 to read: [Add Exception 6 to Section R302.1 to read:]

~~R302.1 Exterior walls. Construction, projections, openings and penetrations of exterior walls of dwellings and accessory buildings shall comply with Table R302.1.~~

~~Exceptions:~~

- ~~1. Walls, projections, openings or penetrations in walls perpendicular to the line use to determine the fire separation distance.~~
- ~~2. Walls of dwellings and accessory structures located on the same lot.~~

- ~~3. Detached tool sheds and storage sheds, playhouses and similar structures exempted from permits are not required to provide wall protection based on location on the lot. Projections beyond the exterior wall shall not extend over the lot line.~~
- ~~4. Detached garages accessory to a dwelling located within two feet (610 mm) of a lot line are permitted to have roof eave projections not exceeding four inches (102 mm).~~
- ~~5. Foundation vents installed in compliance with this code are permitted.~~

[6. Decks and open porches.]

Change Section R310.1 to read:

(No change to section)

Exceptions:

1. Dwelling units equipped throughout with an approved automatic sprinkler system installed in accordance with NFPA 13, 13R [~~or ,~~] 13D [or Section P2904] .
2. Basements used only to house mechanical equipment and not exceeding total floor area of 200 square feet (18.58 m²).

[Change Section R314.2 to read:

R314.2 Smoke detection systems. Household fire alarm systems installed in accordance with NFPA 72 that include smoke alarms, or a combination of smoke detector and audible notification device installed as required by this section for smoke alarms, shall be permitted. The household fire alarm system shall provide the same level of smoke detection and alarm as required by this section for smoke alarms. Where a household fire warning system is installed using a combination of smoke detector and audible notification device(s), the system shall become a permanent fixture of the dwelling unit.

Exception: Where smoke alarms are provided meeting the requirements of Section R314.4.

Delete Section R314.3.1.

Delete Section R315.2.

Change Section R315.3 to read:

R315.3 Alarm requirements. Single station carbon monoxide alarms shall be hard wired, plug-in or battery type, listed as complying with UL 2034, and shall be installed in accordance with this code and the manufacturer's installation instructions.

Add Section R328 Gray Water and Rain Water Recycling Systems.

Add Section R328.1 to read:

R328.1 Use of Appendix O for gray water and rain water recycling systems. In addition to other applicable provisions of this code, gray water recycling systems and rain water recycling systems shall comply with the provisions in Appendix O. In the use of Appendix O for rain water recycling systems, the term “rain water” shall be substituted for the term “gray water.” Gray water recycling systems and rain water recycling systems shall be separate systems and shall not be interconnected.

Add Section R329 Fire Extinguishers.

Add Section R329.1 to read:

R329.1 Kitchen areas. Other than where the dwelling is equipped with an approved sprinkler system in accordance with Section R313, a fire extinguisher having a rating of 2-A:10-B:C or an approved equivalent type of fire extinguisher shall be installed in the kitchen area.

Change Section R401.3 to read:

R401.3 Drainage. Surface drainage shall be diverted to a storm sewer conveyance or other approved point of collection that does not create a hazard to the dwelling unit. Lots shall be graded to drain surface water away from foundation walls. The grade shall fall a minimum of 6 inches (152 mm) within the first 10 feet (3048 mm).

Exception: Where lot lines, walls, slopes or other physical barriers prohibit 6 inches (152 mm) of fall within 10 feet (3048 mm), drains or swales shall be constructed to ensure drainage away from the structure. Impervious surfaces within 10 feet (3048 mm) of the building foundation shall be sloped a minimum of 2 percent away from the building.

Change Exceptions 2 and 3 in Section R403.1.6 to read:

2. Walls 24 inches (610 mm) total length or shorter connecting offset braced wall panels shall be anchored to the foundation with a minimum of one anchor bolt located in the center third of the plate section.
3. Connection of walls 12 inches (305 mm) total length or shorter connecting offset braced wall panels to the foundation without anchor bolts shall be permitted.

Delete Item 5 of Section R403.1.6.1.

Add Section R408.3.1 to read:

R408.3.1 Termite inspection. Where an unvented crawl space is installed and meets the criteria in Section R408, the vertical face of the sill plate shall be clear and unobstructed and an inspection gap shall be provided below the sill plate along the top of any interior foundation wall covering. The gap shall be a minimum of 1 inch (25.4 mm) and a maximum of two inches (50.8 mm) in width and shall extend throughout all parts of any foundation that is enclosed. Joints between the sill plate and the top of any interior wall covering may be sealed.

Exceptions:

1. In areas not subject to damage by termites as indicated by Table R301.2(1).

2. Where other approved means are provided to inspect for potential damage.

Where pier and curtain foundations are installed as depicted in Figure R404.1.5(1), the inside face of the rim joist and sill plate shall be clear and unobstructed except for construction joints which may be sealed.

Exception: Fiberglass or similar insulation may be installed if easily removable.

Change Section R502.2.1 to read:

R502.2.1 Framing at braced wall panels. A load path for lateral forces shall be provided between floor framing and braced wall panels located above or below a floor, as specified in Sections R602.3.5 and R602.10.8.

Modify Table R602.3(1) to change and add items as shown:

<u>7</u>	<u>Built-up studs, face nail</u>	<u>10d (3" x 0.128")</u>	<u>24" o.c.</u>
<u>7a</u>	<u>Abutting studs at intersecting wall corners, face nail</u>	<u>16d (3½" x 0.135")</u>	<u>12" o.c.</u>
<u>26a</u>	<u>Rim joist or blocking to sill plate, toe nail</u>	<u>8d (2½" x 0.113")</u>	<u>6" o.c.</u>

Add Section R602.3.5 to read:

R602.3.5 Braced wall panel uplift load path. Braced wall panels located at exterior walls that support roof rafters or trusses (including stories below top story) shall have the framing members connected in accordance with one of the following:

1. Fastening in accordance with Table R602.3(1) where:
 - 1.1. The basic wind speed does not exceed 90 mph (40 m/s), the wind exposure category is B, the roof pitch is 5:12 or greater, and the roof span is 32 feet (9754 mm) or less, or
 - 1.2. The net uplift value at the top of a wall does not exceed 100 plf (146 N/mm). The net uplift value shall be determined in accordance with Section R802.11 and shall be permitted to be reduced by 60 plf (57 N/mm) for each full wall above.
2. Where the net uplift value at the top of a wall exceeds 100 plf (146 N/mm), installing approved uplift framing connectors to provide a continuous load path from the top of the wall to the foundation or to a point where the uplift force is 100 plf (146 N/mm) or less. The net uplift value shall be as determined in Item 1.2 above.
3. Wall sheathing and fasteners designed in accordance with accepted engineering practice to resist combined uplift and shear forces.

Change Section R602.9 to read:

R602.9 Cripple walls. Foundation cripple walls shall be framed of studs not smaller than the studding above. When exceeding 4 feet (1219 mm) in height, such walls shall be framed of studs having the size required for an additional story.

Cripple walls with a stud height less than 14 inches (356 mm) shall be continuously sheathed on one side with wood structural panels fastened to both the top and bottom plates in accordance with Table R602.3(1), or the cripple walls shall be constructed of solid blocking. Cripple walls shall be supported on continuous foundations.]

(Delete 2006 Section R602.10 and all subsections and replace with the following. Note: Figures are not shown underlined, but are part of the new provisions)

[R602.10 Wall bracing. Buildings shall be braced in accordance with this section, or, when applicable, Section R602.12. Where a building, or portion thereof, does not comply with one or more of the bracing requirements in this section, those portions shall be designed and constructed in accordance with Section R301.1.

The building official may require the permit applicant to identify and locate on the construction documents braced wall lines and braced wall panels as described herein.

R602.10.1 Braced wall lines. For the purpose of determining the amount and location of bracing required in each story level of a building, braced wall lines shall be designated as straight lines in the building plan placed in accordance with this section.

R602.10.1.1 Length of a braced wall line. The length of a braced wall line shall be the distance between its ends. The end of a braced wall line shall be the intersection with a perpendicular braced wall line, an angled braced wall line as permitted in Section R602.10.1.4 or an exterior wall as shown in Figure R602.10.1.1.

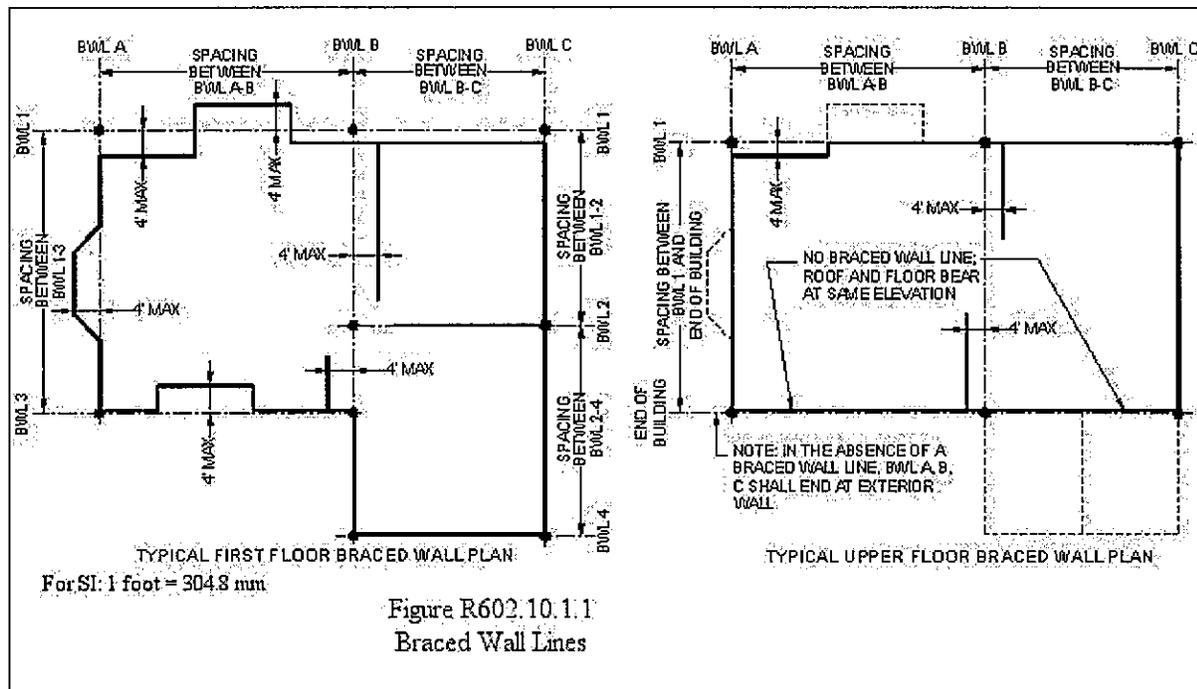


Figure R602.10.1.1
Braced Wall Lines

R602.10.1.2 Offsets along a braced wall line. All exterior walls parallel to a braced wall line shall be permitted to offset up to 4 feet (1219 mm) from the designated braced wall line location as shown Figure R602.10.1.1. Interior walls used as bracing shall be permitted to offset up to 4 feet (1219 mm) from a braced wall line through the interior of the building as shown in Figure R602.10.1.1.

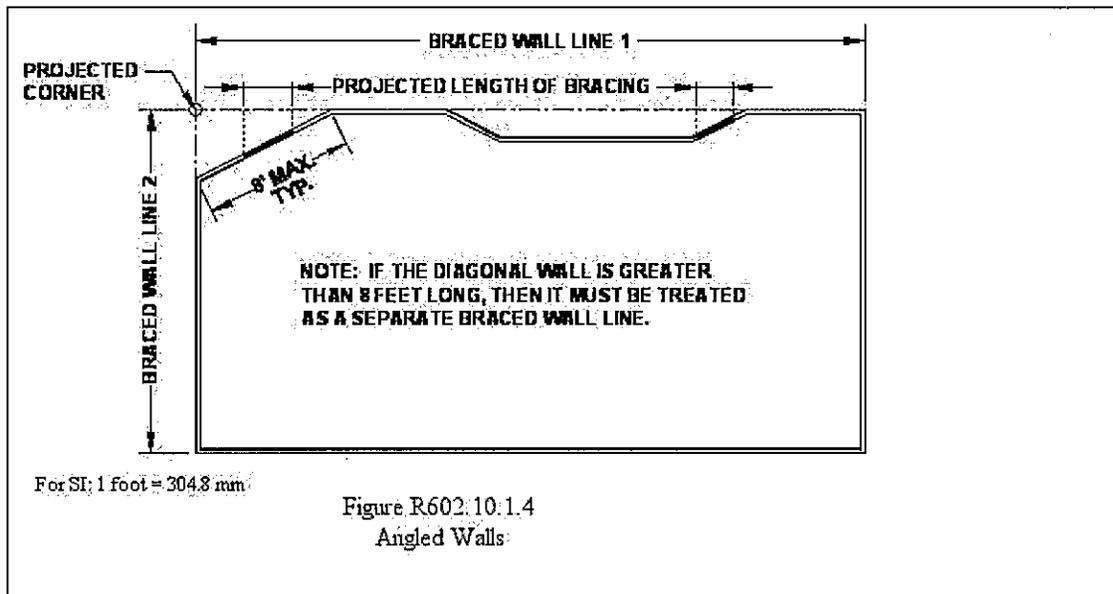
R602.10.1.3 Spacing of braced wall lines. There shall be a minimum of two braced wall lines in both the longitudinal and transverse direction as shown in Figure R602.10.1.1. Intermediate braced wall lines through the interior of the building shall be permitted. The spacing between parallel braced wall lines shall be in accordance with Table R602.10.1.3.

**Table R602.10.1.3
Braced Wall Line Spacing**

APPLICATION	CONDITION	BUILDING TYPE	BRACED WALL LINE SPACING CRITERIA	
			Maximum Spacing	Exception to Maximum Spacing
Wind bracing	85 mph to <110 mph	Detached, townhouse	60 feet	None
Seismic bracing	SDC A - C	Detached	Use wind bracing	
	SDC A - B	Townhouse	Use wind bracing	
	SDC C	Townhouse	35 feet	Up to 50 feet when length of required bracing per Table R602.10.3(3) is adjusted in accordance with Table R602.10.3(4)

For SI: 1 foot = 304.8 mm

R602.10.1.4 Angled walls. Any portion of a wall along a braced wall line shall be permitted to angle out of plane for a maximum diagonal length of 8 feet (2438 mm). Where the angled wall occurs at a corner, the length of the braced wall line shall be measured from the projected corner as shown in Figure R602.10.1.4. Where the diagonal length is greater than 8 feet (2438 mm), it shall be considered a separate braced wall line and shall be braced in accordance with Section R602.10.1.



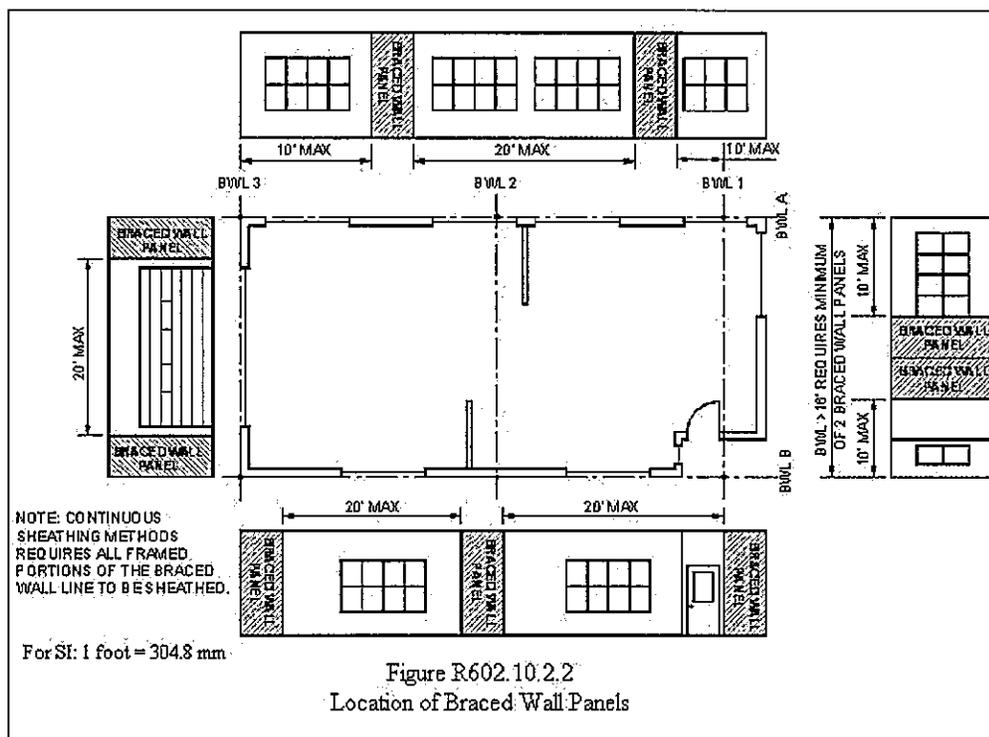
For SI: 1 foot = 304.8 mm

Figure R602.10.1.4
Angled Walls

R602.10.2 Braced wall panels. Braced wall panels shall be full-height sections of wall that shall have no vertical or horizontal offsets. Braced wall panels shall be constructed and placed along a braced wall line in accordance with this section and the bracing methods specified in Section R602.10.4.

R602.10.2.1 Braced wall panel uplift load path. The bracing lengths in Table R602.10.3(1) apply only when uplift loads are resisted per Section R602.3.5.

R602.10.2.2 Locations of braced wall panels. A braced wall panel shall begin within 10 feet (3810 mm) from each end of a braced wall line as determined in accordance with Section R602.10.1.1. The distance between adjacent edges of braced wall panels along a braced wall line shall be no greater than 20 feet (6096 mm) as shown in Figure R602.10.2.2



R602.10.2.3 Minimum number of braced wall panels. Braced wall lines with a length of 16 feet (4877 mm) or less shall have a minimum of two braced wall panels of any length or one braced wall panel equal to 48 inches (1219 mm) or more. Braced wall lines greater than 16 feet (4877 mm) shall have a minimum of two braced wall panels.

R602.10.3 Required length of bracing. The required length of bracing along each braced wall line shall be determined as follows.

1. All buildings in Seismic Design Categories A and B shall use Table R602.10.3(1) and the applicable adjustment factors in Table R602.10.3(2).
2. Detached buildings in Seismic Design Category C shall use Table R602.10.3(1) and the applicable adjustment factors in Table R602.10.3(2).

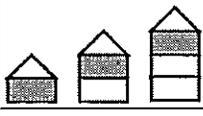
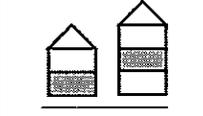
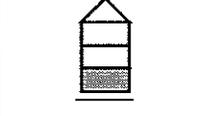
3. Townhouses in Seismic Design Category C shall use the greater value determined from Table R602.10.3(1) or R602.10.3(3) and the applicable adjustment factors in Table R602.10.3(2) or R602.10.3(4) respectively.

Only braced wall panels parallel to the braced wall line within the 4 foot (1219 mm) offset permitted by Section R602.10.1.2 shall contribute towards the required length of bracing of that braced wall line. If a braced wall panel is located along an angled wall and meets the minimum length requirements of Tables R602.10.5 or R602.10.5.2, it shall be permitted to contribute its projected length towards the minimum required length of bracing for the braced wall line as shown in Figure R602.10.1.4. If a braced wall panel is located along an angled wall at the end of a braced wall line, it shall contribute its projected length for only one of the braced wall lines at the projected corner.

(Remainder of page intentionally left blank to fit table on next two pages)

Table R602.10.3(1)
Bracing Requirements Based on Wind Speed

<ul style="list-style-type: none"> • EXPOSURE CATEGORY B • 30 FT MEAN ROOF HEIGHT • 10 FT EAVE TO RIDGE HEIGHT • 10 FT WALL HEIGHT • 2 BRACED WALL LINES 			MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE ^a			
Basic Wind Speed (mph)	Story Location	Braced Wall Line Spacing (feet)	Method LIB ^b	Method GB	Methods DWB, WSP, SFB, PBS, PCP, HPS, CS-SFB ^c	Methods CS-WSP, CS-G, CS-PF
≤85		10	3.5	3.5	2.0	1.5
		20	6.0	6.0	3.5	3.0
		30	8.5	8.5	5.0	4.5
		40	11.5	11.5	6.5	5.5
		50	14.0	14.0	8.0	7.0
		60	16.5	16.5	9.5	8.0
		10	6.5	6.5	3.5	3.0
		20	11.5	11.5	6.5	5.5
		30	16.5	16.5	9.5	8.0
		40	21.5	21.5	12.5	10.5
		50	26.5	26.5	15.0	13.0
		60	31.5	31.5	18.0	15.5
		10	NP	9.0	5.5	4.5
		20	NP	17.0	10.0	8.5
		30	NP	24.5	14.0	12.0
		40	NP	32.0	18.0	15.5
		50	NP	39.0	22.5	19.0
		60	NP	46.5	26.5	22.5
≤90		10	3.5	3.5	2.0	2.0
		20	7.0	7.0	4.0	3.5
		30	9.5	9.5	5.5	5.0
		40	12.5	12.5	7.5	6.0
		50	15.5	15.5	9.0	7.5
		60	18.5	18.5	10.5	9.0
		10	7.0	7.0	4.0	3.5
		20	13.0	13.0	7.5	6.5
		30	18.5	18.5	10.5	9.0
		40	24.0	24.0	14.0	12.0
		50	29.5	29.5	17.0	14.5
		60	35.0	35.0	20.0	17.0
		10	NP	10.5	6.0	5.0
		20	NP	19.0	11.0	9.5
		30	NP	27.5	15.5	13.5
		40	NP	35.5	20.5	17.5
		50	NP	44.0	25.0	21.5
		60	NP	52.0	30.0	25.5
≤100		10	4.5	4.5	2.5	2.5
		20	8.5	8.5	5.0	4.0
		30	12.0	12.0	7.0	6.0
		40	15.5	15.5	9.0	7.5
		50	19.0	19.0	11.0	9.5
		60	22.5	22.5	13.0	11.0
		10	8.5	8.5	5.0	4.5
		20	16.0	16.0	9.0	8.0
		30	23.0	23.0	13.0	11.0
		40	29.5	29.5	17.0	14.5
		50	36.5	36.5	21.0	18.0
		60	43.5	43.5	25.0	21.0
		10	NP	12.5	7.5	6.0
		20	NP	23.5	13.5	11.5
		30	NP	34.0	19.5	16.5
		40	NP	44.0	25.0	21.5
		50	NP	54.0	31.0	26.5
		60	NP	64.0	36.5	31.0

<ul style="list-style-type: none"> • EXPOSURE CATEGORY B • 30 FT MEAN ROOF HEIGHT • 10 FT EAVE TO RIDGE HEIGHT • 10 FT WALL HEIGHT • 2 BRACED WALL LINES 			MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE ^a			
Basic Wind Speed (mph)	Story Location	Braced Wall Line Spacing (feet)	Method LIB ^b	Method GB	Methods DWB, WSP, SFB, PBS, PCP, HPS, CS-SFB ^c	Methods CS-WSP, CS-G, CS-PF
< 110°		10	5.5	5.5	3.0	3.0
		20	10.0	10.0	6.0	5.0
		30	14.5	14.5	8.5	7.0
		40	18.5	18.5	11.0	9.0
		50	23.0	23.0	13.0	11.5
		60	27.5	27.5	15.5	13.5
		10	10.5	10.5	6.0	5.0
		20	19.0	19.0	11.0	9.5
		30	27.5	27.5	16.0	13.5
		40	36.0	36.0	20.5	17.5
		50	44.0	44.0	25.5	21.5
		60	52.5	52.5	30.0	25.5
		10	NP	15.5	9.0	7.5
		20	NP	28.5	16.5	14.0
		30	NP	41.0	23.5	20.0
		40	NP	53.0	30.5	26.0
		50	NP	65.5	37.5	32.0
		60	NP	77.5	44.5	37.5

For SI: 1 inch = 25.4 mm, 1 foot = 305 mm.

a. Linear interpolation shall be permitted.

b. Method LIB shall have gypsum board fastened to at least one side with nails or screws per Table R602.3(1) for exterior sheathing or Table R702.3.5 for interior gypsum board. Spacing of fasteners at panel edges shall not exceed 8 inches (203 mm).

c. Method CS-SFB does not apply where the wind speed is greater than 100 mph.

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Table R602.10.3(2)

Wind Adjustment Factors to the Required Length of Wall Bracing

ADJUSTMENT BASED ON	STORY/ SUPPORTING	CONDITION	ADJUSTMENT FACTOR ^{a,b} (multiply length from Table R602.10.3(1) by this factor)	APPLICABLE METHODS
<u>Exposure category</u>	<u>One story structure</u>	B	1.00	<u>All methods</u>
		C	1.20	
		D	1.50	
	<u>Two-story structure</u>	B	1.00	
		C	1.30	
		D	1.60	
	<u>Three-story structure</u>	B	1.00	
		C	1.40	
		D	1.70	
<u>Roof eave-to-ridge height</u>	<u>Roof only</u>	≤ ft	0.70	
		10 ft	1.00	
		15 ft	1.30	
		20 ft	1.60	
	<u>Roof + 1 floor</u>	≤ ft	0.85	
		10 ft	1.00	
		15 ft	1.15	
		20 ft	1.30	
	<u>Roof + 2 floors</u>	≤ ft	0.90	
		10 ft	1.00	
		15 ft	1.10	
		20 ft	Not permitted	
<u>Wall height adjustment</u>	<u>Any story</u>	8 ft	0.90	
		9 ft	0.95	
		10 ft	1.00	
		11 ft	1.05	
		12 ft	1.10	
<u>Number of braced wall lines (per plan direction)^c</u>	<u>Any story</u>	2	1.00	
		3	1.30	
		4	1.45	
		≥	1.60	
<u>Additional 800 lb hold-down device</u>	<u>Top story only</u>	<u>Fastened to the end studs of each braced wall panel and to the foundation or framing below</u>	0.80	<u>DWB, WSP, SFB, PBS, PCP, HPS</u>
<u>Interior gypsum board finish (or equivalent)</u>	<u>Any story</u>	<u>Omitted from inside face of braced wall panels</u>	1.40	<u>DWB, WSP, SFB, PBS, PCP, HPS, CS-WSP, CS-G, CS-SFB</u>
<u>Gypsum board fastening</u>	<u>Any story</u>	<u>4 in. o.c. at panel edges, including top and bottom plates, and all horizontal joints blocked</u>	0.7	<u>GB</u>

For SI: 1 foot = 305 mm, 1 lb = 4.48 N.

a. Linear Interpolation shall be permitted.

b. The total adjustment factor is the product of all applicable adjustment factors.

c. The adjustment factor is permitted to be 1.0 when determining bracing amounts of intermediate braced wall lines provided the bracing amounts on adjacent braced wall lines are based on a spacing and number that neglects the intermediate braced wall line.

(Remainder of page intentionally left blank to fit tables on next page)

Table R602.10.3(3)
Bracing Requirements Based on Seismic Design Category

<ul style="list-style-type: none"> • SOIL CLASS D^b • WALL HEIGHT = 10 FT • 10 PSF FLOOR DEAD LOAD • 15 PSF ROOF/CEILING DEAD LOAD • BRACED WALL LINE SPACING ≤ 25 FT 			MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE ^a				
Seismic Design Category	Story Location	Braced Wall Line Length (ft)	Method LIB ^c	Method GB	Methods DWB, SFB, PBS, PCP, HPS, CS-SFB	Method WSP	Methods CS-WSP, CS-G
C (townhouses only)		10	2.5	2.5	2.5	1.6	1.4
		20	5.0	5.0	5.0	3.2	2.7
		30	7.5	7.5	7.5	4.8	4.1
		40	10.0	10.0	10.0	6.4	5.4
		50	12.5	12.5	12.5	8.0	6.8
		10	NP	4.5	4.5	3.0	2.6
		20	NP	9.0	9.0	6.0	5.1
		30	NP	13.5	13.5	9.0	7.7
		40	NP	18.0	18.0	12.0	10.2
		50	NP	22.5	22.5	15.0	12.8
		10	NP	6.0	6.0	4.5	3.8
		20	NP	12.0	12.0	9.0	7.7
		30	NP	18.0	18.0	13.5	11.5
		40	NP	24.0	24.0	18.0	15.3
		50	NP	30.0	30.0	22.5	19.1

For SI: 1 foot 305 mm

a. Linear interpolation shall be permitted.

b. Wall bracing lengths are based on a soil site class "D." Interpolation of bracing length between the S_{ds} values associated with the Seismic Design Categories shall be permitted when a site-specific S_{ds} value is determined in accordance with Section 1613.5 of the International Building Code.

c. Method LIB shall have gypsum board fastened to at least one side with nails or screws per Table R602.3(1) for exterior sheathing or Table R702.3.5 for interior gypsum board. Spacing of fasteners at panel edges shall not exceed 8 inches (203 mm).

Table R602.10.3(4)
Seismic Adjustment Factors to the Required Length of Wall Bracing

ADJUSTMENT BASED ON:	STORY/SUPPORTING	CONDITION	ADJUSTMENT FACTOR ^{a,b} (Multiply length from Table R602.10.3(3) by this factor)	APPLICABLE METHODS	
Story height (Section 301.3)	Any story	≤ 10 ft	1.0	All methods	
		> 10 ft ≤ 12 ft	1.2		
Braced wall line spacing	Any story	≤ 35 ft	1.0		
		> 35 ft ≤ 50 ft	1.43		
Wall dead load	Any story	> 8 psf < 15 psf	1.0		
		≤ 8 psf	0.85		
Roof/ceiling dead load for wall supporting	Any story	≤ 5 psf	1.0		
	Roof plus one or two stories	> 15 psf ≤ 25 psf	1.1		
	Roof only	> 15 psf ≤ 25 psf	1.2		
Walls with stone or masonry veneer			1.0		
			1.5		
			1.5		
Interior gypsum board finish (or equivalent)	Any story	Omitted from inside face of braced wall panels	1.5		DWB, WSP, SFB, PBS, PCP, HPS, CS-WSP, CS-G, CS-SFB

For SI: 1 psf = 47.8 N/m².

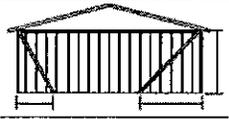
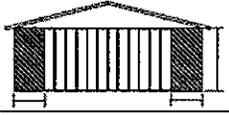
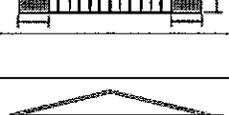
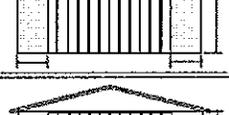
a. Linear interpolation shall be permitted.

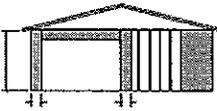
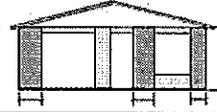
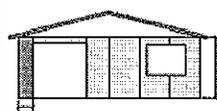
b. The total length of bracing required for a given wall line is the product of all applicable adjustment factors.

- c. The length-to-width ratio for the floor/roof diaphragm shall not exceed 3:1. The top plate lap splice nailing shall be a minimum of 12-16d nails on each side of the splice.
- d. Applies to stone or masonry veneer exceeding the first story height.
- e. The adjustment factor for stone or masonry veneer shall be applied to all exterior braced wall lines and all braced wall lines on the interior of the building.

R602.10.4 Bracing methods for braced wall panels. Braced wall panels shall be constructed in accordance with this section and the methods listed in Table R602.10.4.

**Table R602.10.4
Bracing Methods**

METHODS, MATERIAL	MINIMUM THICKNESS	FIGURE	CONNECTION CRITERIA ^a		
			Fasteners	Spacing	
Intermittent Bracing Methods	LIB Let-in-bracing	1x4 wood or approved metal straps at 45° to 60° angles for maximum 16" stud spacing		Wood: 2-8d common nails or 3-8d (2 1/2" long x 0.113" dia.) nails Metal: per manufacturer	Wood: per stud and top and bottom plates Metal: per manufacturer
	DWB Diagonal wood boards	3/4" (1" nominal) for maximum 24" stud spacing		2-8d (2 1/2" long x 0.113" dia.) nails or 2 - 1 3/4" long staples	Per stud
	WSP Wood structural panel (See Section R604)	3/8"		Exterior sheathing per Table R602.3(3) Interior sheathing per Table R602.3(1) or R602.3(2)	6" edges 12" field Varies by fastener
	SFB Structural fiberboard sheathing	1/2" or 25/32" for maximum 16" stud spacing		1 1/2" long x 0.12" dia. (for 1/2" thick sheathing) 1 3/4" long x 0.12" dia. (for 25/32" thick sheathing) galvanized roofing nails or 8d common (2 1/2" long x 0.131" dia.) nails	3" edges 6" field
	GB Gypsum board	1/2"		Nails or screws per Table R602.3(1) for exterior locations Nails or screws per Table R702.3.5 for interior locations	For all braced wall panel locations: 7" edges (including top and bottom plates) 7" field
	PBS Particleboard sheathing (See Section R605)	3/8" or 1/2" for maximum 16" stud spacing		For 3/8", 6d common (2" long x 0.113" dia.) nails For 1/2", 8d common (2 1/2" long x 0.131" dia.) nails	3" edges 6" field
	PCP Portland cement plaster	See Section R703.6 for maximum 16" stud spacing		1 1/2" long, 11 gage, 7/16" dia. head nails or 7/8" long, 16 gage staples	6" o.c. on all framing members
	HPS Hardboard panel siding	7/16" for maximum 16" stud spacing		0.092" dia., 0.225" dia. head nails with length to accommodate 1 1/2" penetration into studs	4" edges 8" field
	ABW Alternate braced wall	3/8"		See Section R602.10.6.1	See Section R602.10.6.1
	PFH Portal frame with hold-downs	3/8"		See Section R602.10.6.2	See Section R602.10.6.2

Continuous Sheathing Methods	PFG Portal frame at garage	$\frac{7}{16}$ "		See Section R602.10.6.3	See Section R602.10.6.3
	CS-WSP Continuously sheathed wood structural panel	$\frac{3}{8}$ "		Exterior sheathing per Table R602.3(3) Interior sheathing per Table R602.3(1) or R602.3(2)	6" edges 12" field Varies by fastener
	CS-G ^{b, c} Continuously sheathed wood structural panel adjacent to garage openings	$\frac{3}{8}$ "		See Method CS-WSP	See Method CS-WSP
	CS-PF Continuously sheathed portal frame	$\frac{7}{16}$ "		See Section R602.10.6.4	See Section R602.10.6.4
	CS-SFB ^d Continuously sheathed structural fiberboard	$\frac{1}{2}$ " or $\frac{25}{32}$ " for maximum 16" stud spacing		$\frac{1}{2}$ " long x 0.12" dia. (for $\frac{1}{2}$ " thick sheathing) $\frac{3}{4}$ " long x 0.12" dia. (for $\frac{25}{32}$ " thick sheathing) galvanized roofing nails or 8d common ($\frac{1}{2}$ " long x 0.131 dia.) nails	3" edges 6" field

For SI: 1 inch = 25.4 mm, 1 foot = 305 mm.

a. Adhesive attachment of wall sheathing, including Method GB, shall not be permitted in townhouses in Seismic Design Category C.

b. Applies to panels next to garage door opening when supporting gable end wall or roof load only. May only be used on one wall of the garage.

c. Garage openings adjacent to a Method CS-G panel shall be provided with a header in accordance with Table R502.5(1). A full height clear opening shall not be permitted adjacent to a Method CS-G panel.

d. Method CS-SFB does not apply in areas where the wind speed exceeds 100 mph.

R602.10.4.1 Mixing methods. Mixing of bracing methods shall be permitted as follows:

1. Mixing intermittent bracing and continuous sheathing methods from story to story shall be permitted.
2. Mixing intermittent bracing methods from braced wall line to braced wall line within a story shall be permitted. In regions where the basic wind speed is less than or equal to 100 mph, mixing of intermittent bracing and continuous sheathing methods from braced wall line to braced wall line within a story shall be permitted.
3. Mixing intermittent bracing methods along a braced wall line shall be permitted in Seismic Design Categories A and B, and detached dwellings in Seismic Design Category C provided the length of required bracing in accordance with Table R602.10.3(1) or R602.10.3(3) is the highest value of all intermittent bracing methods used.
4. Mixing of continuous sheathing methods CS-WSP, CS-G and CS-PF along a braced wall line shall be permitted.
5. In Seismic Design Categories A and B, and for detached one- and two-family dwellings in Seismic Design Category C, mixing of intermittent bracing methods along the interior portion of a braced wall line with continuous sheathing methods CS-WSP, CS-G and CS-PF along the exterior portion of the same braced wall line shall be permitted. The length of required bracing shall be the highest value of all intermittent bracing methods used in

accordance with Table R602.10.3(1) or R602.10.3(3) as adjusted by Tables R602.10.3(2) and R602.10.3(4), respectively. The requirements of Section R602.10.7 shall apply to each end of the continuously sheathed portion of the braced wall line.

R602.10.4.2 Continuous sheathing methods. Continuous sheathing methods require structural panel sheathing to be used on all sheathable surfaces on one side of a braced wall line including areas above and below openings and gable end walls and shall meet the requirements of Section R602.10.7.

R602.10.4.3 Braced wall panel interior finish material. Braced wall panels shall have gypsum wall board installed on the side of the wall opposite the bracing material. Gypsum wall board shall be not less than ½ inch (12.7 mm) in thickness and be fastened with nails or screws in accordance with Table R602.3(1) for exterior sheathing or Table R702.3.5 for interior gypsum wall board. Spacing of fasteners at panel edges for gypsum wall board opposite Method LIB bracing shall not exceed 8 inches (203 mm). Interior finish material shall not be glued in townhouses in Seismic Category C.

Exceptions:

1. Interior finish material is not required opposite wall panels that are braced in accordance with Method GB, ABW, PFH, PFG and CS-PF, unless otherwise required by Section R302.6.
2. An approved interior finish material with an in-plane shear resistance equivalent to gypsum board shall be permitted to be substituted, unless otherwise required by Section R302.6.
3. Except for Method LIB, gypsum wall board is permitted to be omitted provided the required length of bracing in Tables R602.10.3(1) and R602.10.3(3) is multiplied by the appropriate adjustment factor in Tables R602.10.3(2) and R602.10.3(4) respectively, unless otherwise required by Section R302.6.

R602.10.5 Minimum length of a braced wall panel. The minimum length of a braced wall panel shall comply with Table R602.10.5. For Methods CS-WSP and CS-SFB, the minimum panel length shall be based on the vertical dimension of the adjacent opening in accordance with Table R602.10.5 and Figure R602.10.5. When a panel has openings on either side of differing heights, the larger vertical dimension shall be used to determine the minimum braced wall panel length.

R602.10.5.1 Contributing length. For purposes of complying with the required length of bracing in Tables R602.10.3(1) and R602.10.3(3), the contributing length of each braced wall panel to the total length of bracing shall be as specified in Table R602.10.5.

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Table R602.10.5
Minimum Length of Braced Wall Panels

METHOD (See Table R602.10.4)		MINIMUM LENGTH ^a (in)					CONTRIBUTING LENGTH (in)
		Wall Height					
		8 ft	9 ft	10 ft	11 ft	12 ft	
DWG, WSP, SFB, PBS, PCP, HPS		48	48	48	53	58	Actual ^b
GB		48	48	48	53	58	Double sided = Actual Single sided = 0.5 x Actual
LIB		55	62	69	NP	NP	Actual ^b
ABW		28	32	34	38	42	48
PFH	Supporting roof only	16	16	16	18 ^c	20 ^c	48
	Supporting one story and roof	24	24	24	27 ^c	29 ^c	48
PFG		24	27	30	33 ^c	36 ^c	1.5 x Actual ^b
CS-G		24	27	30	33	36	Actual ^b
CS-PF		16	18	20	22 ^c	24 ^c	Actual ^b
CS-WSP, CS-SFB	Adjacent opening vertical dimension (in)						
	≤64	24	27	30	33	36	Actual ^b
	68	26	27	30	33	36	
	72	27	27	30	33	36	
	76	30	29	30	33	36	
	80	32	30	30	33	36	
	84	35	32	32	33	36	
	88	38	35	33	33	36	
	92	43	37	35	35	36	
	96	48	41	38	36	36	
	100		44	40	38	38	
	104		49	43	40	39	
	108		54	46	43	41	
	112			50	45	43	
	116			55	48	45	
	120			60	52	48	
	124				56	51	
128				61	54		
132				66	58		
136					62		
140					66		
144					72		

For SI: 1 inch = 25.4 mm

NP = Not permitted

a. Linear interpolation shall be permitted.

b. Use the actual length provided it is greater than or equal to the minimum length.

c. Maximum header height for is 10'; however, wall height may be increased to 12' with a pony wall per Table R602.10.6.4.

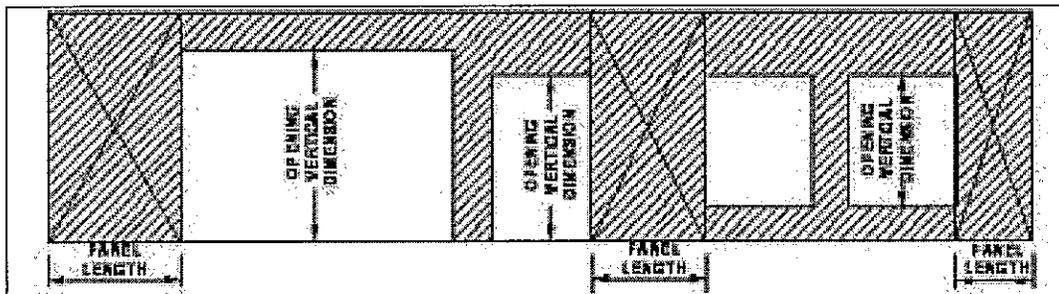


Figure R602.10.5
Braced Wall Panels with Continuous Sheathing

R602.10.5.2 Partial credit. For Methods DWB, WSP, SFB, PBS, PCP and HPS panels between 36 inches and 48 inches in length shall be considered a braced wall panel and shall be permitted to partially contribute towards the required length of bracing in Table R602.10.3(1) and R602.10.3(3), and the contributing length shall be determined from Table R602.10.5.2.

Table R602.10.5.2
Partial Credit for Braced Wall Panels Less than 48 Inches in Actual Length

<u>Actual Length of Braced Wall Panel (in)</u>	<u>Contributing Length of Braced Wall Panel (in)^a</u>	
	<u>8 ft Wall Height</u>	<u>9 ft Wall Height</u>
<u>48</u>	<u>48</u>	<u>48</u>
<u>42</u>	<u>36</u>	<u>36</u>
<u>36</u>	<u>27</u>	<u>N/A</u>

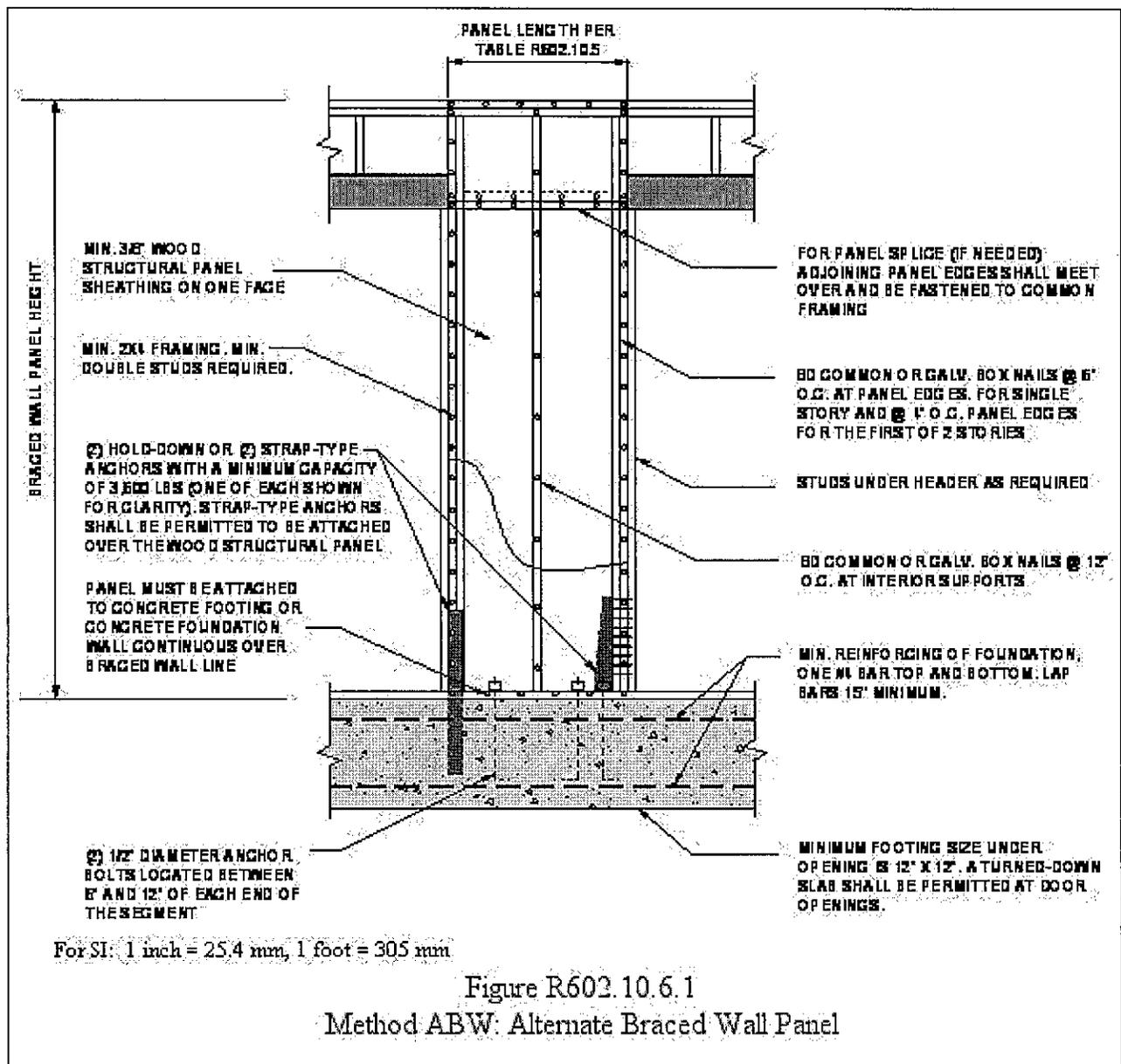
For SI: 1 inch = 25.4mm

^a Linear interpolation shall be permitted.

R602.10.6 Construction of Methods ABW, PFH, PFG and CS-PF. Methods ABW, PFH, PFG and CS-PF shall be constructed as specified in Sections R602.10.6.1 through R602.10.6.4.

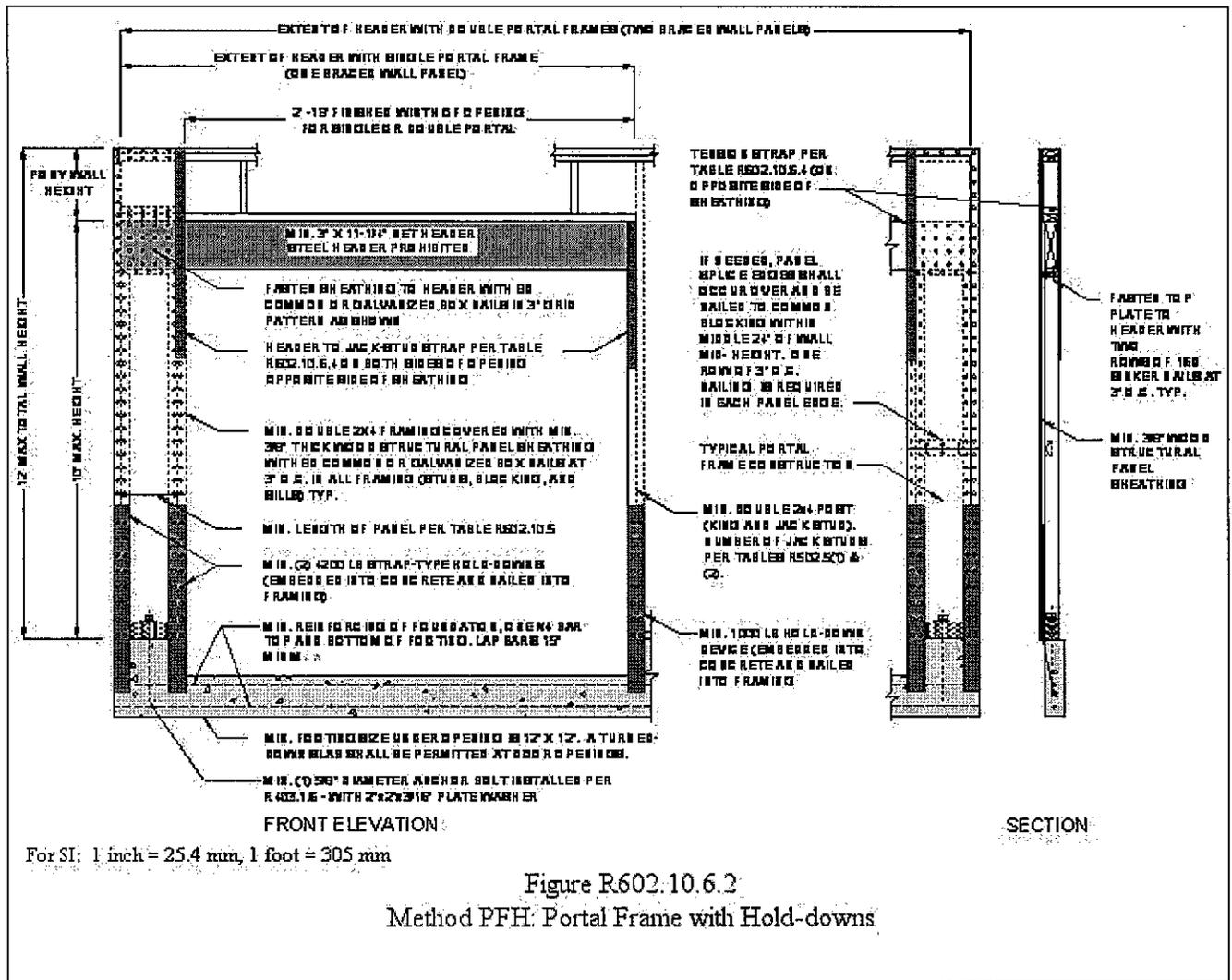
R602.10.6.1 Method ABW: Alternate braced wall panels. Method ABW braced wall panels shall be constructed in accordance with Figure R602.10.6.1.

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R602.10.6.2 Method PFH: Portal frame with hold-downs. Method PFH braced wall panels shall be constructed in accordance with Figure R602.10.6.2.

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R602.10.6.3 Method PFG: Portal frame at garage door openings. Where supporting a roof or one story and a roof, a Method PFG braced wall panel constructed in accordance with Figure R602.10.6.3 shall be permitted on either side of garage door openings.

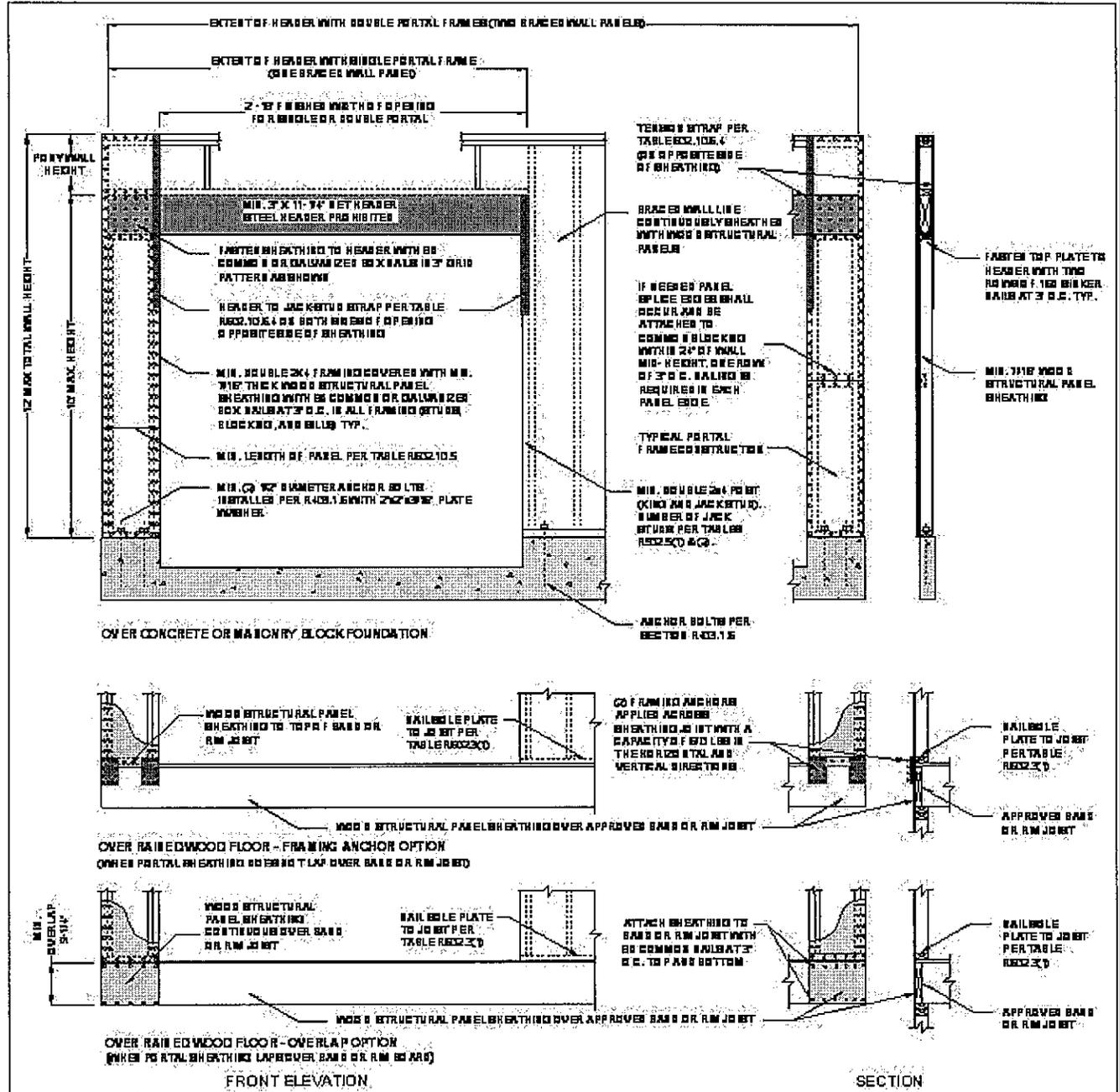
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			16	1650	2050	2925	3000	3550	DR
			18	2025	2450	3425	3500	4100	DR
	4	12	9	1125	1500	2225	2275	2775	3800
			16	2650	3150	DR	DR	DR	DR
			18	3125	3675	DR	DR	DR	DR

For SI: 1 inch = 25.4 mm, 1 foot = 305 mm, 1 lb = 4.45 N

DR = design required

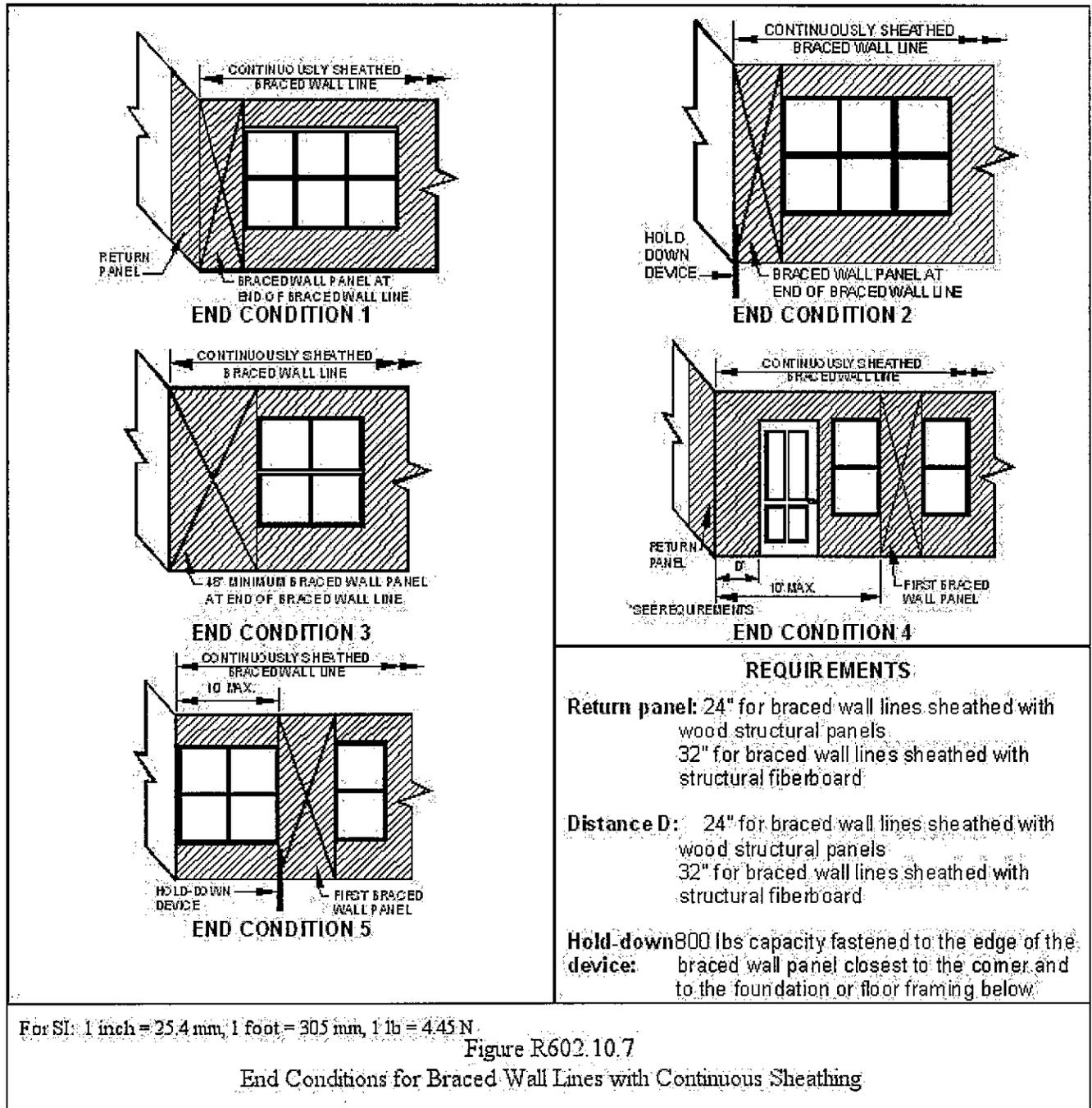
a. Strap shall be installed in accordance with manufacturer's recommendations.



For SI: 1 inch = 25.4 mm, 1 foot = 305 mm, 1 lb = 4.45 N

Figure R602.10.6.4
Method CS-PF: Continuously Sheathed Portal Frame Panel Construction

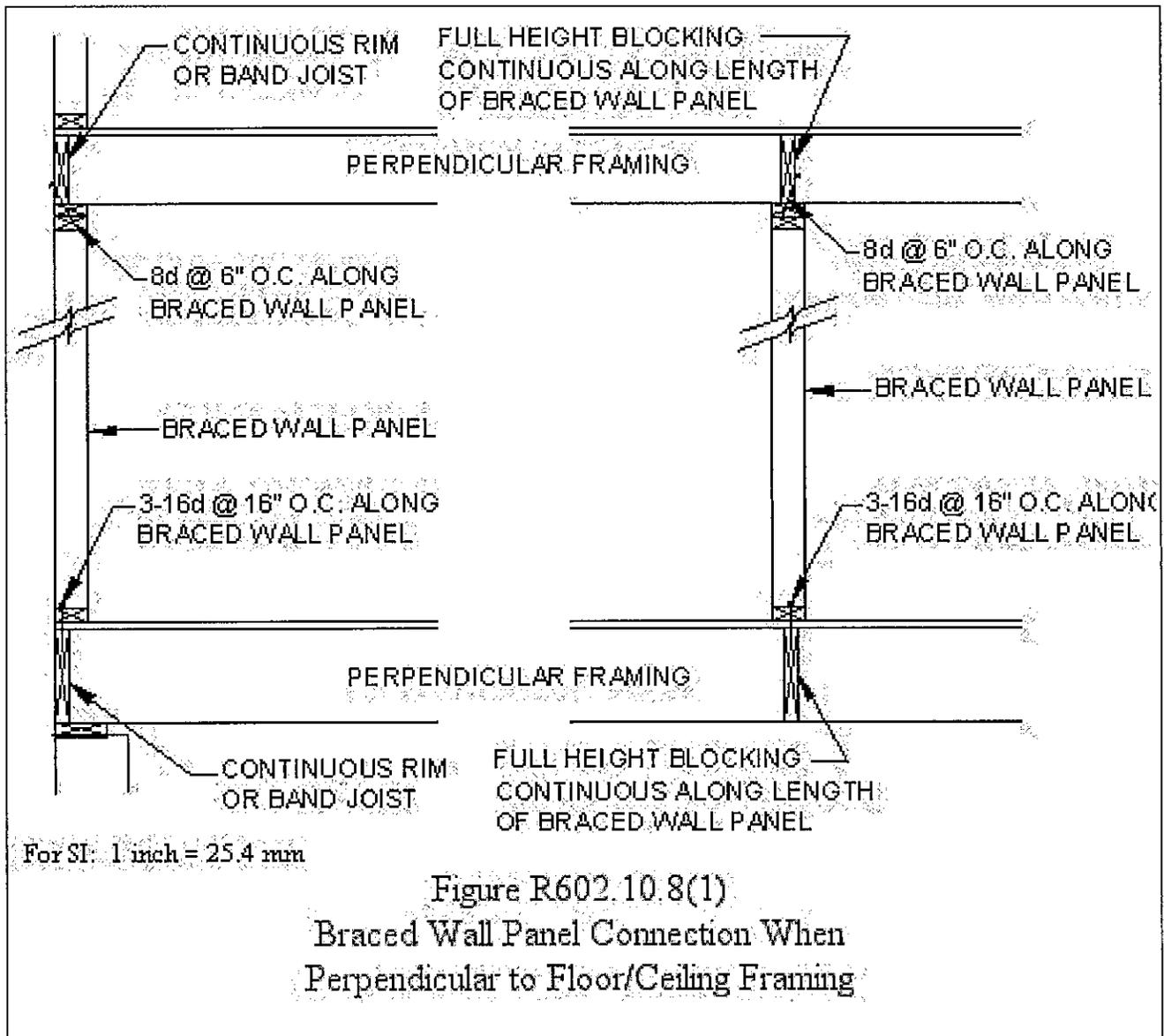
R602.10.7 Ends of braced wall lines with continuous sheathing. Each end of a braced wall line with continuous sheathing shall be in accordance with one of the end conditions shown in Figure R602.10.7.

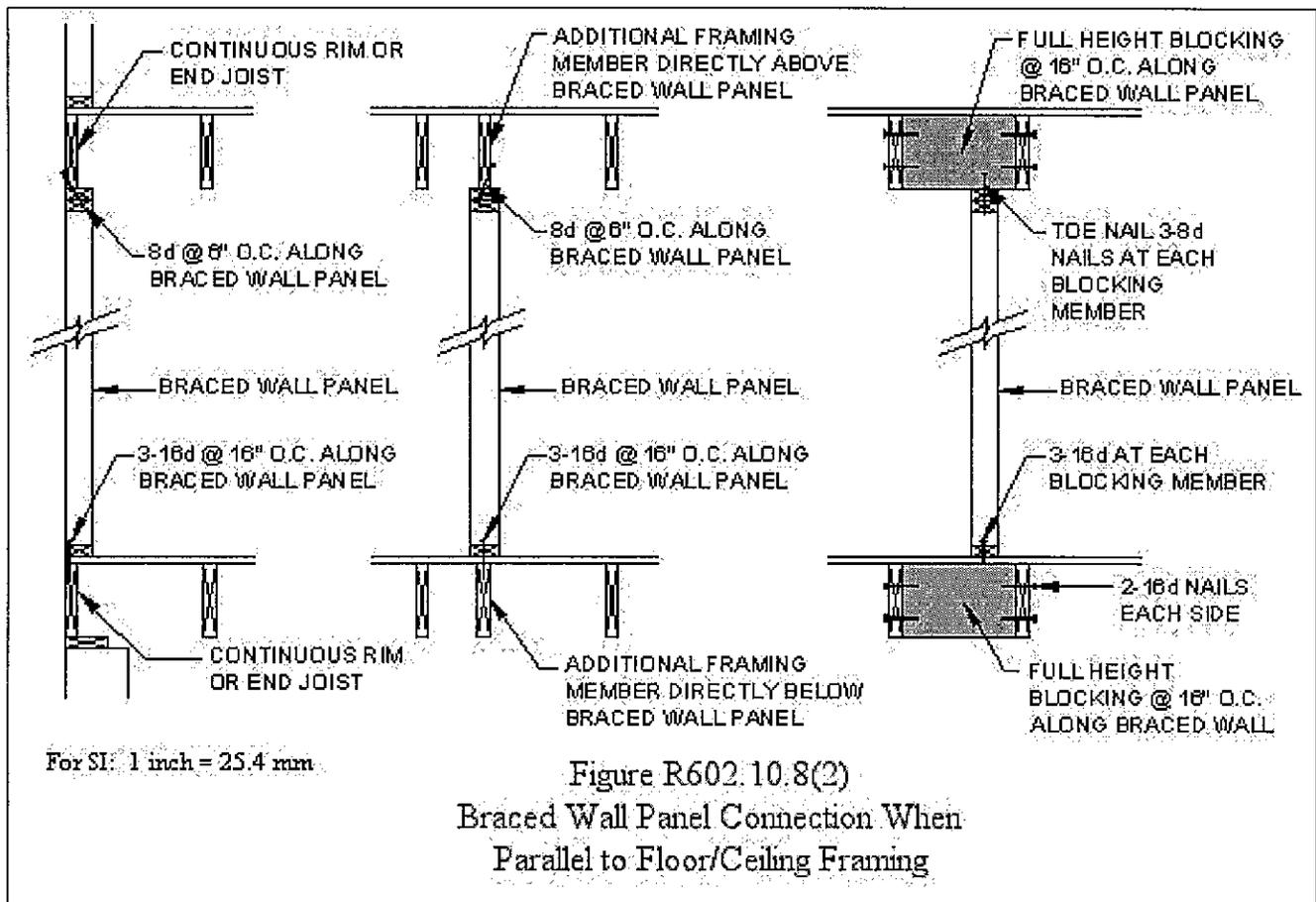


R602.10.8 Braced wall panel connections. Braced wall panels shall be connected to floor framing or foundations as follows:

1. Where joists are perpendicular to a braced wall panel above or below, a rim joist, band joist or blocking shall be provided along the entire length of the braced wall panel in accordance with Figure R602.10.8(1). Fastening of top and bottom wall plates to framing, rim joist, band joist and/or blocking shall be in accordance with Table R602.3(1).

2. Where joists are parallel to a braced wall panel above or below, a rim joist, end joist or other parallel framing member shall be provided directly above and below the braced wall panel in accordance with Figure R602.10.8(2). Where a parallel framing member cannot be located directly above and below the panel, full-depth blocking at 16 inch (406 mm) spacing shall be provided between the parallel framing members to each side of the braced wall panel in accordance with Figure R602.10.8(2). Fastening of blocking and wall plates shall be in accordance with Table R602.3(1) and Figure R602.10.8(2).
3. Connections of braced wall panels to concrete or masonry shall be in accordance with Section R403.1.6.





R602.10.8.1 Connections to roof framing. Top plates of exterior braced wall panels shall be attached to rafters or roof trusses above in accordance with Table R602.3(1) and this section. Where required by this section, blocking between rafters or roof trusses shall be attached to top plates of braced wall panels and to rafters and roof trusses in accordance with Table R602.3(1). A continuous band, rim, or header joist or roof truss parallel to the braced wall panels shall be permitted to replace the blocking required by this section. Blocking shall not be required over openings in continuously-sheathed braced wall lines. In addition to the requirements of this section, lateral support shall be provided for rafters and ceiling joists in accordance with Section R802.8 and for trusses in accordance with Section R802.10.3. Roof ventilation shall be provided in accordance with R806.1.

1. For wind speeds less than 100 mph (45 m/s):
 - 1.1. Where the distance from the top of the braced wall panel to the top of the rafters or roof trusses above is 9.25 inches (235 mm) or less, blocking between rafters or roof trusses shall not be required.
 - 1.2. Where the distance from the top of the braced wall panel to the top of the rafters or roof trusses above is between 9.25 inches (235 mm) and 15.25 inches (387 mm) blocking between rafters or roof trusses shall be provided above the braced wall panel in accordance with Figure R602.10.8.1(1).
2. For wind speeds of 100 mph (45 m/s) or greater, where the distance from the top of the braced wall panel to the top of the rafters or roof trusses is 15.25 inches (387 mm) or less,

blocking between rafters or roof trusses shall be provided above the braced wall panel in accordance with Figure R602.10.8.1(1).

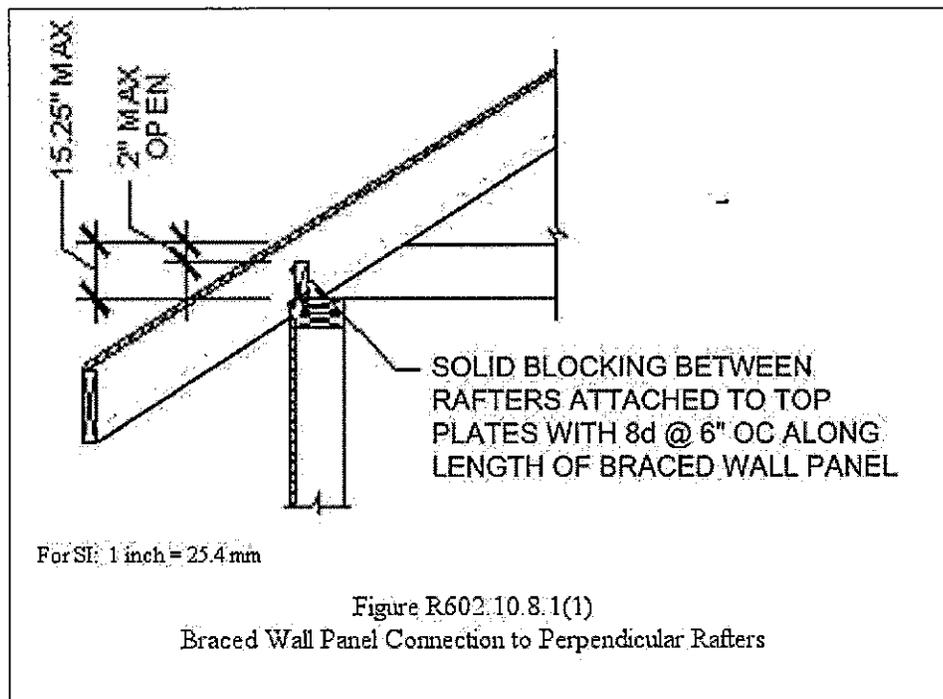
3. Where the distance from the top of the braced wall panel to the top of the rafters or roof trusses exceeds 15.25 inches (387 mm), the top plate of the braced wall panel shall be connected to perpendicular rafters or roof trusses above in accordance with one or more of the following methods:

3.1. Soffit blocking panels constructed per Figure R602.10.8.1(2).

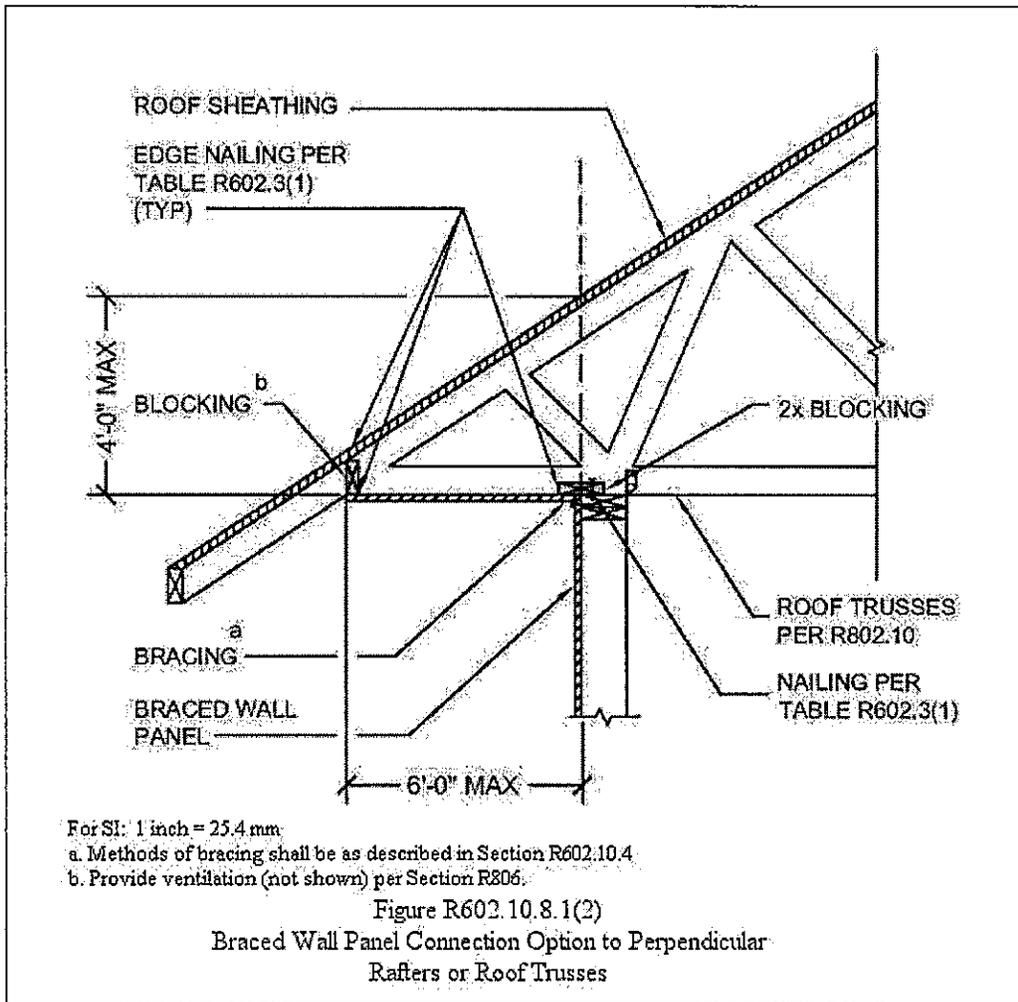
3.2. Vertical blocking panels constructed per Figure R602.10.8.1(3).

3.3. Full-height engineered blocking panels designed per the AF&PA WFCM.

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



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1. 5/8 inch (16 mm) threaded rod – 3/4 inch (19 mm) diameter hole with a minimum embedment of 6 inches (152 mm).

2. No. 4 reinforcing bar – 5/8 inch (16 mm) diameter hole with a minimum embedment of 4 1/2 inches (114 mm).

A minimum footing thickness of 8 inches (203 mm) is required and the minimum distance from each anchor to the edge of the footing shall be 3 3/4 (95 mm).

The anchoring adhesive and anchors shall be installed in accordance with the manufactures instructions and have a minimum tensile capacity of 5,000 lbs (22 kN).

The reinforcement of the masonry stem wall and attachment of the braced wall panel to the stem wall shall be as shown in Figure R602.10.9.

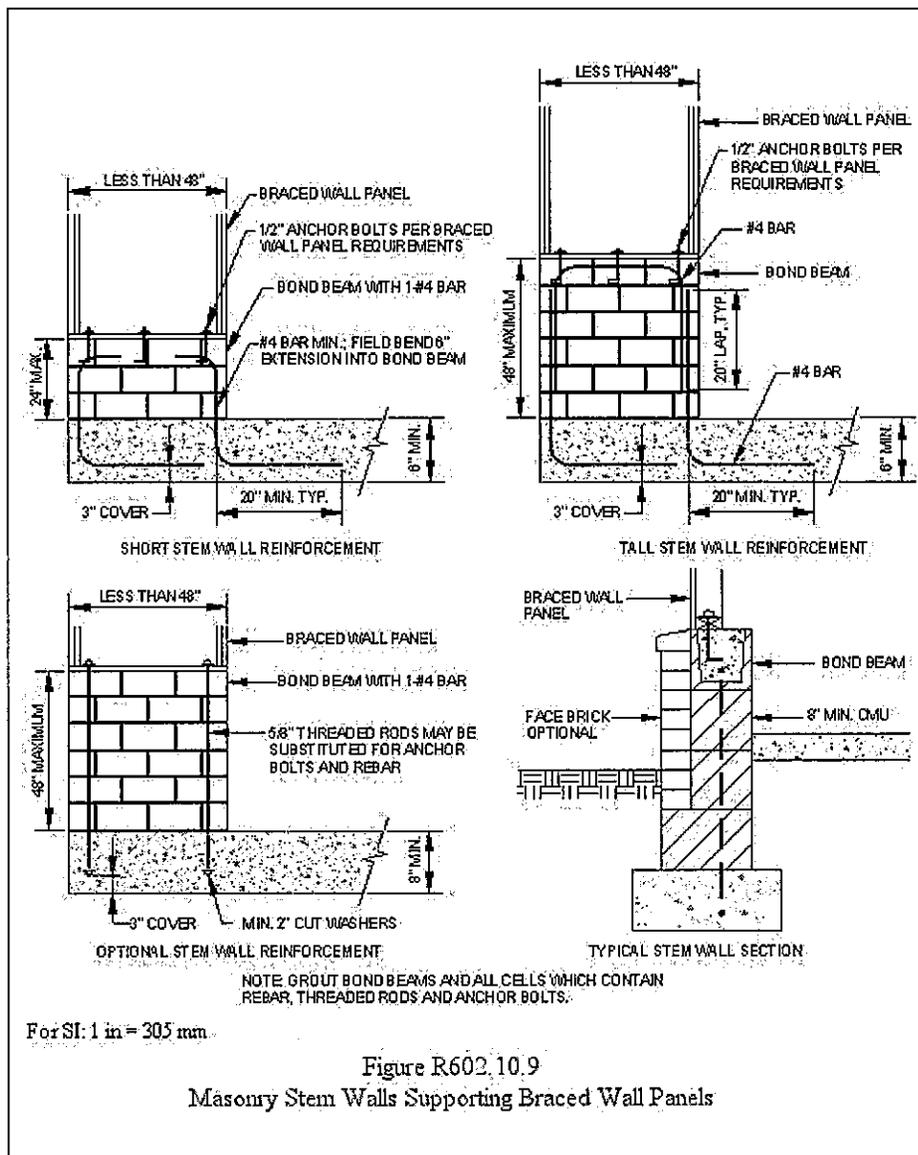


Figure R602.10.9
Masonry Stem Walls Supporting Braced Wall Panels

R602.10.10 Panel joints. All vertical joints of panel sheathing shall occur over, and be fastened to common studs. Horizontal joints in braced wall panels shall occur over, and be fastened to common blocking of a minimum 1-1/2 inch (38 mm) thickness.

Exceptions:

1. Vertical joints of panel sheathing shall be permitted to occur over double studs, where adjoining panel edges are attached to separate studs with the required panel edge fastening schedule, and the adjacent studs are attached together with 2 rows of 10d box nails (3 in. long x 0.128 in. dia.) at 10 inches (254 mm) o.c.
2. Blocking at horizontal joints shall not be required in wall segments that are not counted as braced wall panels.
3. Where the length of bracing provided is at least twice the required length of bracing from Tables R602.10.3(1) and R602.10.3(3) blocking at horizontal joints shall not be required in braced wall panels constructed using Methods WSP, SFB, GB, PBS or HPS.
4. When Method GB panels are installed horizontally, blocking of horizontal joints is not required.

R602.10.11 Cripple wall bracing. Cripple walls shall be constructed in accordance with Section R602.9 and braced in accordance with this section. Cripple walls shall be braced with the length and method of bracing used for the wall above in accordance with Tables R602.10.3(1) and R602.10.3(3), except that the length of cripple wall bracing shall be multiplied by a factor of 1.15.

R602.10.11.1 Cripple wall bracing for townhouses in Seismic Design Category C. In addition to the requirements in Section R602.10.11, the distance between adjacent edges of braced wall panels shall be 14 feet (4267 mm) maximum.

Where braced wall lines at interior walls are not supported on a continuous foundation below, the adjacent parallel cripple walls, where provided, shall be braced with Method WSP or CS-WSP per Section R602.10.4. The length of bracing required per Table R602.10.3(3) for the cripple walls shall be multiplied by 1.5. Where the cripple walls do not have sufficient length to provide the required bracing, the spacing of panel edge fasteners shall be reduced to 4 inches (102 mm) on center and the required bracing length adjusted by 0.7. If the required length can still not be provided, the cripple wall shall be designed in accordance with accepted engineering practice.

R602.10.11.2 Redesignation of cripple walls. Where all cripple wall segments along a braced wall line do not exceed 48 inches (1220 mm) in height, the cripple wall shall be permitted to be redesignated as a first story wall for purposes of determining wall bracing requirements. Where any cripple wall segment in a braced wall line exceeds 48 inches (1220 mm) in height, the entire cripple wall shall be counted as an additional story. If the cripple walls are redesignated, the stories above the redesignated story shall be counted as the second and third stories respectively.

Change Section R602.11.1 to read:

602.11.1 Wall anchorage for townhouses in Seismic Design Category C. Plate washers, a minimum of 0.229 inch by 3 inches by 3 inches (5.8 mm by 76 mm by 76 mm) in size, shall be provided

between the foundation sill plate and the nut except where approved anchor straps are used. The hole in the plate washer is permitted to be diagonally slotted with a width of up to 3/16 inch (5 mm) larger than the bolt diameter and a slot length not to exceed 1 3/4 inches (44 mm), provided a standard cut washer is placed between the plate washer and the nut.

Delete Section R602.11.2.

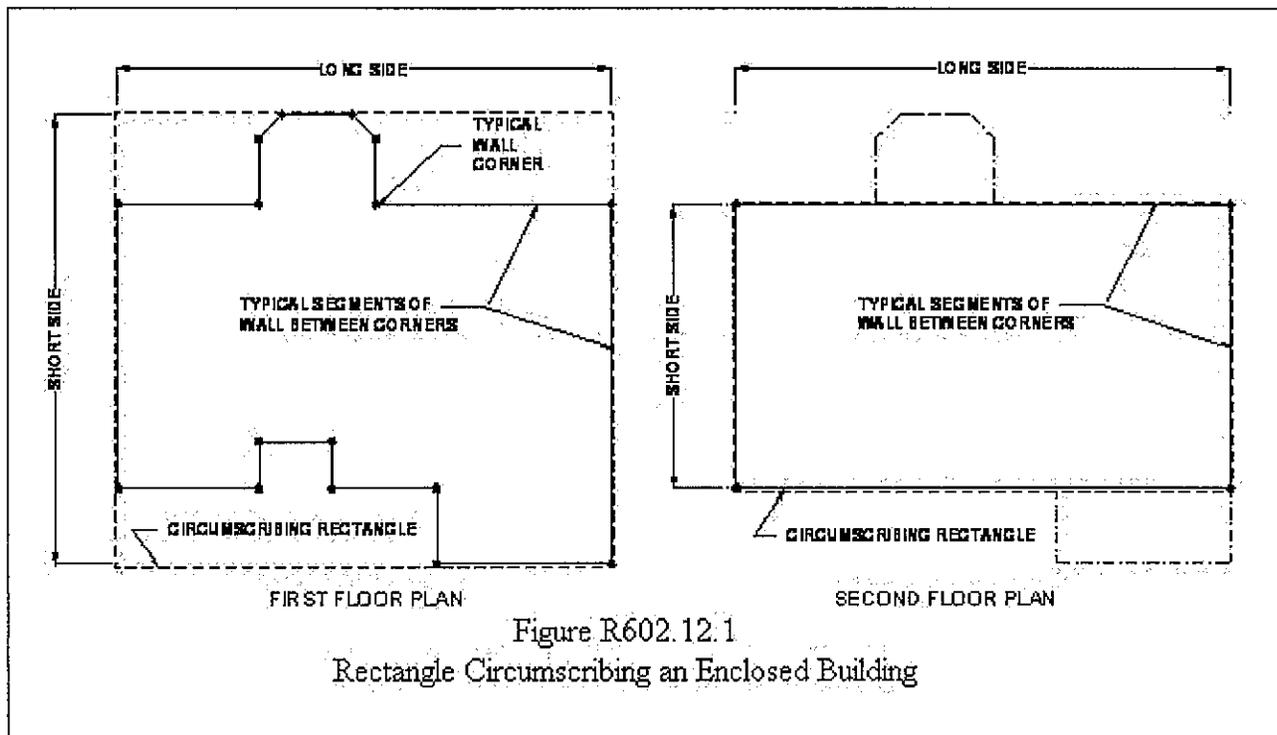
Replace Section R602.12, including all subsections, with the following:

R602.12 Simplified wall bracing. Buildings meeting all of the conditions listed below shall be permitted to be braced in accordance with this section as an alternate to the requirements of Section R602.10. The entire building shall be braced in accordance with this section; the use of other bracing provisions of R602.10, except as specified herein, shall not be permitted.

1. There shall be no more than two stories above the top of a concrete or masonry foundation or basement wall. Permanent wood foundations shall not be permitted.
2. Floors shall not cantilever more than 24 inches (607 mm) beyond the foundation or bearing wall below.
3. Wall height shall not be greater than 10 feet (2743 mm).
4. The building shall have a roof eave-to-ridge height of 15 feet (4572 mm) or less.
5. All exterior walls shall have gypsum board with a minimum thickness of 1/2 inches (12.7 mm) installed on the interior side fastened in accordance with Table R702.3.5.
6. The structure shall be located where the basic wind speed is less than or equal to 90 mph (40 m/s), and the Exposure Category is A or B.
7. The structure shall be located in Seismic Design Category of A, B or C for detached one- and two-family dwellings or Seismic Design Category A or B for townhouses.
8. Cripple walls shall not be permitted in two-story buildings.

R602.12.1 Circumscribed rectangle. Required bracing shall be determined by circumscribing a rectangle around the entire building on each floor as shown in Figure R602.12.1. The rectangle shall surround all enclosed offsets and projections such as sunrooms and attached garages. Open structures, such as carports and decks shall be permitted to be excluded. The rectangle shall have no side greater than 60 feet (18 288 mm), and the ratio between the long side and short side shall be a maximum of 3:1.

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R602.12.2 Sheathing materials. The following sheathing materials installed on the exterior side of exterior walls shall be used to construct a bracing unit as defined in Section R602.12.3. Mixing materials is prohibited.

1. Wood structural panels with a minimum thickness of 3/8 inch (9.5 mm) fastened in accordance with Table R602.3(3).
2. Structural fiberboard sheathing with a minimum thickness of 1/2 inch (12.7 mm) fastened in accordance with Table R602.3(1).

R602.12.3 Bracing unit. A bracing unit shall be a full-height sheathed segment of the exterior wall with no openings or vertical or horizontal offsets and a minimum length as specified below. Interior walls shall not contribute toward the amount of required bracing. Mixing of Items 1 and 2 below is prohibited on the same story.

1. Where all framed portions of all exterior walls are sheathed in accordance with Section R602.12.2, including wall areas between bracing units, above and below openings and on gable end walls, the minimum length of a bracing unit shall be 3 feet (914 mm).
2. Where the exterior walls are braced with sheathing panels in accordance with Section R602.12.2 and areas between bracing units are covered with other materials, the minimum length of a bracing unit shall be 4 feet (1219 mm).

R602.12.3.1 Multiple bracing units. Segments of wall compliant with Section R602.12.3 and longer than the minimum bracing unit length shall be considered as multiple bracing units. The number of bracing units shall be determined by dividing the wall segment length by the minimum bracing unit length. Full-height sheathed segments of wall narrower than the minimum bracing unit length shall not contribute toward a bracing unit except as specified in Section R602.12.6.

R602.12.4 Number of bracing units. Each side of the circumscribed rectangle, as shown in Figure R602.12.1, shall have, at a minimum, the number of bracing units per Table R602.12.4 placed on the parallel exterior walls facing the side of the rectangle. Bracing units shall then be placed using the distribution requirements specified in Section R602.12.5.

Table R602.12.4

Minimum Number of Bracing Units on Each Side of the Circumscribed Rectangle

STORY LEVEL	EAVE-TO RIDGE HEIGHT (FEET)	MINIMUM NUMBER OF BRACING UNITS ON EACH LONG SIDE ^{a,b}						MINIMUM NUMBER OF BRACING UNITS ON EACH SHORT SIDE ^{a,b}					
		Length of short side (ft) ^c						Length of long side (ft) ^c					
		10	20	30	40	50	60	10	20	30	40	50	60
	10	1	2	2	2	3	3	1	2	2	2	3	3
		2	3	3	4	5	6	2	3	3	4	5	6
	15	1	2	3	3	4	4	1	2	3	3	4	4
		2	3	4	5	6	7	2	3	4	5	6	7

For SI: 1 ft = 304.8 mm

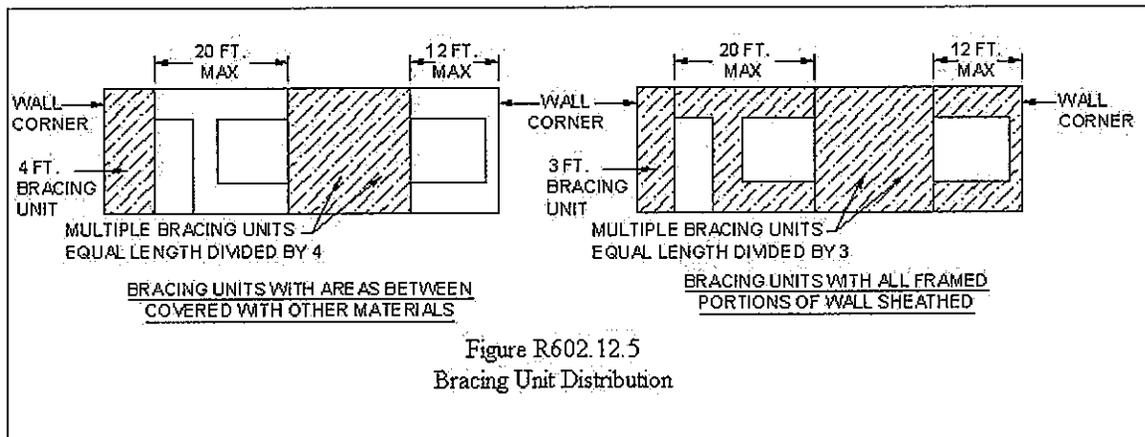
a. Interpolation shall not be permitted.

b. Cripple walls or wood-framed basement walls in a walk-out condition of a one-story structure shall be designed as the first floor of a two-story house.

c. Actual lengths of the sides of the circumscribed rectangle shall be rounded to the next highest unit of 10 when using this table.

R602.12.5 Distribution of bracing units. The placement of bracing units on exterior walls shall meet all of the following requirements as shown in Figure R602.12.5.

1. A bracing unit shall begin no more than 12 feet (3658 mm) from any wall corner.
2. The distance between adjacent edges of bracing units shall be no greater than 20 feet (6096 mm).
3. Segments of wall greater than 8 feet (2438 mm) in length shall have a minimum of one bracing unit.



R602.12.6 Narrow panels. The bracing methods referenced in Section R602.10 and specified in Sections R602.12.6.1 through R602.12.6.3 shall be permitted when using simplified wall bracing.

R602.12.6.1 Method CS-G. Braced wall panels constructed as Method CS-G in accordance with Tables R602.10.4.1 and R602.10.5 shall be permitted for one-story garages when all framed portions of all exterior walls are sheathed with wood structural panels. Each CS-G panel shall be equivalent to 0.5 bracing units.

R602.12.6.2 Method CS-PF. Braced wall panels constructed as Method CS-PF in accordance with Section R602.10.6.4 shall be permitted when all framed portions of all exterior walls are sheathed with wood structural panels. Each CS-PF panel shall equal 0.5 bracing units. A maximum of four CS-PF panels shall be permitted on all the segments of walls parallel to each side of the circumscribed rectangle.

R602.12.6.3 Methods PFH and PFG. Braced wall panels constructed as Method PFH, in accordance with Section R602.10.6.2, and PFG, in accordance with Section R602.10.6.3, shall be permitted when bracing units are constructed using wood structural panels. Each PFH panel shall equal one bracing unit, and each PFG shall equal 0.75 bracing units.

R602.12.7 Lateral support. For bracing units located along the eaves, the vertical distance from the outside edge of the top wall plate to the roof sheathing above shall not exceed 9.25 inches (235 mm) at the location of a bracing unit unless lateral support is provided in accordance with Section R602.10.8.1.

R602.12.8 Stem walls. Masonry stem walls with a height and length of 48 inches (1219 mm) or less supporting a bracing unit or a Method CS-G, CS-PF or PFG braced wall panel shall be constructed in accordance with Figure R602.10.9. Concrete stem walls greater than 12 inches (305 mm) tall and less than 6 inches (152 mm) thick shall have reinforcement sized and located in accordance with Figure R602.10.9.

Change Section R703.7 to read:

R703.7 Stone and masonry veneer, general. Stone and masonry veneer shall be installed in accordance with this chapter, Table R703.4 and Figure R703.7. These veneers installed over a backing of wood or cold-formed steel shall be limited to the first story above-grade and shall not exceed 5 inches (127 mm) in thickness. See Tables R602.10.3(3) and R602.10.3(4) for wall bracing requirements for masonry veneer for wood framed construction and Section R603.9.5 for wall bracing requirements for masonry veneer for cold-formed steel construction.

Exceptions:

1. For all buildings in Seismic Design Categories A, B and C, exterior stone or masonry veneer, as specified in Table R703.7(1), with a backing of wood or steel framing shall be permitted to the height specified in Table R703.7(1) above a noncombustible foundation.
2. For detached one- or two-family dwellings in Seismic Design Categories D0, D1 and D2, exterior stone or masonry veneer, as specified in Table R703.7(2), with a backing

of wood framing shall be permitted to the height specified in Table R703.7(2) above a noncombustible foundation.

Delete both the reference to footnote “f” and the footnote itself in Figure R802.11.

Delete Section N1101.9.

Change Section P2601.2 to read:

P2601.2 Connections. Plumbing fixtures, drains and appliances used to receive or discharge liquid wastes or sewage shall be directly connected to the sanitary drainage system of the building or premises, in accordance with the requirements of this code. This section shall not be construed to prevent indirect waste systems.

Exception: Bathtubs, showers, lavatories, clothes washers and laundry trays are not required to discharge to the sanitary drainage system where those fixtures discharge to an approved gray water or rain water recycling system.

Change Section E3802.4 to read:

E3802.4 In unfinished basements. Where type SE or NM cable is run at angles with joists in unfinished basements, cable assemblies containing two or more conductors of sizes 6 AWG and larger and assemblies containing three or more conductors of sizes 8 AWG and larger shall not require additional protection where attached directly to the bottom of the joists. Smaller cables shall be run either through bored holes in joists or on running boards. NM cable installed on the wall of an unfinished basement shall be permitted to be installed in a listed conduit or tubing or shall be protected in accordance with Table E3802.1. Conduit or tubing shall be provided with a suitable insulating bushing or adapter at the point the where cable enters the raceway. The NM or SE cable sheath shall extend through the conduit or tubing and into the outlet or device box not less than 1/4 inch (6.4 mm). The cable shall be secured within 12 inches (305 mm) of the point where the cable enters the conduit or tubing. Metal conduit, tubing, and metal outlet boxes shall be connected to an equipment grounding conductor.

Change Section E3902.11 to read:

E3902.11 Arc-fault protection of bedroom outlets. All branch circuits that supply 120-volt, single phase, 15- and 20-ampere outlets installed in bedrooms shall be protected by a combination type arc-fault circuit interrupter installed to provide protection of the branch circuit.

Exceptions:

1. Where a combination AFCI is installed at the first outlet to provide protection for the remaining portion of the branch circuit, the portion of the branch circuit between the branch-circuit overcurrent device and such outlet shall be wired with metal outlet and junction boxes and RMC, IMC, EMT or steel armored cable, Type AC meeting the requirements of Section E3908.8.

2. AFCI protection is not required for a branch circuit supplying only a fire alarm system where the branch circuit is wired with metal outlet and junction boxes and RMC, IMC, EMT or steel armored cable Type AC meeting the requirements of Section E3908.8.]

IBC Chapter 4 – Special Detailed Requirements Based on Use and Occupancy

[Delete IBC Section 403.4.4.

Change the title of IBC Section 410 to read:

Stages, Platforms and Technical Production Areas.

Delete the following definitions in IBC Section 410.2:

Fly gallery.

Gridiron.

Add the following definition to IBC Section 410.2 to read:

Technical production area. Open elevated areas or spaces intended for entertainment technicians to walk on and occupy for servicing and operating entertainment technology systems and equipment. Galleries, including fly and lighting galleries, gridirons, catwalks and similar areas are designed for these purposes.]

Delete Section 410.5.3 of the IBC, add new Section 410.6 to the IBC and renumber Sections 410.6 and 410.7 of the IBC to Sections 410.7 and 410.8 respectively.

410.6 Means of egress. Except as modified or as provided for in this section, the provisions of Chapter 10 shall apply.

410.6.1 Arrangement. Where two or more exits or exit access doorways are required per Section 1015.1 from the stage [~~or area beneath the stage~~], at least one exit or exit access doorway shall be provided on each side of the stage [~~or area beneath the stage~~].

410.6.2 Stairway and ramp enclosure. Stairways and ramps [~~serving the stage~~ provided from stages, platforms and technical production areas] are not required to be enclosed.

410.6.3 [~~Fly gallery~~ Technical production areas . Technical production areas shall be provided with means of egress and means of escape in accordance with Section 410.6.3.1 through 410.6.3.5.

410.6.3.1 Means of egress.] At least one [~~exit or exit-access~~ means of egress] shall be provided from [~~fly galleries and the~~ technical production areas.

410.6.3.2 Travel distance. The] maximum length of exit access travel shall not exceed 300 feet (91 440 mm) for buildings without a sprinkler system and 400 feet (121 920 mm) for buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

[410.6.3.3 Two means of egress. Where two means of egress are required, the common path of travel shall not exceed 100 feet (30 480 mm).

Exception: A means of egress to a roof in place of a second means of egress is permitted.

410.6.3.4 Path of egress travel.] The following exit access components are permitted when serving only the fly gallery technical production areas] :

1. [Unenclosed interior stairs Stairways] .

2. [Ramps.

3. Spiral stairs stairways] .

[~~3. 4. Stairways with a minimum width of 22 inches (559 mm) Catwalks] .~~

[~~4. 5.] Alternating tread devices.~~

[~~5. 6. Permanently installed Permanent] ladders.~~

[410.6.3.5 Width. The path of egress travel within and from technical production areas shall be a minimum of 22 inches (559 mm).]

Add Section 421.4 424.4 to the IBC to read:

421.4 424.4 Skirting requirements for manufactured homes. As used in this section, “skirting” means a weather-resistant material used to enclose the space from the bottom of the manufactured home to grade. [Manufactured In accordance with § 36-99.8 of the Code of Virginia, manufactured] homes installed or relocated shall have skirting installed within 60 days of occupancy of the home. Skirting materials shall be durable, suitable for exterior exposures and installed in accordance with the manufacturer's installation instructions. Skirting shall be secured as necessary to ensure stability, to minimize vibrations, to minimize susceptibility to wind damage and to compensate for possible frost heave. Each manufactured home shall have a minimum of one opening in the skirting providing access to any water supply or sewer drain connections under the home. Such openings shall be a minimum of 18 inches (457 mm) in any dimension and not less than three square feet (.28 m²) in area. The access panel or door shall not be fastened in a manner requiring the use of a special tool to open or remove the panel or door. On-site fabrication of the skirting by the owner or installer of the home shall be acceptable, provided that the material meets the requirements of this code. [In addition, as a requirement of this code, skirting for the installation and set-up of a new manufactured home shall also comply with the requirements of 24 CFR Part 3285 – Model Manufactured Home Installation Standards.]

Add Section 421.5 424.5 to the IBC to read:

421.5 424.5 Site work for industrialized buildings. Site work for the erection and installation of an industrialized building is generally subject to the requirements of the Virginia Industrialized Building Safety Regulations (13VAC5-91) and the building official has certain enforcement responsibilities under those regulations shall comply with the manufacturer's installation instructions. To the extent that any aspect of the erection or installation of an industrialized

building is not covered by those regulations the manufacturer's installation instructions, this code shall be applicable. In addition, all administrative requirements of this code for permits, inspections and certificates of occupancy are also applicable. The requirements, including the use of the IRC shall be permitted to be used for any construction work that is subject to this code where the industrialized building would be classified as a Group R-5 building. In addition, all administrative requirements of this code for permits, inspections and certificates of occupancy are also applicable. Further, the building official may require the submission of plans and specifications for details of items needed to comprise the finished building that are not included or specified in the manufacturer's instructions, including, but not limited to, footings, foundations, supporting structures, proper anchorage and the completion of the plumbing, mechanical and electrical systems. Where the installation or erection of an industrialized building utilizes components which are to be concealed, the installer shall notify the building official that an inspection is necessary and assure that an inspection is performed and approved prior to concealment of such components, unless the building official has agreed to an alternative method of verification.

[Exception: Temporary family health care structures installed pursuant to § 15.2-2292.1 of the Code of Virginia shall not be required or permitted to be placed on a permanent foundation, but shall otherwise remain subject to all pertinent provisions of this section.

Add IBC Section 425 Aboveground Liquid Fertilizer Storage Tanks.

Add Sections 425.1 through 425.6 to the IBC to read:

425.1 General. This section shall apply to the construction of ALFSTs and shall supersede any conflicting requirements in other provisions of this code. ALFSTs shall also comply with any applicable non-conflicting requirements of this code.

425.1.1 When change of occupancy rules apply. A change of occupancy to use a tank as an ALFST occurs when there is a change in the use of a tank from storing liquids other than liquid fertilizers to use storing liquid fertilizer and when the type of liquid fertilizer being stored has a difference of at least 20 percent of the specific gravity or operating temperature, or both, or a significant change in the material's compatibility.

425.2 Standards. Newly constructed welded steel ALFSTs shall comply with API 650 and TFI RMIP, as applicable. Newly constructed ALFSTs constructed of materials other than welded steel shall be constructed in accordance with accepted engineering practice to prevent the discharge of liquid fertilizer and shall be constructed of materials that are resistant to corrosion, puncture or cracking. In addition, newly constructed ALFSTs constructed of materials other than welded steel shall comply with TFI RMIP, as applicable. For the purposes of this code, the use of TFI RMIP shall be construed as mandatory and any language in TFI RMIP, such as, but not limited to, the terms "should" or "may" which indicate that a provision is only a recommendation or a guideline shall be taken as a requirement. ALFSTs shall be placarded in accordance with NFPA 704.

Exception: Sections 4.1.4, 4.2.5, 5.1.2, 5.2.8, 5.3 and 8.1(d)(i) of TFI RMIP shall not be construed as mandatory.

425.3 Secondary containment. When ALFSTs are newly constructed and when there is a change of occupancy to use a tank as an ALFST, a secondary containment system designed and constructed to prevent any liquid fertilizer from reaching the surface water, groundwater or adjacent land

before cleanup occurs shall be provided. The secondary containment system may include dikes, berms or retaining walls, curbing, diversion ponds, holding tanks, sumps, vaults, double-walled tanks, liners external to the tank, or other approved means and shall be capable of holding up to 110 percent of the capacity of the ALFST as certified by an RDP.

425.4 Repair, alteration and reconstruction of ALFSTs. Repair, alteration and reconstruction of ALFSTs shall comply with applicable provisions of API 653 and TFI RMIP.

425.5 Inspection. Applicable inspections as required by and in accordance with API 653 and TFI RMIP shall be performed for repairs and alterations to ALFSTs, the reconstruction of ALFSTs and when there is a change of occupancy to use a tank as an ALFST. When required by API 653 or TFI RMIP, such inspections shall occur prior to the use of the ALFST.

425.6 Abandoned ALFSTs. Abandoned ALFSTs shall comply with applicable provisions of Section 3404.2.13.2 of the IFC.]

IBC Chapter 7 – Fire and Smoke Protection Features

[Change Section 705.2 of the IBC to read:

705.2 Projections. Except for decks and open porches of buildings in Groups R-3 and R-4, cornices, eave overhangs, exterior balconies and similar projections extending beyond the exterior wall shall conform to the requirements of this section and Section 1406. Exterior egress balconies and exterior exit stairways shall also comply with Sections 1019 and 1026, respectively. Projections shall not extend beyond the distance determined by the following three methods, whichever results in the lesser projection:

1. A point one-third the distance from the exterior face of the wall to the lot line where protected openings or a combination of protected and unprotected openings are required in the exterior wall.
2. A point one-half the distance from the exterior face of the wall to the lot line where all openings in the exterior wall are permitted to be unprotected or the building is equipped throughout with an automatic sprinkler system installed under the provisions of Section 705.8.2.
3. More than 12 inches (305 mm) into areas where openings are prohibited.

Buildings on the same lot and considered as portions of one building in accordance with Section 705.3 are not required to comply with this section.

Add Exception 4 to Section 706.5.2 of the IBC to read:

4. Decks and open porches of buildings in Groups R-3 and R-4.]

IBC Chapter 9 – Fire Protection Systems

[Change Section 903.2.3 of the IBC to read:

903.2.3 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 lowest level of exit discharge serving that portion of the building.

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

Change Section 903.2.7 of the IBC to read:

903.2.7 Group M. An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:

1. A Group M fire area exceeds 12,000 square feet (1115 m²).
2. A Group M fire area is located more than three stories above grade plane.
3. The combined area of all Group M fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m²).]

Change Item 1 of Section 906.1 of the IBC to read:

~~906.1 General. Portable fire extinguishers shall be provided in occupancies and locations as required by the International Fire Code.~~

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

[Exceptions Exception] :

[1.] Group R-2 occupancies [~~In Group A, B and E occupancies equipped throughout with quick response sprinklers, portable fire extinguishers shall be required only in locations specified in Items 2 through 6.~~

2.] In Group I-3 occupancies, portable fire extinguishers shall be permitted to be located at staff locations and the access to such extinguishers shall be permitted to be locked.

[Change Section 911.1.3 of the IBC to read:

911.1.3 Size. The fire command center shall be a minimum of 96 square feet (9 m²) in area with a minimum dimension of 8 feet (2438 mm).

Exception: Where it is determined by the building official, after consultation with the fire chief, that specific building characteristics require a larger fire command center, the building official may increase the minimum required size of the fire command center up to 200 square feet (19 m²) in area with a minimum dimension of up to 10 feet (3048 mm).]

Add ~~Change~~ Section ~~913.1~~ to 915.1 of the IBC to read:

~~913.1~~ 915.1 General. [~~In-building~~ For localities utilizing public safety wireless communications, dedicated infrastructure to accommodate and perpetuate continuous in-building] emergency communication equipment to allow emergency public safety personnel to send and receive emergency communications shall be provided in new buildings and structures in accordance with this section.

Exceptions:

1. Buildings of Use Groups A-5, I-4, within dwelling units of R-2, R-3, R-4, R-5, and U.
2. Buildings of Type IV and V construction without basements [, that are not considered unlimited area buildings in accordance with Section 507] .

(Remainder of section unchanged)

Add Sections ~~913.2, 913.2.1, 913.2.2 and 913.2.3~~ [915.2, 915.2.1, 915.2.2 and 915.2.3 ~~915.1.1, 915.1.2 and 915.1.3~~] to the IBC to read:

~~913.2~~ [915.2 ~~Where required. For localities utilizing public safety wireless communications, new buildings and structures shall be equipped throughout with dedicated infrastructure to accommodate and perpetuate continuous emergency communication.~~]

~~913.2.1~~ [915.2.1 ~~915.1.1~~] Installation. [~~Radiating~~ The building owner shall install radiating] cable [~~systems~~], such as coaxial cable or equivalent [~~; .~~ The radiating cable] shall be installed in dedicated conduits, raceways, plenums, attics, or roofs, compatible for these specific installations as well as other applicable provisions of this code. [The locality shall be responsible for the installation of any additional communication equipment required for the operation of the system.]

~~913.2.2~~ [915.2.2 ~~915.1.2~~] Operations. The locality will assume all responsibilities for the [~~installation operation~~] and maintenance of [~~additional the~~] emergency communication equipment. [~~To allow the locality access to and the ability to operate such equipment, sufficient space within the building shall be provided. The building owner shall provide sufficient operational space within the building to allow the locality access to and the ability to operate in-building emergency communication equipment.~~]

~~913.2.3~~ [915.2.3 ~~915.1.3~~] Inspection. In accordance with Section 113.3, all installations shall be inspected prior to concealment.

Add Section ~~913.3~~ [915.3 ~~915.2~~] to the IBC to read:

~~913.3~~ [915.3 ~~915.2~~] Acceptance test. Upon completion of installation, after providing reasonable notice to the owner or their representative, emergency public safety personnel shall have the right during normal business hours, or other mutually agreed upon time, to enter onto the property to conduct field tests to verify that the required level of radio coverage is present at no cost to the

owner. Any noted deficiencies [in the installation of the radiating cable or operational space] shall be provided in an inspection report to the owner or the owner's representative.

IBC Chapter 10 – Means of Egress

[Change Section 1005.1 of the IBC to read:

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

Exceptions:

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

Change Section 1007.2 of the IBC to read:

1007.2 Continuity and components. Each required accessible means of egress shall be continuous to a public way and shall consist of one or more of the following components:

1. Accessible routes complying with Section 1104.
2. Interior exit stairways complying with Sections 1007.3 and 1022.
3. Exterior exit stairways complying with Sections 1007.3 and 1026 and serving levels other than the level of exit discharge.
4. Elevators complying with Section 1007.4.
5. Platform lifts complying with Section 1007.5.
6. Horizontal exits complying with Section 1025.
7. Ramps complying with Section 1010.
8. Areas of refuge complying with Section 1007.6.

9. Exterior area for assisted rescue complying with Section 1007.7 serving exits at the level of exit discharge.

Change Section 1007.7, including subsections, of the IBC to read:

1007.7 Exterior area for assisted rescue. The exterior area for assisted rescue shall be an area provided on the exterior landing serving an exit door on an accessible route. The exterior area of assisted rescue shall meet the size and access requirements of Section 1007.6.1.

1007.7.1 Separation. Exterior walls separating the exterior area of assisted rescue from the interior of the building shall have a minimum fire resistance rating of 1 hour, rated for exposure to fire from the inside. The fire resistance rated exterior wall construction shall extend horizontally 10 feet (3048 mm) beyond the landing on either side of the landing or equivalent fire resistance rated construction is permitted to extend out perpendicular to the exterior wall 4 feet (1220 mm) minimum on the side of the landing. The fire resistance rated construction shall extend vertically from the ground to a point 10 feet (3048 mm) above the floor level of the area for assisted rescue or to the roof line, whichever is lower. Openings within such fire resistance rated exterior walls shall be protected in accordance with Section 715.

1007.7.2 Openness. The exterior area for assisted rescue shall be at least 50 percent open, and the open area above the guards shall be so distributed as to minimize the accumulation of smoke or toxic gases.

1007.7.3 Exterior stairway. Exterior stairways that are part of the means of egress for the exterior area for assisted rescue shall provide a clear width of 48 inches (1219 mm) between handrails.

Add Exception 3 to Section 1009.7 of the IBC to read:

3. Spiral stairways used as a means of egress from technical production areas.

Add Exception 7 to Section 1018.2 of the IBC to read:

7. Forty-four inches (1118 mm) – In corridors of Group I-2 assisted living facilities serving areas with wheelchair, walker and gurney traffic where residents are capable of self-preservation or where resident rooms have a means of egress door leading directly to the outside.

Change Exception 6 of Section 1022.1 of the IBC to read:

6. Means of egress stairways as provided for in Section 410.6.2 are not required to be enclosed.

Change Section 1022.8 of the IBC to read:

1022.8 Floor identification signs. A sign shall be provided at each floor landing in exit enclosures connecting more than three stories designating the floor level, the terminus of the top and bottom of the exit enclosure and the identification of the stair or ramp by designation with a letter of the alphabet. The signage shall also state the story of, and the direction to, the exit discharge and the availability of roof access from the enclosure for the fire department. The sign shall be located 5 feet (1524 mm) above the floor landing in a position that is readily visible when the doors are in the open and closed positions. Floor level identification signs in tactile characters complying with

ICC A117.1 shall be located at each floor level landing adjacent to the door leading from the enclosure into the corridor to identify the floor level.

Change Section 1024.1 of the IBC to read:

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

Exceptions:

1. Luminous egress path markings shall not be required on the level of exit discharge in lobbies that serve as part of the exit path in accordance with Section 1027.1, Exception 1.
2. Luminous egress path markings shall not be required in areas of open parking garages that serve as part of the exit path in accordance with Section 1027.1, Exception 3.]

IBC Chapter 13 – Energy Efficiency

[Add Section 1301.1.1.1 to the IBC to read:

1301.1.1.1 Changes to the International Energy Conservation Code (IECC). The following change shall be made to the IECC:

1. Delete Section 401.3.]

IBC Chapter 18 – Soils and Foundations

[Add an exception to Section 1808.1 of the IBC to read:

Exception: One-story detached accessory structures not exceeding 256 square feet (23.78m²) of building area, provided all of the following conditions are met:

1. The building eave height is 10 feet (3048 mm) or less.
2. The maximum height from the finished floor level to grade does not exceed 18 inches (457.2 mm).
3. The supporting structural elements in direct contact with the ground shall be placed level on firm soil and when such elements are wood they shall be approved pressure preservative treated suitable for ground contact use.
4. The structure is anchored to withstand wind loads as required by this code.
5. The structure shall be of light-frame construction with walls and roof of light weight material, not slate, tile, brick or masonry.]

IBC Chapter 28 – Mechanical Systems

Add Section ~~2803.1~~ 2801.1.3 to the IBC to read:

~~2803.1~~ 2801.1.3 Changes to the International Mechanical Code [(IMC)] . The following ~~changes~~ [change changes] shall be made to the [~~International Mechanical Code IMC~~] :

[1. Change Section 403.3 of the IMC to read:

403.3 Outdoor airflow rate. Ventilation systems shall be designed to have the capacity to supply the minimum outdoor airflow rate determined in accordance with this section. The occupant load utilized for design of the ventilation system shall not be less than the number determined from the estimated maximum occupant load rate indicated in Table 403.3. Ventilation rates for occupancies not represented in Table 403.3 shall be those for a listed occupancy classification that is most similar in terms of occupant density, activities and building construction; or shall be determined by an approved engineering analysis. The ventilation system shall be designed to supply the required rate of ventilation air continuously during the period the building is occupied, except as otherwise stated in other provisions of the code.

With the exception of smoking lounges and other designated areas where smoking is permitted, the ventilation rates in Table 403.3 are based on the absence of smoking in occupiable spaces.

Exception: The occupant load is not required to be determined based on the estimated maximum occupant load rate indicated in Table 403.3 where approved statistical data document the accuracy of an alternate anticipated occupant density.

2. Add the following areas to Table 403.3 of the IMC in the occupancy classifications shown:

<u>OCCUPANCY CLASSIFICATION</u>	<u>People Outdoor Airflow Rate in Breathing Zone Cfm/person</u>	<u>Area Outdoor Airflow Rate in Breathing Zone R_a cfm/ft^{2a}</u>	<u>Default Occupant Density #/1000 ft^{2a}</u>	<u>Exhaust Airflow Rate Cfm/ft^{2a}</u>
<u>Food and beverage service</u>				
<u>Bars or cocktail lounges designated as an area when smoking is permitted^b</u>	<u>30</u>	<u>=</u>	<u>100</u>	<u>=</u>
<u>Cafeteria or fast food designated as an area when smoking is permitted^b</u>	<u>20</u>	<u>=</u>	<u>100</u>	<u>=</u>
<u>Dining rooms designated as an area when smoking is permitted^b</u>	<u>20</u>	<u>=</u>	<u>70</u>	<u>=</u>
<u>Public spaces</u>				
<u>Lounges designated as an area where smoking is permitted^b</u>	<u>30</u>	<u>=</u>	<u>100</u>	<u>=]</u>

~~7. [1. 3.]~~ Add Section 801.1.1 to the [~~International Mechanical Code IMC~~] to read:

(Remainder of this subdivision unchanged)

[4. Change Section 1101.10 of the IMC to read:

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

IBC Chapter 29 – Plumbing Systems

Change Section 2901.1 of the IBC to read:

2901.1 Scope. The provisions of this chapter and the International Plumbing Code [(IPC)] shall govern the design and installation of all plumbing systems and equipment, except that as provided for in Section 103.11 for functional design, water supply sources and sewage disposal systems are regulated and approved by the Virginia Department of Health and the Virginia Department of Environmental Quality. The approval of pumping and electrical equipment associated with such water supply sources and sewage disposal systems shall, however, be the responsibility of the building official.

Note: See also the Memorandum of Agreement in the “Related Laws Package,” which is available from DHCD.

Add Section 2901.1.1 to the IBC to read:

[2901.1.1 Use of Appendix C of the IPC for gray water and rain water recycling systems. In addition to other applicable provisions of the IPC, gray water recycling systems and rain water recycling systems shall comply with the provisions in Appendix C of the IPC. In the use of Appendix C of the IPC for rain water recycling systems, the term “rain water” shall be substituted for the term “gray water.” Gray water recycling systems and rain water recycling systems shall be separate systems and shall not be interconnected.

Add Section 2901.1.2 to the IBC to read:

~~2901.1.1~~ 2901.1.2] Changes to the [~~International Plumbing Code IPC~~] . The following changes shall be made to the [~~International Plumbing Code IPC~~] :

1. ~~Change Section 310.4 to read:~~

~~310.4 Water closet compartment. Each water closet utilized by the public or employees shall occupy a separate compartment with walls or partitions and a door enclosing the fixtures to ensure privacy.~~

~~Exceptions:~~

- ~~1. Water closet compartments shall not be required in a single occupant toilet room with a lockable door.~~
- ~~2. Toilet rooms located in day care and child care facilities and containing two or more water closets shall be permitted to have one water closet without an enclosing compartment.~~

~~3. Water closet compartments or partitions shall not be required in toilet facilities for inmates in I-3 occupancies.~~

[1. Change Section 301.3 of the IPC to read:

301.3 Connections to drainage system. All plumbing fixtures, drains, appurtenances and appliances used to receive or discharge liquid wastes or sewage shall be directly connected to the sanitary drainage system of the building or premises, in accordance with the requirements of this code. This section shall not be construed to prevent indirect waste systems required by Chapter 8.

Exception: Bathtubs, showers, lavatories, clothes washers and laundry trays shall not be required to discharge to the sanitary drainage system where such fixtures discharge to an approved gray water system or rain water system for flushing of water closets and urinals or for subsurface landscape irrigation.]

~~2. [1. 2.] Delete Sections 311 and 311.1 [of the IPC] .~~

[3. Change Section 602.1 of the IPC to read:

602.1 General. Every structure equipped with plumbing fixtures and utilized for human occupancy or habitation shall be provided with a potable supply of water in the amounts and at the pressures specified in this chapter. This shall not prohibit the use of reclaimed water distribution systems installed in accordance with this code and the Virginia Water Reclamation and Reuse Regulation (9 VAC 25-740).

4. Change Section 604.1 of the IPC to read:

604.1 General. The design of the water distribution system, including any reclaimed water distribution systems governed by the Virginia Water Reclamation and Reuse Regulation (9 VAC 25-740), shall conform to accepted engineering practice. Methods utilized to determine pipe sizes shall be approved.

5. Add an exception to Section 608.8 of the IPC to read:

Exception: Reclaimed water supply systems shall be identified in accordance with the provisions of the Virginia Water Reclamation and Reuse Regulation (9 VAC 25-740).

6. Change Section 608.8.2 of the IPC to read:

608.8.2 Color. The color of the pipe identification shall be discernable and consistent throughout the building. The color purple shall be used to identify rain and gray water distribution systems.]

~~4. [2. 7.] Delete Section 701.9 [of the IPC] .~~

~~5. [3. 8.] Add Section 703.6 [to the IPC] to read:~~

(Remainder of subdivision unchanged)

IBC Chapter 30 – Elevators and Conveying Systems

[Change Section 3008.1 of the IBC to read:

3008.1 General. Where elevators in buildings greater than 420 feet (128 016 mm) in building height are to be used for occupant self-evacuation during fires, all passenger elevators for general public use shall comply with this section.]

IBC Chapter 31 – Special Construction

[~~Change Section 3109 to read:~~

~~Section 3109. Swimming Pools, Swimming Pool Enclosures and Safety Devices~~

~~Change Section 3109.3 to read:~~

~~3109.3 Public swimming pools. Public swimming pools shall be designed and constructed in conformance with ANSI/NSPI 1 or ANSI/NSPI 2, as applicable, and shall be completely enclosed by a fence at least four feet (1290 mm) in height or a screen enclosure. Openings in the fence shall not permit the passage of a 4-inch diameter (102 mm) sphere. The fence or screen enclosure shall be equipped with self-closing and self-latching gates.]~~

IBC Chapter 34 – Existing Structures

[Add Section 3413.16 to the IBC to read:

3413.16 ALFSTs. Existing ALFSTs, regardless of when constructed, shall, by October 1, 2011, meet the applicable requirements of API 653 and TFI RMIP for suitability for service and inspections and shall provide a secondary containment system complying with Section 425.3.]

IBC Chapter 35 – Referenced Standards

Change the referenced standards in Chapter 35 of the IBC as follows (standards not shown remain the same):

Standard reference number	Title	Referenced in code section number
[ANSI/NSPI 1 2003	American National Standard for Public Swimming Pools	3109.3
ANSI/NSPI 2 1999	American National Standard for Public Spas	3109.3]
ASTM E329-02	Standard Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction	1703.1, 1703.1.3
NFPA 13-07	Installation of Sprinkler Systems	707.2, 903.3.1.1, 903.3.2, 903.3.5.1.1, 903.3.5.2, 904.11, 905.3.4, 907.8, 3104.5, 3104.9

NFPA 13D-07	Installation of Sprinkler Systems in One and Two Family Dwellings and Manufactured Homes	903.3.1.3, 903.3.5.1.1
NFPA 13R-07	Installation of Sprinkler Systems in Residential Occupancies Up to and Including Four Stories in Height	903.3.1.2, 903.3.5.1.1, 903.3.5.1.2, 903.4
NFPA 14-07	Installation of Standpipe and Hose System	905.2, 905.3.4, 905.4.2, 905.8
NFPA 70-05	National Electrical Code	2701.1
NFPA 72-07	National Fuel Alarm Code	901.6, 903.4.1, 904.3.5, 907.2, 907.2.1.1, 907.2.10, 907.2.10.4, 907.2.11.2, 907.2.11.3, 907.2.12.2.3, 907.2.12.3, 907.4, 907.5, 907.9.2, 907.10, 907.14, 907.16, 907.17, 911.1, 3006.5
NFPA 704-07	Standard System for the Identification of the Hazards of Materials for Emergency Response	414.7.2, 415.2
[<u>API 650-09</u>	<u>Welded Steel Tanks for Oil Storage</u>	<u>425.2</u>
<u>API 653-09</u>	<u>Tank Inspection, Repair, Alteration and Reconstruction</u>	<u>425.4, 425.5, 3411.16</u>
<u>ASME A17.1/CSA B44-2007</u>	<u>Safety Code for Elevators and Escalators with 2008 and 2009 Addenda</u>	<u>907.3.3, 911.1.5, 1007.4, 1607.8.1, 1613.6.5, 3001.2, 3001.4, 3002.5, 3003.2, 3007.1, 3008.3, 3008.12, 3008.14.1, 3411.8.2</u>
<u>NFPA 704-07</u>	<u>Identification of the Hazards of Materials for Emergency Response</u>	<u>425.2</u>
<u>TFI RMIP-09</u>	<u>Aboveground Storage Tanks Containing Liquid Fertilizer, Recommended Mechanical Integrity Practices</u>	<u>425.2, 425.4, 425.5, 3411.16</u>

Appendix E Supplementary Accessibility Requirements.

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

Virginia Department of Housing and Community Development
Division of Building and Fire Regulation

2009 Code Change Cycle
Final Regulations for Review by the BHCD at the July 26, 2010 Meeting

UNIFORM STATEWIDE BUILDING CODE, PART III – VIRGINIA MAINTENANCE CODE

Note: Only those provisions having changes between proposed and final regulations are shown – brackets are used to identify the changes comprising the final regulations.

Chapter 1 – Administration

105.1 General. This section shall apply to existing [~~buildings or~~] structures which are classified as unsafe or unfit for human occupancy. All conditions causing such structures to be classified as unsafe or unfit for human occupancy shall be remedied or as an alternative to correcting such conditions, the structure may be vacated and secured against public entry or razed or removed. 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~~ 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 [or discovered] 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.

105.3.1 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 by personal service~~] 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.

[105.4.1 Vacating unsafe structure. If the code official determines there is actual and immediate danger to the occupants or public, or when life is endangered by the occupancy of an unsafe structure, the code official shall be authorized to order the occupants to immediately vacate the unsafe structure. When an unsafe structure is ordered to be vacated, the code official shall post a notice with the following wording at each entrance: "THIS STRUCTURE IS UNSAFE AND ITS OCCUPANCY (OR USE) IS PROHIBITED BY THE CODE OFFICIAL." After posting, occupancy of use of the unsafe structure shall be prohibited except when authorized to enter to conduct inspections, make required repairs or as necessary to demolish the structure.]

105.5 Posting of notice. If the notice is unable to be issued [~~in person by personal service~~] 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 structure] : "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 structure] . After a [building structure] is placarded, entering the [building structure] shall be prohibited except as authorized by the code official to make inspections, to perform required repairs or to demolish the [building structure] . In addition, the placard shall not be removed until the [building structure] is determined by the code official to be safe to occupy, nor shall the placard be defaced.

106.5 Right of appeal; filing of appeal application. [~~The owner of a building or structure, the owner's agent or any other person involved in the use of a building or structure may appeal a decision of the code official concerning the~~ Any person aggrieved by the local enforcing agency's] application of the this code [~~to such building or structure and may also appeal a or the~~] refusal [~~by the code official~~] to grant a modification to the provisions of this code [~~pertaining to such building or structure may appeal to the LBBCA~~] . The applicant shall submit a written request for appeal to the LBBCA within 14 calendar days of the receipt of the decision being appealed. The application shall contain the name and address of the owner of the building or structure and in addition, the name and address of the person appealing, when the applicant is not the owner. A copy of the code official's decision shall be submitted along with the application for appeal and maintained as part of the record. The application shall be marked by the LBBCA to indicate the date received. Failure to submit an application for appeal within the time limit established by this section shall constitute acceptance of a code official's decision.

IPMC Chapter 3 – General Requirements

[Delete Section 304.1.1 of the IPMC.

Delete Section 305.1.1 of the IPMC.

Delete Section 306 of the IPMC in its entirety.

Add IMPC Section 310 Aboveground Liquid Fertilizer Storage Tanks (ALFSTs)

Add Section 310.1 to the IPMC to read:

310.1 General. ALFSTs shall be maintained in accordance with the requirements of Section 3411.16 of the Virginia Construction Code and the requirements of the Virginia Construction Code applicable to such ALFSTs when newly constructed, undergoing a change of occupancy to an ALFST and when repaired, altered or reconstructed, including the requirements for inspections and for a secondary containment system.

Virginia Department of Housing and Community Development
Division of Building and Fire Regulation

2009 Code Change Cycle
Final Regulations for Review by the BHCD at the July 26, 2010 Meeting

VIRGINIA STATEWIDE FIRE PREVENTION CODE

Note: Only those provisions having changes between proposed and final regulations are shown – brackets are used to identify the changes comprising the final regulations.

Chapter 1 - Administration

107.2 Permits required. Permits may be required by the fire official as permitted under the SFPC in accordance with Table 107.2, except that the fire official shall require permits for the manufacturing, storage, handling, use, and sale of explosives. [~~An~~ In accordance with Section 3301.2.3.1, an] application for a permit to manufacture, store, handle, use, or sell explosives shall only be made by [~~an individual certified as a blaster in accordance with Section 3301.4, or by a person who has been issued a background clearance card in accordance with Section 3301.2.3.1.1~~ a designated individual] .

Exception: Such permits shall not be required for the storage of explosives or blasting agents by the Virginia Department of State Police provided notification to the fire official is made annually by the Chief Arson Investigator listing all storage locations.

107.6. State Fire Marshal: Permits will not be required by the State Fire Marshal except for [~~the manufacturing, storage, handling, use, and sale of explosives in localities not enforcing the SFPC, and for the display of fireworks on state-owned property~~ those permits listed in Section 107.13 and 107.14 of this code] .

Exception: Such permits shall not be required for the storage of explosives or blasting agents by the Virginia Department of State Police provided notification to the State Fire Marshal is made annually by the Chief Arson Investigator listing all storage locations within areas where enforcement is provided by the State Fire Marshal's office.

107.13. State explosives, blasting agents [~~,~~ theatrical flame effects] and fireworks permit fees: [Applications for firework or pyrotechnic displays shall be submitted to and received by the State Fire Marshal's Office not less than 15 days prior to the planned event.] Fees for permits issued by the State Fire Marshal's office for the storage, use, sale or manufacture of explosives or blasting agents, and for the display of fireworks [and flame effects] on state-owned property shall be as follows:

1. [~~\$100~~ \$125] per year per magazine to store explosives and blasting agents.
2. [~~\$150~~ \$200] per year per city or county to use explosives and blasting agents.
3. \$150 per year to sell explosives and blasting agents.
4. \$200 per year to manufacture explosives, blasting agents and fireworks.

5. [~~\$300 per~~ \$350 the first] day [~~for of~~] fireworks, pyrotechnics or proximate audience displays conducted in any state-owned building and \$150 per day for each [subsequent consecutive] day [for identical multi-day events] . [If an application is received by the State Fire Marshal's Office less than 15 days prior to the planned event, the permit fee shall be \$450 per day and \$150 per day for each consecutive day for identical multi-day events. If an application is received by the State Fire Marshal's Office less than seven days prior to the planned event, the permit fee shall be \$550 per day and \$150 per day for each consecutive day for identical multi-day events.]

6. [~~\$200 per~~ \$250 the first] day [~~for of~~] fireworks, pyrotechnics or proximate audience displays conducted out-of-doors on any state-owned property and \$150 per day for each [subsequent consecutive] day [for identical multi-day events] . [If an application is received by the State Fire Marshal's Office less than 15 days prior to the planned event, the permit fee shall be \$450 per day and \$150 per day for each consecutive day for identical multi-day events. If an application is received by the State Fire Marshal's Office less than seven days prior to the planned event, the permit fee shall be \$550 per day and \$150 per day for each consecutive day for identical multi-day events.]

7. [~~\$75~~ \$100] per event for the use of explosives in special operations or emergency conditions.

- [8. \$300 the first day for flame effects conducted in accordance with Section 308.3.6 indoors of any state-owned building or outdoors on state-owned property and \$150 per day for each consecutive day for identical multi-day events, or, if conducted as part of a firework (pyrotechnic) display, \$100 the first day and \$75 per day for each consecutive day for identical multi-day events. If an application for flame effects is received by the State Fire Marshal's Office less than 15 days prior to the planned event, the permit fee shall be \$450 per day and \$150 per day for each consecutive day for identical multi-day events. If an application is received by the State Fire Marshal's Office less than seven days prior to the planned event, the permit fee shall be \$550 per day and \$150 per day for each consecutive day for identical multi-day events.]

107.14 State annual inspection permit fees. Annual fees for inspection permits issued by the State Fire Marshal's office for the inspection of buildings shall be as follows:

(No change to Items 1-4)

[5. Child day centers, assisted living facilities and adult day care centers licensed by the Virginia Department of Social Services based on licensed capacity as follows:

5.1 \$50 for 1 to 8.

5.2 \$75 for 9 to 20.

5.3 \$100 for 21 to 50.

5.4 \$200 for 51 to 100.

5.5 \$400 for 101 or more.

112.2 Membership. The BFPCA shall consist of at least five members appointed by the local governing body and having terms 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 local governing body. 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. [The BFPCA shall meet at least once annually to assure a duly constituted board, appoint officers as necessary and receive such training on the code as may be appropriate or necessary from staff of the locality.]

112.5 Application for appeal. The owner of a structure, the owner's agent or any other person involved in the design, construction or maintenance of the structure may appeal a decision of the fire official concerning the application of the SFPC or the fire official's refusal to grant modification under Section 106.5 to the provisions of the SFPC. The appeal shall first lie to the local board of fire prevention code appeals (BFPCA) and then to the TRB except that appeals concerning the application of the SFPC or refusal to grant modifications by the State Fire Marshal shall be made directly to the TRB. The appeal shall be submitted to the BFPCA within 14 calendar days of the application of the SFPC. The application shall contain the name and address of the owner of the structure and the person appealing if not the owner. A copy of the written decision of the fire official shall be submitted along with the application for appeal and maintained as part of the record. The application shall be stamped or otherwise marked by the BFPCA to indicate the date received. Failure to submit an application for appeal within the time limit established by this section shall constitute acceptance of the fire official's decision.

[Note: In accordance with § 27-98 of the Code of Virginia, any local fire code may provide for an appeal to a local board of appeals. If no local board of appeals exists, the TRB shall hear appeals of any local fire code violation.]

IFC Chapter 2 - Definitions

Add the following definitions:

Background clearance card: See Section 3302.1.

Blaster, restricted: See Section 3302.1.

Blaster, unrestricted: See Section 3302.1.

[Designated individual: See Section 3302.1.]

DHCD: The Virginia Department of Housing and Community Development.

Local government, local governing body or locality: The governing body of any county, city, or town, other political subdivision and state agency in this Commonwealth charged with the enforcement of the SFPC under state law.

Night club: Any building or portion thereof in which the main use is a place of public assembly that provides exhibition, performance or other forms or entertainment; serves alcoholic beverages; and provides music and space for dancing.

[Pyrotechnician (firework operator): See Section 3302.1.

Responsible management. See Section 3302.1.

Sole proprietor. See Section 3302.1.]

(Remainder of section unchanged)

IFC Chapter 3 – General Requirements

[Change Section 315.1 to read:

315.1 General. Storage shall be in accordance with this section.

Change Section 315.2 to read:

315.2 Storage in buildings. Storage of materials in buildings shall be orderly and stable. Storage of combustible materials shall be separated from heaters or heating devices by distance or shielding so that ignition cannot occur.]

IFC Chapter 5 – Fire Service Features

[Change Section 506.1 to read:

506.1 Where required. Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life-saving or fire-fighting purposes, the fire code official is authorized to require a key box to be installed in an approved location. The key box shall be of an approved type listed in accordance with UL 1037 and shall contain keys to gain necessary access as required by the fire code official.

Exception: Existing key boxes are not required to be listed in accordance with UL 1037 unless replaced.]

IFC Chapter 6 – Building Services and Systems

[Change Section 605.10.1 to read:

605.10.1 Listed and labeled. Only portable electric space heaters listed and labeled in accordance with UL 1278 shall be used.

Change Section 609.3.3.2 to read:

609.3.3.2 Cleaning. Hoods, grease-removal devices, fans, ducts and other appurtenances shall be cleaned at intervals necessary to prevent the accumulation of grease based upon a written and posted cleaning schedule that shall be established and maintained on the premises by the owner or operator of the ventilation system. The schedule shall be originated by the owner or operator of the ventilation system based upon criteria particular to the cooking operation. Cleanings shall be recorded and the records shall state the extent, time and date of cleaning.]

IFC Chapter 9 – Fire Protection Systems

[Change Section 907.9.5 to read:

907.9.5 Maintenance, inspection and testing. The building owner shall be responsible to maintain the fire and life safety systems in an operable condition at all times. Service personnel shall meet the qualification requirements of NFPA 72 for maintaining, inspecting and testing such systems. A written record shall be maintained and shall be made available to the fire code official. In addition to all applicable information contained in Figure 10.6.2.3 of NFPA 72, the written record of inspections, testing and maintenance shall contain the following minimum information.

1. Date, name and address of property.
2. Name of person performing inspection, maintenance and tests, or combination thereof, and affiliation, business address and telephone number.
3. Name, address and representative of approving agency or agencies.
4. Test Frequency.
5. Designation of the detector or detectors tested (for example, “Test performed in accordance with Section ----- .”).
6. Physical location (for example, “Heat detector in main kitchen; horn-strobe in Room 115.”) and a list of all initiating and notification devices and appliances tested.
7. Functional list of detectors and required sequence of operations.
8. Check of all smoke detectors.
9. Loop resistance for all fixed-temperature, line-type detectors.
10. Other tests as required by either the equipment manufacturer’s published instructions or the authority having jurisdiction.
11. Signature tests as required by the authority having jurisdiction.
12. Disposition of problems identified during test (examples, “Owner notified,” “Problem corrected or successfully retested, or both,” “Device abandoned in place.”).]

IFC Chapter 22 – Motor Fuel-Dispensing Facilities and Repair Garages

[Change Section 2205.4 to read:

2205.4 Sources of ignition. Smoking and open flames shall be prohibited within 20 feet (6096 mm) of a fuel dispensing device. The engines of vehicles being fueled shall be shut off during fueling. Electrical equipment shall be in accordance with NFPA 70.]

IFC Chapter 33 – Explosives and Fireworks

Change entire Section 3301.2 to read:

(No change to Sections 3301.2 through 3301.2.3)

~~3301.2.3.1. Permit applicants. [The As a condition of permit as provided for in Section 107.5, the] fire official shall not issue a permit to manufacture, store, handle, use or sell explosives or blasting agents to any [individual] applicant who [is not certified by the SFMO as a blaster in accordance with Section 3301.4.1, or who is not in the possession of a background clearance card or to designated persons representing an applicant that is not an individual and who is not in possession of a background clearance card issued in accordance with Section 3301.2.3.1.1. The SFMO shall process all applications for a background clearance card for compliance with § 27-97.2 of the Code of Virginia and will be the sole provider of background clearance cards has not provided on the permit application the name and signature of a designated individual as representing the applicant] . [When, as provided for in Section 107.2 or 107.6, a permit is required to conduct a fireworks display, as a condition of permit as provided for in Section 107.5, the fire official shall not issue a permit to design, setup or conduct a fireworks display to any applicant who has not provided on the permit application the name and signature of a designated individual as representing the applicant.~~

If the applicant's designated individual changes or becomes no longer qualified to represent the applicant as responsible management or designated individual, the applicant shall notify the fire official who issued the permit on the change of status of the designated individual. The notice is to be made prior to the use of any explosives or conducting a fireworks display but in no case shall the notification occur more than seven days after the change of status and shall provide the name of another designated individual. The fire official may revoke or require the re-issuance of a permit based on a change of permit conditions or status or inability to provide another designated individual.]

~~3301.2.3.1.1. [Background clearance card BCC] : [A background clearance card The SFMO shall process all applications for a BCC for compliance with § 27-97.2 of the Code of Virginia and will be the sole provider of a BCC. Using forms provided by the SFMO, a BBC] may be [applied for and] issued [upon completion of the following requirements:~~

- ~~1. Any firm or company manufacturing, storing, using or selling explosives in the Commonwealth shall provide the name of a designated person or persons who will be a representative of the company and be responsible for (i) ensuring compliance with state law and regulations relating to blasting agents and explosives and (ii) applying for permits from the fire official.~~
- ~~2. Using a form provided by the SFMO, all individual applicants and all designated persons representing an applicant that is not an individual, shall submit to a background investigation, to include a national criminal history record check, for a permit to manufacture, store, handle, use or sell explosives, and for any applicant for certification as a blaster.~~
- ~~3. Each such applicant shall submit fingerprints and provide personal descriptive information to the SFMO to be forwarded through the Central Criminal Records Exchange to the~~

~~Federal Bureau of Investigation for the purpose of obtaining a national criminal history record check regarding such applicant to any person who submits to the completion of a background investigation by providing fingerprints and personal descriptive information to the SFMO. The SFMO shall forward the fingerprints and personal descriptive information to the Central Criminal Records Exchange for submission to the Federal Bureau of Investigation for the purpose of obtaining a national criminal history records check regarding such applicant] .~~

(No change to Sections 3301.2.3.1.2 through 3301.2.4.1)

3301.2.4.2. Fireworks display. The permit holder shall furnish a bond or certificate of insurance in an amount deemed adequate by the legal department of the jurisdiction for the payment of all potential damages to a person or persons or to property by reason of the permitted display, and arising from any acts of the permit holder, the agent, employees or subcontractors [, but in no case shall the value of the coverage be less than \$500,000] .

Change entire Section 3301.4 to read:

(No change to Section 3301.4)

3301.4.1. Certification of blasters [and pyrotechnicians] . Certificates as a restricted [~~or blaster,~~] unrestricted blaster [or pyrotechnician] will be issued upon proof of successful completion of an examination approved by the SFMO [commensurate to the certification sought] and [completion of] a background investigation for compliance with § 27-97.2 of the Code of Virginia. The applicant for certification shall submit proof to the SFMO of the following experience:

1. For certification as a restricted blaster, at least one year under direct supervision by a certified unrestricted blaster, certified restricted blaster or other person(s) approved by the SFMO.
2. For certification as an unrestricted blaster, at least one year under direct supervision by a certified unrestricted blaster or other person or persons approved by the SFMO.

[3. For certification as a pyrotechnician, aerial, or pyrotechnician, proximate, applicant was in responsible charge of, or has assisted in the documented design, setup and conducting of, a fireworks display on at least six occasions within the 24 months immediately preceding the application for certification.]

The SFMO shall process all certification applicants for compliance with § 27-97.2 of the Code of Virginia and will be the sole provider of blaster [and pyrotechnician] certifications.

Exception: The [use of explosives by the] owner of real estate parcels of five or more acres conforming to the definition of “real estate devoted to agricultural use” or “real estate devoted to horticultural use” in § 58.1-3230 of the Code of Virginia when blasting on such real estate.

3301.4.2. Certification issuance. The issuance of a certification as a blaster [or pyrotechnician] shall be denied if the applicant has been convicted of any felony, whether such conviction occurred under the laws of the Commonwealth, or any other state, the District of Columbia, the United States or any territory thereof, unless his civil rights have been restored by the Governor or other

appropriate authority [, or has not provided acceptable proof or evidence of the experience required in Section 3301.4.1, or has not provided acceptable proof or evidence of the continued training or education required in Section 3301.4.5] .

3301.4.3. Fee for certification. The fee for obtaining or renewing a blaster [or pyrotechnician] certificate from SFMO shall be \$150 plus any additional fees charged by other agencies for fingerprinting and for obtaining a national criminal history record check through the Central Criminal Records Exchange to the Federal Bureau of Investigation.

3301.4.4. Revocation of a blaster [or pyrotechnician] certification. After issuance of a blaster [or pyrotechnician] certification, subsequent conviction of a felony will be grounds for immediate revocation of a blaster [or pyrotechnician] certification, whether such conviction occurred under the laws of the Commonwealth, or any other state, the District of Columbia, the United States or any territory thereof. The certification shall be returned to the SFMO immediately. An individual may subsequently reapply for his blaster [or pyrotechnician] certification if his civil rights have been restored by the Governor or other appropriate authority.

3301.4.5. Expiration and renewal of a [BCC,] blaster [or pyrotechnician] certification. A certificate for an unrestricted [~~or blaster,~~] restricted blaster [or pyrotechnician] shall be valid for three years from the date of issuance. A [~~background clearance card~~ BCC] shall be valid for three years from the date of issuance. Renewal of the unrestricted blaster certificate will be issued upon proof of at least 16 [accumulated] hours of continued training or education in the use of explosives within three consecutive years and a background investigation for compliance with § 27-97.2 of the Code of Virginia. Renewal of the restricted blaster certificate will be issued upon proof of at least eight [accumulated] hours of continued training or education in the use of explosives within three consecutive years and a background investigation for compliance with § 27-97.2 of the Code of Virginia. [Renewal of the pyrotechnician certificate will be issued upon proof of at least 12 accumulated hours of continued training or education in the subject areas of explosives storage, the design, setup, or conduct of a fireworks display within three consecutive years and a background investigation for compliance with §27-97.2 of the Code of Virginia.] The continued training or education required for renewal of a blaster [or pyrotechnician] certificate shall be obtained during the three years immediately prior to the certificate's published expiration date. Failure to renew a blaster [or pyrotechnician] certificate in accordance with this section shall cause an individual to obtain another [~~blaster~~] certificate upon compliance with Section 3301.4.1 to continue engaging in the unsupervised use of explosives [or conducting a fireworks display] .

Add the following definitions to Section 3302.1 to read:

Background clearance card [(BCC)] . An identification card issued to an individual who is not a certified blaster [or pyrotechnician] and is [~~representing himself or acting as a representative~~ responsible management or an employee] of a company, corporation, firm or other entity, solely for the purpose of submitting an application to the fire official for a permit to manufacture, use, handle, store, or sell explosive materials [, or conduct a fireworks display. A person to whom a BCC has been issued can fulfill the role of a designated individual on an application for permit to manufacture, use, handle, store, or sell explosive materials, or on an application for permit to design, setup and conduct a fireworks display.]

Blaster, restricted. Any person engaging in the use of explosives or blasting agents utilizing five pounds (2.25 kg) or less per blasting operation and using instantaneous detonators. [A certified

restricted blaster can fulfill the role of a designated individual on an application for permit to manufacture, use, handle, store, or sell explosive materials.]

Blaster, unrestricted. Any person engaging in the use of explosives or blasting agents without limit to the amount of explosives or blasting agents or type of detonator. [A certified unrestricted blaster can fulfill the role of a designated individual on an application for permit to manufacture, use, handle, store, or sell explosive materials.

Design. For the purposes of a fireworks display, either inside a building or structure or outdoors, it shall mean the pyrotechnician who will be in attendance and makes the final artistic determination for the placement of fireworks and ground display pieces suitable for the display site.

Designated individual. A person in possession of a BCC issued by the SFMO, or is certified by the SFMO as a pyrotechnician, or is a restricted or unrestricted blaster, any of whom are responsible for (i) ensuring compliance with state law and regulations relating to blasting agents and explosives, (ii) applying for explosives or firework permits, (iii) is at least 21 years of age, and (iv) shall demonstrate the capability to effectively communicate safety messages verbally and in writing in the English language.

Pyrotechnician (firework operator). Any person supervising or engaged in the design, setup or conducting of any fireworks display, either inside a building or outdoors. A certified pyrotechnician can fulfill the role of a designated individual on an application for permit for a fireworks display.

Pyrotechnician, aerial. A person supervising or engaged in the design, setup or conducting of a outdoor aerial fireworks display performed in accordance with the regulations as set forth in this code and NFPA 1123, a referenced standard for fireworks displays.

Pyrotechnician, proximate. A person supervising or engaged in the design, setup or conducting of a fireworks display, either inside a building or outdoors, performed in accordance with the regulations as set forth in this code and NFPA 1126, a referenced standard for the use of pyrotechnics before a proximate audience.

Responsible management. A person who is any of the following:

1. The sole proprietor of a sole proprietorship.
2. The partners of a general partnership.
3. The managing partners of a limited partnership.
4. The officers of a corporation.
5. The managers of a limited liability company.
6. The officers or directors of an association, or both.
7. Individuals in other business entities recognized under the laws of the Commonwealth as having a fiduciary responsibility to the firm.

Sole proprietor. A person or individual, not a corporation, who is trading under his own name, or under an assumed or fictitious name pursuant to the provisions of § 59.1-69 through 59.1-76 of the Code of Virginia.]

Permissible fireworks. Any sparklers, fountains, Pharaoh's serpents, caps for pistols, or pinwheels commonly known as whirligigs or spinning jennies.

[~~Add exception to~~ Change] Section 3308.2 to read:

[3308.2 Permit application. Prior to issuing permits for a fireworks display, plans for the fireworks display, inspections of the display site and demonstrations of the display operations shall be approved. A plan establishing procedures to follow and actions to be taken in the event that a shell fails to ignite in, or discharge from, a mortar or fails to function over the fallout area or other malfunctions shall be provided to the fire code official.

In addition to the requirements of Section 3301.2.3.1, a permit to conduct a fireworks display shall not be issued to any applicant without the applicant identifying on the application the pyrotechnician who will be in responsible charge of the fireworks display and who is appropriately certified as a pyrotechnician in accordance with Section 3301.4.1.]

Exception: Permits are not required for the [~~supervised~~] use or display of permissible fireworks on private property with the consent of the owner of such property.

[Change Section 3308.3 to read:

3308.3 Approved fireworks displays. Approved fireworks displays shall include only the approved fireworks 1.3G, fireworks 1.4G, fireworks 1.4S and pyrotechnic articles 1.4G. The design, setup, conducting or direct on-site supervision of the design, setup and conducting of any fireworks display, either inside a building or outdoors, shall be performed only by persons certified by the SFMO in accordance with Section 3301.4.1 as a pyrotechnician (firework operator) and at least one person properly certified by the SFMO as a pyrotechnician shall be present at the site where the fireworks display is being conducted. The approved fireworks shall be arranged, located, discharged and fired in a manner that will not pose a hazard to property or endanger any person.

Exception: Certification as a pyrotechnician is not required for the use or display of permissible fireworks when conducted on private property with the consent of the owner of such property.

Change Section 3308.4 to read:

3308.4 Clearance. Spectators, spectator parking areas, and dwellings, buildings or structures shall not be located within the display site. The site for the outdoor land or water display shall have at least 100-ft/in. (31-m/2.4mm) radius of internal mortar distance of the largest shell to be fired as shown in Table 3308.4.

Exceptions:

1. This provision shall not apply to pyrotechnic special effects and fireworks displays using Division 1.4G materials before a proximate audience in accordance with NFPA 1126.

2. This provision shall not apply to unoccupied dwellings, buildings and structures with the approval of the building owner and the fire code official.

Add Table 3308.4 to read:

Table 3308.4
Distances for Outdoor Fireworks Display Sites: Minimum Separation Distances from Mortars to Spectators for Land and Water Displays

<u>Mortar Size¹</u>		<u>Minimum Secured Diameter of Site</u>		<u>Vertical Mortars²</u>		<u>Angled Mortars³ 1/3 offset</u>		<u>Mortars to Special Hazards⁴</u>	
<u>in.</u>	<u>mm</u>	<u>ft</u>	<u>m</u>	<u>ft</u>	<u>m</u>	<u>ft</u>	<u>m</u>	<u>ft</u>	<u>m</u>
<u><3</u>	<u><76</u>	<u>300</u>	<u>92</u>	<u>150</u>	<u>46</u>	<u>100</u>	<u>31</u>	<u>300</u>	<u>92</u>
<u>3</u>	<u>76</u>	<u>600</u>	<u>183</u>	<u>300</u>	<u>92</u>	<u>200</u>	<u>61</u>	<u>600</u>	<u>183</u>
<u>4</u>	<u>102</u>	<u>800</u>	<u>244</u>	<u>400</u>	<u>122</u>	<u>266</u>	<u>81</u>	<u>800</u>	<u>244</u>
<u>5</u>	<u>127</u>	<u>1000</u>	<u>305</u>	<u>500</u>	<u>152</u>	<u>334</u>	<u>102</u>	<u>1000</u>	<u>305</u>
<u>6</u>	<u>152</u>	<u>1200</u>	<u>366</u>	<u>600</u>	<u>183</u>	<u>400</u>	<u>122</u>	<u>1200</u>	<u>366</u>
<u>7</u>	<u>178</u>	<u>1400</u>	<u>427</u>	<u>700</u>	<u>213</u>	<u>467</u>	<u>142</u>	<u>1400</u>	<u>427</u>
<u>8</u>	<u>203</u>	<u>1600</u>	<u>488</u>	<u>800</u>	<u>244</u>	<u>534</u>	<u>163</u>	<u>1600</u>	<u>488</u>
<u>10</u>	<u>254</u>	<u>2000</u>	<u>610</u>	<u>1000</u>	<u>305</u>	<u>667</u>	<u>203</u>	<u>2000</u>	<u>610</u>
<u>12</u>	<u>305</u>	<u>2400</u>	<u>732</u>	<u>1200</u>	<u>366</u>	<u>800</u>	<u>244</u>	<u>2400</u>	<u>732</u>
<u>>12</u>	<u>Requires the approval of the fire official</u>								

1. Aerial shells, mines, and comets shall be classified and described only in terms of the inside diameter of the mortar from which they are fired [e.g., 3-in. (76-mm) aerial shells, mines and comets are only for use in 3-in. (76mm) mortars].
2. Where the mortars are positioned vertically, the mortars shall be placed at the approximate center of the display site.
3. Mortars shall be permitted to be angled during a display to allow for wind and to carry shells away from the main spectator viewing areas. For angled mortars, the minimum secured diameter of the display site does not change. Only the location of the mortars within the secured area changes when the mortars are angled.
4. Note that this is only the distance to the special hazards. The minimum secured diameter of the display site does not change.]

IFC Chapter 38 – Liquefied Petroleum Gases

[Add Sections 3809.15 and 3809.15.1 to read:

3809.15 LP-Gas cylinder exchange for resale. In addition to other applicable requirements of this chapter, facilities operating cylinder exchange stations for LP-gas that are accessible to the public shall comply with the following requirements.

1. Cylinders shall be secured in a lockable, ventilated metal cabinet or other approved enclosure.
2. Cylinders shall be accessible only by authorized personnel or by use of an automated exchange system in accordance with Section 3809.15.1.
3. A sign shall be posted on the entry door of the business operating the cylinder exchange stating “DO NOT BRING LP-GAS CYLINDERS INTO THE BUILDING” or similar approved wording.
4. An emergency contact information sign shall be posted within 10 feet of the cylinder storage cabinet. The content, lettering, size, color and location of the required sign shall be as required by the fire code official.

3809.15.1 Automated Cylinder Exchange Stations. Cylinder exchange stations that include an automated vending system for exchanging cylinders shall comply with the following additional requirements:

1. The vending system shall only permit access to a single cylinder per individual transaction.
2. Cabinets storing cylinders shall be designed such that cylinders can only be placed inside when they are oriented in the upright position.
3. Devices operating door releases for access to stored cylinders shall be permitted to be pneumatic, mechanical or electrically powered.
4. Electrical equipment inside of or within 5 feet of a cabinet storing cylinders, including but not limited to electronics associated with vending operations, shall comply with the requirements for Class 1, Division 2 equipment in accordance with NFPA 70.
5. A manual override control shall be permitted for use by authorized personnel. On newly installed cylinder exchange stations, the vending system shall not be capable of returning to automatic operation after a manual override until the system has been inspected and reset by authorized personnel.
6. Inspections shall be conducted by authorized personnel to verify that all cylinders are secured, access doors are closed and the station has no visible damage or obvious defects, which necessitate placing the station out of service. The frequency of inspections shall be as specified by the fire code official.]

Chapter 46 – Construction Requirements for Existing Buildings

[Delete Chapter 46 in its entirety.]

Chapter 47 – Referenced Standards

Change the referenced standards as follows (standards not shown remain the same):

Standard reference number	Title	Referenced in code section number
CGA C-6 (2001)	Standards for Visual Inspection of Steel Compressed Gas Cylinders	3806.4
NFPA-10-07	Portable Fire Extinguishers	Table 901.6.1, 906.2, 906.3, Table 906.3(1), Table 906.3(2), 2106.3
NFPA-13-07	Installation of Sprinkler Systems	Table 704.1, 903.3.1.1, 903.3.2, 903.3.5.1.1, 903.3.5.2, 904.1.1, 905.3.4, 907.9, 2301.1, 2304.2, Table 2306.2, 2306.9, 2307.2, 2307.2.1, 2308.2.2, 2308.2.2.1, 2310.1, 2501.1, 2804.1, 2806.5.7, 3404.3.3.9, Table 3404.3.6.3(7), 3404.3.7.5.1, 3404.3.8.4
NFPA 13D-07	Installation of Sprinkler	903.3.1.3, 903.3.5.1.1

	Systems in One and Two-Family Dwellings and Manufactured Homes	
NFPA 13R-07	Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height	903.3.1.2, 903.3.5.1.1, 903.3.5.1.2, 903.4
NFPA 14-07	Installation of Standpipe and Hose Systems	905.2, 905.3.4, 905.4.2, 905.8
NFPA 20-07	Installation of Stationary Pumps for Fire Protection	913.1, 913.2, 913.5.1
NFPA 24-07	Installation of Private Fire Service Mains and their Appurtenances	508.2.1, 1909.5
NFPA 25-08	Inspection, Testing and Maintenance of Water-based Fire Protection Systems	508.5.3, Table 901.6.1, 904.7.1, 912.6, 913.5
NFPA 30B-07	Manufacture and Storage of Aerosol Products	2801.1, 2803.1, 2804.1, Table 2804.3.1, Table 2804.3.2, Table 2804.3.2.2, 2804.4.1, 2804.5.2, 2804.6, Table 2806.2, 2806.2.3, 2806.3.2, Table 2806.4, 2806.5.1, 2806.5.6, 2807.1
NFPA 33-07	Spray Application Using Flammable or Combustible Materials	1504.3.2
NFPA 72-07	National Fire Alarm Code	509.1, Table 901.6.1, 903.4.1, 904.3.5, 907.2, 907.2.1.1, 907.2.10, 907.2.10.4, 907.2.11.2, 907.2.11.3, 907.2.12.2.3, 907.2.12.3, 907.3, 907.5, 907.6, 907.10.2, 907.11, 907.15, 907.17, 907.18, 907.20, 907.20.2, 907.20.5
NFPA 704-07	Identification of the Hazards of Materials for Emergency Response	606.7, 1802.1, 2404.2, 2703.2.2.1, 2703.2.2.2, 2703.5, 2703.10.2, 2705.1.10, 2705.2.1.1, 2705.4.4, 3203.4.1, 3404.2.3.2
[<u>UL 1037-99</u>	<u>Standard for Antitheft Alarms and Devices</u>	<u>506.1</u>
<u>UL 1278-00</u>	<u>Standard for Movable and Wall- or Ceiling-Hung Electric Room Heaters</u>	<u>605.10.1]</u>

Virginia Department of Housing and Community Development
Division of Building and Fire Regulation

2009 Code Change Cycle
Final Regulations for Review by the BHCD at the July 26, 2010 Meeting

VIRGINIA INDUSTRIALIZED BUILDING SAFETY REGULATIONS

Note: Only those provisions having changes between proposed and final regulations are shown -- brackets are used to identify the changes comprising the final regulations.

13 VAC 5-91-70. Appeals.

~~A. Appeals [In accordance with § 36-82.1 of the Code of Virginia, appeals from building officials, compliance assurance agencies or manufacturers of industrialized buildings concerning Any person aggrieved by] DHCD's application of this chapter shall be heard by the State Review Board established by § 36-108 of the Code of Virginia. [The State Review Board shall have the power and duty to render its decision in any such appeal, which decision shall be final if no further appeal is made. In addition, as a requirement of this chapter, appeals~~ Such appeal] shall be submitted [to the State Review Board] within 21 calendar days of receipt of DHCD's decision. A copy of the decision of DHCD to be appealed shall be submitted with the application for appeal. Failure to submit an application for appeal within the time limit established by this section shall constitute acceptance of DHCD's decision.

~~B. Procedures of the State Review Board are in accordance with Article 2 (§ 36-108 et seq.) of Chapter 6 of Title 36 of the Code of Virginia. Decisions of the State Review Board shall be final if no appeal is made therefrom.~~

13 VAC 5-91-260. Registration seal for industrialized buildings.

A. Registered industrialized buildings shall be marked with an approved registration seal seals issued by the SBCAO. The seal seals shall be applied by the manufacturer to a registered industrialized building intended for sale or use in Virginia prior to the shipment of the building from the place of manufacture.

B. Registered industrialized buildings shall bear a one registration seal ~~for on~~ each dwelling unit in residential occupancies. ~~For nonresidential occupancies, a~~ manufactured section or module, or, as an alternative, the registration seal is required for each registered for each manufactured section or module may be placed in one location in the completed building.

C. Approved registration seals may be purchased from the SBCAO in advance of use. The fee for each registration seal shall be \$75 [~~\$50~~ \$75] . ~~Checks~~ Fees shall be submitted by checks made payable to "Treasurer of Virginia" ~~or shall be submitted by electronic means."~~ Payment for the seals must be received by the SBCAO before the seals can be sent to the user.

(Remainder of section unchanged)

Virginia Department of Housing and Community Development
Division of Building and Fire Regulation

2009 Code Change Cycle
Final Regulations for Review by the BHCD at the July 26, 2010 Meeting

VIRGINIA AMUSEMENT DEVICE REGULATIONS

Note: Only those provisions having changes between proposed and final regulations are shown – brackets are used to identify the changes comprising the final regulations.

13 VAC 5-31-40. Incorporated standards.

A. The following standards are hereby incorporated by reference for use as part of this chapter:

1. American National Standards Institute (ANSI) Standard No. B77.1-2006 for the regulation of passenger tramways; and
2. American Society for Testing and Materials (ASTM) Standard Nos. F698-94 (Reapproved 2000), F747-06, F770-06a, F846-92 (Reapproved 2003), F853-05 F893-05a; F1159-03a, F1193-06, F1305-94 (Reapproved 2002), F1950-99, F1957-99 (Reapproved 2004), F2007-06, F2137-04 [Reapproved 2009] , [~~F2291-06a~~ F2291-09b] , F2374-07a, F2376-06 and F2460-06 for the regulation of amusement devices.

The standards referenced above may be procured from:

ANSI
25 W 43rd Street
New York, NY 10036

ASTM
100 Barr Harbor Dr.
West Conshohocken, PA 19428-2959

(Remainder of section unchanged)

13 VAC 5-31-75. Local building department.

(No changes to subsections A-H)

[I. In accordance with subdivision 7 of § 36-137 of the Code of Virginia, the local building department shall collect a 2% levy of fees charged for permits under this chapter and transmit it quarterly to DHCD to support training programs of the Virginia Building Code Academy. Localities which maintain individual or regional training academies accredited by DHCD shall retain such levy.]

13 VAC 5-31-85. Accidents involving serious injury or death.

A. If an accident involving the serious injury or death of a patron occurs, the operation of an amusement device shall cease and the local building department [and DHCD] shall be notified as soon as practicable, but in no case later than during the next working day. The operation of the device shall not resume until inspected by a private inspector or an inspector from the local building department, except where the owner or operator determines the cause was not related to malfunction or improper operation of the amusement device.

(Remainder of section unchanged)

[Part IX
Accessibility Requirements for Amusement Devices

13 VAC 5-31-280. Scope. This part shall apply to newly designed and constructed amusement devices for permanent installation and does not apply to amusement devices regularly assembled or disassembled. This part also does not apply to mobile, portable or temporary amusement devices set up for short periods of time such as at traveling carnivals, state and county fairs and festivals. For the purposes of this part, newly designed and constructed amusement devices are those which are new upon first use by patrons and the first permanent installation of the ride and would not include a ride which was moved within a park or to another park after several seasons of use.

13 VAC 5-31-290. Requirements.

Amusement devices subject to this part shall comply with applicable requirements of 36 CFR Part 1191 – Americans With Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities; Architectural Barriers Act (ABA) Accessibility Guidelines, 69 FR 44151-44455 (July 23, 2004).]