

WUIC1 – 13

501.3

Proponent: Jason Thompson, National Concrete Masonry Association representing Masonry Alliance for Codes and Standards

Revise as follows:

501.3 Fire-resistance-rated construction. Where this code requires 1-hour fire-resistance-rated construction, the fire-resistance rating of building elements, components or assemblies shall be determined in accordance with the test procedures set forth in ASTM E 119 or UL 263.

Exceptions:

1. The fire-resistance rating of building elements, components or assemblies based on the prescriptive designs prescribed in Section 721 of the *International Building Code*.
2. The fire-resistance rating of building elements, components or assemblies based on the calculation procedures in accordance with Section 722 of the *International Building Code*.

Reason: Section 501.3 of the IWUIC requires building elements, components or assemblies that have to meet the 1-hour fire-resistance-rated construction be tested in accordance with ASTM E 119 or UL 263. However, there are numerous existing building elements, components or assemblies already considered acceptable to meet fire resistance ratings located in the prescriptive tables in Section 721 of the IBC. In addition, Section 722 of the IBC contains calculation procedures that are also considered acceptable to establish the fire resistance for building elements, components or assemblies based on well-founded engineering principles. This proposed code change makes it clear that the prescriptive tables and the calculation procedures in Chapter 7 of the IBC are also permissible to establish the fire resistance requirements of the IWUIC.

Cost Impact: This proposal can reduce the cost of construction by permitting fire-resistance-rated assemblies already recognized in the International Building Code to be used to comply with the provisions of the IWUIC

WUIC1-13

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

501.3-WUIC-THOMPSON

WUIC2 – 13

503.2, Chapter 7

Proponent: Joseph Holland (jholland@frtw.com) and Dave Bueche (dbueche@frtw.com), representing Hoover Treated Wood Products, Inc. dbueche@frtw.com

Revise as follows:

503.2 Ignition-resistant building material. Ignition-resistant building materials shall comply with any one of the following:

1. Material shall be tested on all sides with the Extended ASTM E 84 (UL 723) testing or ASTM E2768, except panel products shall be permitted to test only the front and back faces. Panel products shall be tested with a ripped or cut longitudinal gap of 1/8 inch. Materials that, when tested in accordance with the test procedures set forth in ASTM E 84 or UL 723, for a test period of 30 minutes, or ASTM E2768, comply with the following:
 - 1.1 through 1.4 *(No change to current text)*
 - 2 through 4 *(No change to current text)*

Add new standard to Chapter 7 as follows:

ASTM
E2768-11 Standard Test Method for Extended Duration Surface Burning Characteristics of Building Materials (30 Minute Tunnel Test)

Reason: The code is not specific as to the testing of materials with a surface treatment. There are painted and laminated products in the marketplace that are painted or laminated on only one side and are only tested on that side. This is inappropriate for many of the applications where “ignition-resistant material” is permitted; e.g., decks, lapped siding, exposed fascia and other installations with a gap between the material.

The recommendations of the approved agencies for panel products require a 1/8 inch gap between sheets. Because panel products with a surface treatment will be cut in the field and are mandated a 1/8 inch gap it is important that non factory edges be tested to evaluate the effect of their performance in a fire.

ASTM developed a standard for testing materials for 30 minutes in the E84 or UL723 tunnel. Use of the standard is appropriate for “ignition-resistant material” used in the Wildland/Urban Interface. The standard uses E84 as the basis with the extended time period of 30 minutes

Cost Impact: As all products should be testing in this manner the will be no cost impact.

Analysis: A review of the standard proposed for inclusion in the code, ASTM E2768-11, with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before April 1, 2013.

WUIC2-13

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

503.2-WUIC-BUECHE-HOLLAND

WUIC3 – 13

503.2, Chapter 7

Proponent: John Woestman, Kellen Company, representing Composite Lumber Manufacturers Association (CLMA) (jwoestman@kellencompany.com)

Revise as follows:

503.2 Ignition-resistant building material. Ignition-resistant building materials shall comply with any one of the following:

- ~~1. Extended ASTM E 84 testing. Materials that, when tested in accordance with the test procedures set forth in ASTM E 84 or UL 723, for a test period of 30 minutes, comply with the following:~~
 - ~~1.1. Flame spread. Material shall exhibit a flame spread index not exceeding 25 and shall show no evidence of progressive combustion following the extended 30-minute test.~~
 - ~~1.2. Flame front. Material shall exhibit a flame front that does not progress more than 10 1/2 feet (3200 mm) beyond the centerline of the burner at any time during the extended 30-minute test.~~
 - ~~1.3. Weathering. Ignition-resistant building materials shall maintain their performance in accordance with this section under conditions of use. Materials shall meet the performance requirements for weathering (including exposure to temperature, moisture and ultraviolet radiation) contained in the following standards, as applicable to the materials and the conditions of use:~~
 - ~~1.3.1. Method A "Test Method for Accelerated Weathering of Fire-Retardant-Treated Wood for Fire Testing" in ASTM D 2898, for fire-retardant treated wood, wood-plastic composite and plastic lumber materials.~~
 - ~~1.3.2. ASTM D 7032 for wood-plastic composite materials.~~
 - ~~1.3.3. ASTM D 6662 for plastic lumber materials.~~
 - ~~1.4. Identification. All materials shall bear identification showing the fire test results.~~
- ~~21. Noncombustible material. Material that complies with the requirements for *noncombustible* materials in Section 202.~~
- ~~32. Fire-retardant-treated wood. Fire-retardant-treated wood identified for exterior use and meeting the requirements of Section 2303.2 of the *International Building Code*.~~
- ~~43. Fire-retardant-treated wood roof coverings. Roof assemblies containing fire-retardant-treated wood shingles and shakes which comply with the requirements of Section 1505.6 of the *International Building Code* and classified as Class A roof assemblies as required in Section 1505.2 of the *International Building Code*.~~
4. Exterior deck materials. Exterior deck materials complying with ASTM D7032 and the requirements of 4.1, or 4.2, or 4.3.
 - 4.1 Exterior deck materials complying with all of the following:
 - 4.1.1 Tested in accordance with ASTM E2632 and meeting the following acceptance criteria: peak heat release rate not greater than 25 kW/ft²; and absence of sustained flaming or glowing combustion of any kind at the conclusion of the 40 minute observation period; and absence of structural failure of any deck board; and absence of falling particles that are still burning when reaching the burner or floor.
 - 4.1.2 Tested in accordance with ASTM E2726 / E2726M using the Class A brand and meeting the acceptance criteria of X1.6.1 or X1.6.2 of ASTM E2726 / E2726M.
 - 4.1.3 Tested in accordance with ASTM E84 and meeting the Class A flame spread index with the test extended by 20 minutes.
 - 4.2. Exterior deck materials complying with both of the following:
 - 4.2.1 Tested in accordance with ASTM E2632 with a peak heat release rate not greater than 25 kW/ft².
 - 4.2.2 Tested in accordance with ASTM E84 and meeting the Class B flame spread index.

4.3. Exterior deck materials installed where the exterior wall covering to which the deck is attached and within 10 feet of the deck is of noncombustible or ignition resistant material and the exterior deck materials complying with both of the following:

4.3.1 Tested in accordance with ASTM E2632 with a peak heat release rate not greater than 25 kW/ft².

4.3.2 Tested in accordance with ASTM E84 and meeting the Class C flame spread index.

Add new standards to Chapter 7 as follows:

ASTM

E2632-13 Standard Test Method for Evaluating the Under-Deck Fire Test Response of Deck Materials

E2726 / E2726M-12a Standard Test Method for Evaluating the Fire-Test-Response of Deck Structures to Burning Brands

Reason: This proposal introduces, in new Item 4 of Section 503.2, compliance alternatives for decking materials that are consistent with current California Building Code requirements for wildfire exposure (i.e. wildland urban interface areas), and deletes the existing text of Item 1, which would be redundant with the new text.

This proposal revises the IWUIC performance requirements for decking materials to incorporate two ASTM standards specifically developed for evaluating the fire performance characteristics of exterior decking materials. These two standards have been developed from current test requirements in the California building code. ASTM work product WK12052, which will become ASTM E2632-13, is currently at the society review status of approval. ASTM E2632 is commonly described as the under-deck fire test for exterior decks. ASTM E2726 / E2726M received final approval last year, and is commonly described as the burning brand test for exterior deck walking surfaces.

ASTM E2632 was developed from California's 2010 Building Code fire test 12-7A-4 Part A, and ASTM E2726 was developed from 12-7A-4 Part B.

The criteria of 4.1 is intended to be equivalent to the compliance "path" of the 2010 California Building code for wildfire exposure in 709A.3, Item 1. This criteria of 4.1 is similar to, but more stringent than, the criteria for "testing of alternative decking materials" of the San Diego County Consolidated Fire Code in Section 26.3.6.2.1, which is for the Wildland / Urban Interface Area. (Note: Criteria 4.1 would be consistent with San Diego County requirements if 4.1.2 is revised to a Class B brand, and 4.1.3 is deleted.)

The criteria of 4.2 is consistent with the 2010 California Building Code for wildfire exposure in the Exception to 709A.3. The criteria of 4.3 is consistent with the 2010 California Building Code for wildfire exposure in 709A.3, Item 4.

Cost Impact: None

Analysis: A review of the standards proposed for inclusion in the code, ASTM E2632-13 and ASTM E2726/E2726M-12a, with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28), will be posted on the ICC website on or before April 1, 2013.

WUIC3-13

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

503.2-WUIC-WOESTMAN

WUIC4 – 13

504.2, Chapter 7

Proponent: Marcelo M. Hirschler, GBH International (gbhint@aol.com)

Revise as follows:

504.2 Roof covering. Roofs shall have a roof assembly that complies with a Class A rating when tested in accordance with ASTM E 108 or UL 790 roof assembly. For roof coverings where the profile allows a space between the roof covering and roof decking, the space at the eave ends shall be firestopped to preclude entry of flames or embers, or have one layer of 72-pound (32.4 kg) mineral-surfaced, nonperforated cap sheet complying with ASTM D3909 installed over the combustible decking.

Add new standard to Chapter 7 as follows:

ASTM

E108-11 Standard Test Methods for Fire Tests of Roof Coverings

UL

UL 790-2004 Standard Test Methods for Fire Tests of Roof Coverings with revisions through October 2008

Reason: This is basically simple clarification, to clarify the test method for the Class A rating. It adds the same ASTM and UL standards contained in the IBC for the application.

Cost Impact: None

Analysis: The standards proposed for inclusion in the code, ASTM E108-07a and UL 790-2004, are currently referenced in the IBC. Updates in year editions will be accomplished by an administrative standards update code change to be heard by the ADM Code Development Committee.

WUIC4-13

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

504.2-WUIC-HIRSCHLER

WUIC5 – 13

504.10

Proponent: John D. Nicholas, Perceptive Solutions LLC (john@perceptivesolutionsllc.com)

Revise as follows:

504.10 Vents. Attic ventilation openings, foundation or underfloor vents, or other ventilation openings in vertical exterior walls and vents through roofs shall not exceed 144 square inches (0.0929 m²) each. Such vents shall be ~~covered with noncombustible corrosion-resistant mesh with openings not to exceed 1/4 inch (6.4 mm), or shall be designed~~ protected with materials or devices that prevent the passage of flame, hot gases, and embers sufficient to ignite cotton waste when tested using the Cotton Pad Test of ASTM E119 and approved to prevent flame, hot gases or and ember penetration into the structure.

Reason: This proposed code change introduces similar language used by the International Building Code®, the Residential Code®, and the International Mechanical Code® that states "...protected with materials that prevent the passage of flame and hot gases sufficient to ignite cotton waste..."

This change also provides clarity to the means to be used to determine whether a material or device meets the requirements of to prevent flame, hot gases, and ember penetration into the structure. Section 7.5 of ASTM E119 provides a specific means to employ a cotton pad test.

This proposed language addresses construction that employs a material or device to protect a vent or ventilation opening, which can be tested as a vertical or horizontal test assembly that is an interior or exterior part of the structure. As with any fire scenario, the fire exposure subjected to vented construction can vary. However, the means to determine compliance with the intent to provide protection to the structure should be a constant.

This proposed language provides a means to address variables typically seen in construction. Many times vents are located in storage rooms and other areas where combustibles are stacked. Exterior vents are often in contact with landscaping (vegetation or forestation or both). In some cases, these combustibles are just inches from the vent. When these combustibles are subject to flash over conditions a fire may instantaneously occur with immediate flame impingement upon the vent or ventilation opening. Other times the Wildland fire generates a significant amount of hot gases and embers. Both of which can cause a fire within the structure if not prevented from entering it. The use of a cotton pad test provides a means to determine whether the material or device is meeting the prevention requirements.

Cost Impact: This change will not affect the cost of construction.

Analysis: ASTM E119 is currently referenced in the IWUIC. Updates in year edition will be accomplished by an administrative standards update code change to be heard by the ADM Code Development Committee.

WUIC5-13

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

504.10-WUIC-NICHOLAS

WUIC6 – 13

505.2, Chapter 7

Proponent: Marcelo M. Hirschler, GBH International (gbhint@aol.com)

Revise as follows:

505.2 Roof covering. Roofs shall have at least a ~~Class B~~ roof assembly that complies with a Class B rating when tested in accordance with ASTM E 108 or UL 790 or an *approved noncombustible* roof covering. For roof coverings where the profile allows a space between the roof covering and roof decking, the space at the eave ends shall be firestopped to preclude entry of flames or embers, or have one layer of 72-pound (32.4 kg) mineral-surfaced, nonperforated cap sheet complying with ASTM D 3909 installed over the combustible decking.

Add new standard to Chapter 7 as follows:

ASTM

E108-11 Standard Test Methods for Fire Tests of Roof Coverings

UL

UL 790-2004 Standard Test Methods for Fire Tests of Roof Coverings with revisions through October 2008

Reason: This is basically simple clarification, to clarify the test method for the Class B rating. It adds the same ASTM and UL standards contained in the IBC for the application.

Cost Impact: None

Analysis: The standards proposed for inclusion in the code, ASTM E108-07a and UL 790-2004, are currently referenced in the IBC. Updates in year editions will be accomplished by an administrative standards update code change to be heard by the ADM Code Development Committee.

WUIC6-13

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

505.2-WUI-HIRSCHLER

WUIC7 – 13

506.2, Chapter 7

Proponent: Marcelo M. Hirschler, GBH International (gbhint@aol.com)

Revise as follows:

506.2 Roof covering. Roofs shall have at least a ~~Class C~~ roof assembly that complies with a Class C rating when tested in accordance with ASTM E 108 or UL 790 or an *approved noncombustible* roof covering. For roof coverings where the profile allows a space between the roof covering and roof decking, the space at the eave ends shall be firestopped to preclude entry of flames or embers, or have one layer of 72-pound (32.4 kg) mineral-surfaced, nonperforated cap sheet complying with ASTM D 3909 installed over the combustible decking.

Add new standard to Chapter 7 as follows:

ASTM

E108-11 Standard Test Methods for Fire Tests of Roof Coverings

UL

UL 790-2004 Standard Test Methods for Fire Tests of Roof Coverings with revisions through October 2008

Reason: This is basically simple clarification, to clarify the test method for the Class C rating. It adds the same ASTM and UL standards contained in the IBC for the application.

Cost Impact: None

Analysis: The standards proposed for inclusion in the code, ASTM E108-07a and UL 790-2004, are currently referenced in the IBC. Updates in year editions will be accomplished by an administrative standards update code change to be heard by the ADM Code Development Committee.

WUIC7-13

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

506.2-WUIC-HIRSCHLER