



First Revision No. 2501-NFPA 101-2015 [New Section after 8.2.2.4]

8.2.2.5* Wall Marking and Identification.

For other than existing assemblies, where there is an accessible concealed floor, floor-ceiling, or attic space, fire barriers, smoke barriers, and smoke partitions shall be permanently identified with signs or stenciling in the concealed space and shall comply with all of the following:

- (1) Be located in accessible concealed floor, floor-ceiling, or attic spaces
- (2) Be located within 15 ft (4572 mm) of the end of each wall and at intervals not exceeding 30 ft (9144 mm) measured horizontally along the wall or partition
- (3) Include lettering not less than 3 in. (76 mm) in height with a minimum $\frac{3}{8}$ in. (9.5 mm) stroke in a contrasting color
- (4) Identify the wall type and its fire-resistive rating, as applicable

Supplemental Information

<u>File Name</u>	<u>Description</u>
101_A.8.2.2.5.docx	

Submitter Information Verification

Submitter Full Name: Kristin Bigda
Organization: [Not Specified]
Street Address:
City:
State:
Zip:
Submittal Date: Thu Jul 30 14:57:10 EDT 2015

Committee Statement

Committee Statement: This proposal supports the concept covered by Public Inputs 285 and 454 for marking fire and smoke rated walls. It clarifies the following points:

The requirements are placed in the general section in Chapter 8 so they are applicable for fire barriers, smoke barriers, and smoke partitions.

Wall markings are only required for assemblies covered by NFPA 101 and NFPA 5000.

The markings are only required for walls that have accessible concealed spaces, and the markings are to be provided in the concealed spaces.

Response

Message:

[Public Input No. 285-NFPA 101-2015 \[New Section after 8.3.2.3\]](#)

[Public Input No. 454-NFPA 101-2015 \[New Section after 8.3.3.2.3\]](#)

A.8.2.2.5 Acceptable wording may read as follows:

2 HOUR FIRE BARRIER, SMOKE BARRIER-PROTECT ALL OPENINGS



First Revision No. 2513-NFPA 101-2015 [New Section after 8.3.1.3]

8.3.1.4 Smoke Barrier Used as a Fire Barrier.

A smoke barrier shall be permitted to be used as a fire barrier, provided that it meets the requirements of Section 8.3 .

Submitter Information Verification

Submitter Full Name: Kristin Bigda

Organization: [Not Specified]

Street Address:

City:

State:

Zip:

Submittal Date: Wed Aug 05 15:04:35 EDT 2015

Committee Statement

Committee Statement: Section 8.5 currently contains text for fire barriers used as smoke barriers. New language clarifies the application of the Code for those smoke barriers that are also designed and required to comply with the provisions for fire barriers. Consistent language is also being added to NFPA 5000.

Response Message:



First Revision No. 6503-NFPA 101-2015 [Detail]

Add new text:

8.3.6.7 Joints made between a fire barrier and a non-fire-resistance-rated floor or roof sheathing, slab or deck above shall be protected by an approved continuity head of wall joint system installed as tested in accordance with ASTM E2837, *Standard Test Method for Determining the Fire Resistance of Continuity Head-of-Wall Joint Systems Installed Between Rated Wall Assemblies and Nonrated Horizontal Assemblies* and the system shall have an F rating and T rating of not less than the required fire resistance rating of the fire barrier.

Submitter Information Verification

Submitter Full Name: KRISTIN BIGDA
Organization: NATIONAL FIRE PROTECTION ASSOC
Street Address:
City:
State:
Zip:
Submittal Date: Tue Aug 11 13:29:36 EDT 2015

Committee Statement

Committee Statement: The extension of the fire barrier to the next horizontal assembly needs to be tested as the assembly itself. The ASTM standard provides the continuity to protect the system consistent with the barrier.

Response Message:

Public Input No. 334-NFPA 101-2015 [New Section after 8.3.6.6]



First Revision No. 6502-NFPA 101-2015 [Sections 8.3.3, 8.3.4, 8.3.5, 8.3.6]

8.3.3 Fire Doors and Windows. Opening Protectives.

8.3.3.1 General.

Every opening in a fire barrier shall be protected to limit the spread of fire and restrict the movement of smoke from one side of the fire barrier to the other .

8.3.3.1.1

~~Fire resistance-rated glazing tested in accordance with ASTM E119, *Standard Test Methods for Fire Tests of Building Construction and Materials* , or ANSI/UL 263, *Standard for Fire Tests of Building Construction and Materials* , shall be permitted in fire door assemblies and fire window assemblies where tested and installed in accordance with their listings.~~

8.3.3.1.2

~~New fire resistance-rated glazing shall be marked in accordance with Table 8.3.3.12 and Table 8.3.4.2. Such marking shall be permanently affixed.~~

8.3.3.2 Minimum Fire Protection Rating.

8.3.3.2.1*

Fire protection ratings for products required to comply with 8.3.3 shall be as determined and reported by a nationally recognized testing agency in accordance with NFPA 252, NFPA 257, ANSI/UL 10B, *Standard for Fire Tests of Door Assemblies*, ANSI/UL 10C, *Standard for Positive Pressure Fire Tests of Door Assemblies*, or ANSI/UL 9, *Standard for Fire Tests of Window Assemblies*.

8.3.3.2.2*

The fire protection rating for opening protectives in fire barriers, fire-rated smoke barriers, and fire-rated smoke partitions shall be in accordance with [Table 8.3.3.2.2](#), except as otherwise permitted in [8.3.3.2.3](#) or [8.3.3.2.4](#).

Table 8.3.3.2.2 Minimum Fire Ratings for Opening Protectives in Fire Resistance-Rated Assemblies and Fire-Rated Glazing Markings

Component	Walls and Partitions (hr)	Fire Door Assemblies (hr)	Door Vision Panel Maximum Size (in. $\frac{2}{1}$)	Fire-Rated Glazing Marking Door Vision Pane	Minimum Side Light/Transom Assembly Rating (hr)		Fire-Rated Glazing Marking Side Light/Transom Pa	
					Fire protection	Fire resistance	Fire protection	Fire resistance
Elevator hoistways	2	1½	155 in. $\frac{2}{c}$	D-H-90 or D-H-W-90	NP	2	NP	D-H-W-
	1	1	155 in. $\frac{2}{c}$	D-H-60 or D-H-W-60	NP	1	NP	D-H-W
	½	⅓	85 in. $\frac{2}{d}$	D-20 or D-W-20	⅓	⅓	D-H-20	D-W-;
Elevator lobby (per 7.2.13.4)	1	1	100 in. $\frac{2}{a}$	≤100 in. $\frac{2}{1}$, D-H-T-60 or D-H-W-60 >100 in. $\frac{2}{1}$, D-H-W-60	NP	1	NP	D-H-W
Vertical shafts (including stairways, exits, and refuse chutes)	2	1½	Maximum size tested	D-H-90 or D-H-W-90	NP	2	NP	D-H-W-
	1	1	Maximum size tested	D-H-60 or D-H-W-60	NP	1	NP	D-H-W
Replacement panels in existing vertical shafts	½	⅓	Maximum size tested	D-20 or D-W-20	⅓	⅓	D-H-20	D-W-;
Fire barriers	3	3	100 in. $\frac{2}{a}$	≤100 in. $\frac{2}{1}$, D-H-180 or D-H-W-180 >100 in. $\frac{2}{1}$, D-H-W-180	NP	3	NP	D-H-W-
	2	1½	Maximum size tested	D-H-90 or D-H-W-90	NP	2	NP	D-H-W-

Component	Walls and Partitions (hr)	Fire Door Assemblies (hr)	Door Vision Panel Maximum Size (in. ²)	Fire-Rated Glazing Marking Door Vision Pane	Minimum Side Light/Transom Assembly Rating (hr)		Fire-Rated Glazing Marking Side Light/Transom Pa	
					Fire protection	Fire resistance	Fire protection	Fire resistance
	1	¾	Maximum size tested ^e	D-H-45 or D-H-W-45	¾ ^e	¾ ^e	D-H-45	D-H-W
	½	⅓	Maximum size tested	D-20 or D-W-20	⅓	⅓	D-H-20	D-W-
Horizontal exits	2	1 ½	Maximum size tested	D-H-90 or D-H-W-90	NP	2	NP	D-H-W-
Horizontal exits served by bridges between buildings	2	¾	Maximum size tested ^e	D-H-45 or D-H-W-45	¾ ^e	¾ ^e	D-H-45	D-H-W
Exit access corridors ^f	1	⅓	Maximum size tested	D-20 or D-W-20	¾	¾	D-H-45	D-H-W
	½	⅓	Maximum size tested	D-20 or D-W-20	⅓	⅓	D-H-20	D-H-W
Smoke barriers ^f	1	⅓	Maximum size tested	D-20 or D-W-20	¾	¾	D-H-45	D-H-W
Smoke partitions ^{f,g}	½	⅓	Maximum size tested	D-20 or D-W-20	⅓	⅓	D-H-20	D-H-W
	1	1	Maximum size tested	D-H-60 or D-H-W-60	NP	1	NP	D-H-W

For SI units, 1 in. ² = 0.00064516 m ² .

NP: Not permitted.

^a Fire resistance-rated glazing tested to ASTM E119, *Standard Test Methods for Fire Tests of Building Construction and Materials* , or ANSI/UL 263, *Standard for Fire Tests of Building Construction and Materials* , shall be permitted in the maximum size tested (see 8.3.3.7) .

^b Fire-rated glazing in exterior windows shall be marked in accordance with Table 8.3.3.12.

^c See ASME A17.1/CSA B44, *Safety Code for Elevators and Escalators* , for additional information.

^d See ASME A17.3, *Safety Code for Existing Elevators and Escalators* , for additional information.

^e Maximum area of individual exposed lights shall be 1296 in. ² (0.84 m ²), with no dimension exceeding 54 in. (1.37 m) unless otherwise tested. [**80:** Table 4.4.5 Note b and **80:** 4.4.5.1].

^f Fire doors are not required to have a hose stream test per ANSI/UL 10B, *Standard for Fire Tests of Door Assemblies* , or ANSI/UL 10C, *Standard for Positive Pressure Fire Tests of Door Assemblies* .

9 For residential board and care, see 32.2.3.1 and 33.2.3.1.

8.3.3.2.3

Existing fire door assemblies having a minimum $\frac{3}{4}$ -hour fire protection rating shall be permitted to continue to be used in vertical openings and in exit enclosures in lieu of the minimum 1-hour fire protection rating required by [Table 8.3.3.2.2](#).

8.3.3.2.4

Where a 20-minute fire protection-rated door is required in existing buildings, an existing $1\frac{3}{4}$ in. (44 mm) solid-bonded wood-core door, an existing steel-clad (tin-clad) wood door, or an existing solid-core steel door with positive latch and closer shall be permitted, unless otherwise specified by [Chapters 11](#) through [43](#).

8.3.3.2.5

Openings required to have a fire protection rating by [Table 8.3.3.2.2](#) shall be protected by approved, listed, and labeled fire door assemblies and fire window assemblies and their accompanying hardware, including all frames, closing devices, anchorage, and sills in accordance with the requirements of NFPA 80 except as otherwise specified in this *Code*.

8.3.3.3* Fire Doors.

~~Fire protection ratings for products required to comply with [8.3.3](#) shall be as determined and reported by a nationally recognized testing agency in accordance with NFPA 252, *Standard Methods of Fire Tests of Door Assemblies*; ANSI/UL 10B, *Standard for Fire Tests of Door Assemblies*; ANSI/UL 10C, *Standard for Positive Pressure Fire Tests of Door Assemblies*; NFPA 257, *Standard on Fire Test for Window and Glass Block Assemblies*; or ANSI/UL 9, *Standard for Fire Tests of Window Assemblies*.~~

8.3.3.3.1

~~Fire protection-rated glazing shall be evaluated under positive pressure in accordance with NFPA 257, *Standard on Fire Test for Window and Glass Block Assemblies*. Fire door assemblies shall be installed, inspected, tested, and maintained in accordance with NFPA 80.~~

8.3.3.3.2

~~All products required to comply with [8.3.3.2](#) shall bear an approved label. All fire door assemblies shall bear an approved label.~~

8.3.3.3.3

~~Labels on fire door assemblies shall be maintained in a legible condition.~~

8.3.3.3.4*

~~In existing installations, steel door frames without a label shall be permitted where approved by the authority having jurisdiction.~~

8.3.3.3.5

~~The maximum size of the fire doors shall not exceed that specified in NFPA 80, except as modified by [Chapter 7](#).~~

8.3.3.3.6

~~Unless otherwise specified, fire doors shall be self-closing or automatic-closing in accordance with [7.2.1.8](#).~~

8.3.3.3.5 Labels.

8.3.3.4 Floor Fire Door Assemblies.

8.3.3.4.1

Floor fire door assemblies used to protect openings in fire resistance-rated floors shall be tested in accordance with NFPA 288, ~~Standard Methods of Fire Tests of Horizontal Fire Door Assemblies Installed in Horizontal Fire Resistance-Rated Assemblies~~, and shall achieve a fire resistance rating not less than the assembly being penetrated.

8.3.3.4.2

Floor fire door assemblies shall be listed and labeled.

8.3.3.5 Fire Windows.**8.3.3.5.1**

Fire window assemblies shall be installed, inspected, tested, and maintained in accordance with NFPA 80.

8.3.3.5.2

All fire window assemblies shall bear an approved label.

8.3.3.5.3*

~~Fire protection-rated glazing~~ Fire window assemblies shall be permitted in fire barriers having a required fire resistance rating of 1 hour or less and shall be of an approved type with the appropriate fire protection rating for the location in which ~~the barriers they~~ are installed.

8.3.3.6 Glazing.**8.3.3.6.1**

Glazing materials that have been listed and labeled to indicate the type of opening to be protected for fire protection purposes shall be permitted to be used in approved opening protectives in accordance with [Table 8.3.3.2.2](#) and in sizes in accordance with NFPA 80.

8.3.3.6.2

Fire-rated glazing assemblies shall be permitted as follows:

- (1) Those marked as complying with hose stream requirements (H) shall be permitted in applications that do not require compliance with hose stream requirements.
- (2) Those marked as complying with temperature rise requirements (T) shall be permitted in applications that do not require compliance with temperature rise requirements.
- (3) Those marked with ratings that exceed the ratings required by this *Code* (XXX) shall be permitted.

8.3.3.6.3

New fire protection-rated glazing shall be marked in accordance with [Table 8.3.3.6.3](#) and [Table 8.3.3.2.2](#), and such marking shall be permanently affixed.

Table 8.3.3.6.3 Marking Fire-Rated Glazing Assemblies

Fire Test Standard	Marking	Definition of Marking
ASTM E119 or ANSI/UL 263 ^a	W	Meets wall assembly criteria
NFPA 257	OH	Meets fire window assembly criteria, including the hose stream test
NFPA 252	D	Meets fire door assembly criteria
	H	Meets fire door assembly hose stream test
	T	Meets 450°F (232°C) temperature rise criteria for 30 minutes
	XXX	The time, in minutes, of fire resistance or fire protection rating of the glazing assembly

^a ~~ASTM E119, *Standard Test Methods for Fire Tests of Building Construction and Materials* and ANSI/UL 263, *Standard for Fire Tests of Building Construction and Materials* .~~

8.3.3.6.4

New fire resistance-rated glazing shall bear the identifier “W-XXX” where “XXX” is the fire resistance rating in minutes. Such identification be marked in accordance with [Table 8.3.3.6.3](#) and [Table 8.3.3.2.2](#) , and such marking shall be permanently affixed.

8.3.3.6.5

Fire protection-rated glazing shall be permitted in fire barriers having a required fire resistance rating of 1 hour or less and shall be of an approved type with the appropriate fire protection rating for the location in which the barriers are installed.

8.3.3.6.6*

Glazing in fire window assemblies, other than in existing fire window installations of wired glass and other fire-rated glazing material, shall be of a design that has been tested to meet the conditions of acceptance of NFPA 257 or ANSI/UL 9, *Standard for Fire Tests of Window Assemblies*.

8.3.3.6.7

Fire protection-rated glazing in fire door assemblies, other than in existing fire-rated door assemblies, shall be of a design that has been tested to meet the conditions of acceptance of NFPA 252, *Standard Methods of Fire Tests of Door Assemblies* ; ANSI/UL 10B, *Standard for Fire Tests of Door Assemblies*; , or ANSI/UL 10C, *Standard for Positive Pressure Fire Tests of Door Assemblies*.

8.3.3.6.8

Fire resistance-rated glazing complying with [8.3.2.1.4](#) tested in accordance with ASTM E119, *Standard Test Methods for Fire Tests of Building Construction and Materials* , or ANSI/UL 263, *Standard for Fire Tests of Building Construction and Materials* , shall be permitted in fire doors and fire window assemblies in accordance with their listings.

8.3.3.6.9

Nonsymmetrical fire protection-rated glazing systems shall be tested with each face exposed to the furnace, and the assigned fire protection rating shall be the shortest duration obtained from the two tests conducted in compliance with NFPA 257 or ANSI/UL 9, *Standard for Fire Tests of Window Assemblies*.

8.3.3.6.10

The total combined area of glazing in fire-rated window assemblies and fire-rated door assemblies used in fire barriers shall not exceed 25 percent of the area of the fire barrier that is common with any room, unless the installation meets one of the following criteria:

- (1) The installation is an existing fire window installation of wired glass and other fire-rated glazing materials in approved frames.
- (2) The fire protection-rated glazing material is installed in approved existing frames.

8.3.3.6.11

Existing installations of wired glass of ¼ in. (6.3 mm) thickness and labeled for fire protection purposes shall be permitted to be used in approved opening protectives, provided that the maximum size specified by the listing is not exceeded.

8.3.3.10

~~Fire-rated door assemblies shall be inspected and tested in accordance with NFPA 80.~~

8.3.3.7 Sidelights and Transoms.

Glazing used in sidelights and transoms adjacent to 20-minute doors in 1-hour corridor fire barriers shall be tested in accordance with 8.3.3.2, including hose stream, and shall attain a minimum 45-minute fire protection rating.

8.3.5 Joints.**8.3.5.1 General.****8.3.5.1.1**

The provisions of 8.3.5 shall govern the materials and methods of construction used to protect joints in fire barriers, in between fire barriers, and at the perimeter of fire barriers where fire barriers meet other fire barriers, the floor or roof deck above, or the outside walls.

8.3.5.1.2

The provisions of 8.3.5 shall not apply to approved existing materials and methods of construction used to protect existing joints in fire barriers, unless otherwise required by Chapters 11 through 43.

8.3.5.2 Joint System Requirements.**8.3.5.2.1***

Joints made within or at the perimeter of fire barriers, between fire resistance-rated assemblies, or where fire barriers meet other fire barriers, the floor or ~~rook~~ roof deck above, or the outside walls shall be protected with a joint system that is designed and tested to prevent the spread of fire for a time period equal to that of the assembly in which the joint is located.

8.3.5.2.2

Joints made within or at the perimeter of fire barriers used as smoke barriers shall be capable of restricting the transfer of smoke in accordance with 8.5.7.4.

8.3.5.2.3

Joints shall be installed in accordance with a tested system, and installed and maintained in accordance with the manufacturer's instructions.

8.3.5.2.4

Testing of the joint system in a fire barrier shall be representative of the actual installation suitable for the required engineering demand without compromising the fire resistance rating of the assembly or the structural integrity of the assembly.

8.3.5.2.5

Such materials, systems, or devices shall be tested as part of the assembly in accordance with the requirements of ASTM E1966, *Standard Test Method for Fire-Resistive Joint Systems*, or ANSI/UL 2079, *Standard for Tests for Fire Resistance of Building Joint Systems*.

8.3.5.2.6

All joint systems shall be tested at their maximum joint width in accordance with the requirements of ASTM E1966, *Standard Test Method for Fire-Resistive Joint Systems*, or ANSI/UL 2079, *Standard for Tests for Fire Resistance of Building Joint Systems*, under a minimum positive pressure differential of 0.01 in. water column (2.5 N/m²) for a time period equal to that of the assembly.

8.3.5.2.7

All test specimens shall comply with the minimum height or length required by the standard.

8.3.5.2.8

Wall assemblies shall be subjected to a hose stream test in accordance with ASTM E119, *Standard Test Methods for Fire Tests of Building Construction and Materials*, or ANSI/UL 263, *Standard for Fire Tests of Building Construction and Materials*.

[Detail FR-6503](#)

8.3.5.3

Joints made between a fire barrier and a non-fire-resistance-rated floor or roof sheathing, slab, or deck above shall be protected by an approved continuity head of wall joint system installed as tested in accordance with ASTM E2837, *Standard Test Method for Determining the Fire Resistance of Continuity Head-of-Wall Joint Systems Installed Between Rated Wall Assemblies and Nonrated Horizontal Assemblies*, and the system shall have an F rating and T rating of not less than the required fire resistance rating of the fire barrier.

8.3.5.4* Exterior Curtain Walls and Perimeter Joints.

8.3.5.4.1

Voids created between the fire resistance-rated floor assembly and the exterior curtain wall shall be protected with a perimeter joint system that is designed and tested in accordance with ASTM E2307, *Standard Test Method for Determining Fire Resistance of Perimeter Fire Barriers Using Intermediate-Scale, Multi-story Apparatus*.

8.3.5.4.2

The perimeter joint system shall have an F rating equal to the fire resistance rating of the floor assembly.

8.3.4 Penetrations.

8.3.4.1 General.

8.3.4.1.1

The provisions of 8.3.4 shall govern the materials and methods of construction used to protect through-penetrations and membrane penetrations in fire walls, fire barrier walls, and fire resistance-rated horizontal assemblies.

8.3.4.1.2

The provisions of 8.3.4 shall not apply to approved existing materials and methods of construction used to protect existing through-penetrations and existing membrane penetrations in fire walls, fire barrier walls, or fire resistance-rated horizontal assemblies, unless otherwise required by Chapters 11 through 43.

8.3.4.1.3

Penetrations shall be installed in accordance with a tested system, and installed and maintained in accordance with the manufacturer's instructions.

8.3.4.2* Firestop Systems and Devices Required.

8.3.4.2.1

Penetrations for cables, cable trays, conduits, pipes, tubes, combustion vents and exhaust vents, wires, and similar items to accommodate electrical, mechanical, plumbing, and communications systems that pass through a wall, floor, or floor/ceiling assembly constructed as a fire barrier shall be protected by a firestop system or device.

8.3.4.2.2 Testing.

The firestop system or device shall be tested in accordance with ASTM E814, *Standard Test Method for Fire Tests of Through Penetration Fire Stops*, or ANSI/UL 1479, *Standard for Fire Tests of Through-Penetration Firestops*, at a minimum positive pressure differential of 0.01 in. water column ($2.5 \text{ N/m}^2 \text{ Pa}$) between the exposed and the unexposed surface of the test assembly.

8.3.4.2.3 F Ratings.

Firestop systems and devices shall have an F rating of not less than 1 hour, and not less than the required fire resistance rating of the fire barrier penetrated.

8.3.4.2.4 T Ratings.

8.3.4.2.4.1

Penetrations in fire resistance-rated horizontal assemblies shall ~~be required to~~ have a T rating of ~~at least~~ not less than 1 hour, ~~but~~ and not less than the fire resistance rating of the horizontal assembly.

8.3.4.2.4.2

~~and~~ A T rating shall not be required for either of the following:

- (1) Floor penetrations contained within the cavity of a wall assembly
- (2) Penetrations through floors or floor assemblies where the penetration is not in direct contact with combustible material

8.3.4.2.5 Alternative Firestop Requirements.

8.3.4.2.5.1

The requirements of 8.3.4.2 shall not apply where otherwise permitted by any one of the following:

- (1) Where penetrations are tested and installed as part of an assembly tested and rated in accordance with ASTM E119, *Standard Test Methods for Fire Tests of Building Construction and Materials*, or ANSI/UL 263, *Standard for Fire Tests of Building Construction and Materials*
- (2) Where penetrations through floors are enclosed in a shaft enclosure designed as a fire barrier
- (3) Where concrete, grout, or mortar has been used to fill the annular spaces around cast-iron, copper, or steel piping, conduit, or tubing that penetrates one or more concrete or masonry fire resistance-rated assemblies, and ~~both all~~ of the following criteria are also met applies :
 - (a) The nominal diameter of each penetrating item shall ~~shall~~ does not exceed 6 in. (150 mm).
 - (b) The opening size shall ~~shall~~ does not exceed 1 ft² (0.09 m²).
 - (c) The thickness of the concrete, grout, or mortar shall ~~be~~ is the full thickness of the assembly.
- (4) ~~Where firestopping materials are used with the following penetrating items, the penetration is limited to one floor, and the firestopping material is capable of preventing the passage of flame and hot gases sufficient to ignite cotton waste when subjected to the time-temperature fire conditions of ASTM E119, *Standard Test Methods for Fire Tests of Building Construction and Materials*, or ANSI/UL 263, *Standard for Fire Tests of Building Materials*, NFPA 251 under a minimum positive pressure differential of 0.01 in. water column (2.5 Pa) at the location of the penetration for the time period equivalent to the required fire resistance rating of the assembly penetrated, and the firestopping materials are used with the following penetrating items :~~
 - (a) Steel, ferrous, or copper cables
 - (b) Cable or wire with steel jackets
 - (c) Cast-iron, steel, or copper pipes
 - (d) Steel conduit or tubing

8.3.4.2.5.2

The maximum nominal diameter of the penetrating item, as indicated in 8.3.4.2.5.1(4)(a) through 8.3.4.2.5.1(4)(d), shall not be greater than 4 in. (100 mm) and shall not exceed an aggregate 100 in.² (64,520 mm²) opening in any 100 ft² (9.3 m²) of floor or wall area.

8.3.4.3 Sleeves.

Where the penetrating item uses a sleeve to penetrate the wall or floor, the sleeve shall be securely set in the wall or floor, and the space between the item and the sleeve shall be filled with a material that complies with 8.3.4.2.

8.3.4.4 Insulation and Coverings.

Insulation and coverings for penetrating items shall not pass through the wall or floor unless the insulation or covering has been tested as part of the firestop system or device.

8.3.4.5 ~~Transmission of Vibrations~~ Vibration Isolation .

Where designs take transmission of vibrations into consideration, any vibration isolation shall meet one of the following conditions:

- (1) It shall be provided on either side of the wall or floor.
- (2) It shall be designed for the specific purpose.

8.3.4.6 Transitions.

8.3.4.6.1

Where piping penetrates a fire resistance-rated wall or floor assembly, combustible piping shall not connect to noncombustible piping within 36 in. (915 mm) of the firestop system or device without demonstration that the transition will not reduce the fire resistance rating, except in the case of previously approved installations.

8.3.4.6.2

Unshielded couplings shall not be used to connect noncombustible piping to combustible piping unless it can be demonstrated that the transition complies with the fire-resistive requirements of [8.3.4.2](#).

8.3.4.7 Membrane Penetrations.

8.3.4.7.1

Membrane penetrations for cables, cable trays, conduits, pipes, tubes, combustion vents ~~and~~ exhaust vents, wires, and similar items to accommodate electrical, mechanical, plumbing, and communications systems that pass through a membrane of a wall, floor, or floor/ceiling assembly constructed as a fire barrier shall be protected by a firestop system or device and shall comply with [8.3.4.2](#) through [8.3.4.6.2](#).

8.3.4.7.2

The firestop system or device shall be tested in accordance with ASTM E814, *Standard Test Method for Fire Tests of Through Penetration Fire Stops*, or ANSI/UL 1479, *Standard for Fire Tests of Through-Penetration Firestops*, at a minimum positive pressure differential of 0.01 in. water column (2.5 N/m²) between the exposed and the unexposed surface of the test assembly, unless one of the following conditions applies:

- (1) Membrane penetrations of ceilings that are not an integral part of a fire resistance-rated floor/ceiling or roof/ceiling assembly ~~shall be permitted~~.
- (2) Membrane penetrations of steel, ferrous, or copper conduits, and pipes, tubes, or combustion vents or exhaust vents, ~~shall be permitted~~ where the annular space is protected with an approved material and the aggregate area of the openings does not exceed 0.7 ft² (0.06 m²) in any 100 ft² (9.3 m²) of ceiling area.
- (3) Electrical outlet boxes and fittings ~~shall be permitted~~, provided that such devices are listed for use in fire resistance-rated assemblies and are installed in accordance with their listing.
- (4) The annular space created by the membrane penetration of a fire sprinkler shall be permitted, provided that the space is covered by a metal escutcheon plate.

8.3.4.7.3

Where walls or partitions are required to have a minimum 1-hour fire resistance rating, recessed fixtures shall be installed in the wall or partition in such a manner that the required fire resistance is not reduced, unless one of the following criteria is met:

- (1) Any steel electrical box not exceeding 0.1 ft² (0.01 m²) in area shall be permitted where the aggregate area of the openings provided for the boxes does not exceed 0.7 ft² (0.06 m²) in any 100 ft² (9.3 m²) of wall area, and, where outlet boxes are installed on opposite sides of the wall, the boxes shall be separated by one of the following means :
 - (a) Horizontal distance of not less than 24 in. (610 mm)
 - (b) Horizontal distance of not less than the depth of the wall cavity, where the wall cavity is filled with cellulose loose-fill, rock wool, or slag wool insulation
 - (c)* Solid fireblocking
 - (d) Other listed materials and methods
- (2) Membrane penetrations for any listed electrical outlet box made of any material shall be permitted, provided that such boxes have been tested for use in fire resistance-rated assemblies and are installed in accordance with the instructions included in the listing.
- (3) The annular space created by the membrane penetration of a fire sprinkler shall be permitted, provided that the space is covered by a metal escutcheon plate.
- (4) Membrane penetrations by electrical boxes of any size or type, which have been listed as part of a wall opening protective material system for use in fire resistance-rated assemblies and are installed in accordance with the instructions included in the listing, shall be permitted.

8.3.4.8 ~~Openings for Air-Handling Ductwork. Ducts and Air-Transfer Openings.~~

~~Openings in fire barriers for air-handling ductwork or air movement shall be protected in accordance with 9.2.1.~~

8.3.6 ~~Penetrations.~~

~~The provisions of 8.3.4 shall govern the materials and methods of construction used to protect through penetrations and membrane penetrations in fire walls, fire barrier walls, and fire resistance-rated horizontal assemblies. The provisions of 8.3.4 shall not apply to approved existing materials and methods of construction used to protect existing through penetrations and existing membrane penetrations in fire walls, fire barrier walls, or fire resistance-rated horizontal assemblies, unless otherwise required by Chapters 14 through 43.~~

8.3.6.1* ~~Firestop Systems and Devices Required.~~

~~Penetrations for cables, cable trays, conduits, pipes, tubes, combustion vents and exhaust vents, wires, and similar items to accommodate electrical, mechanical, plumbing, and communications systems that pass through a wall, floor, or floor/ceiling assembly constructed as a fire barrier shall be protected by a firestop system or device. The firestop system or device shall be tested in accordance with ASTM E814, *Standard Test Method for Fire Tests of Through Penetration Fire Stops*, or ANSI/UL 1479, *Standard for Fire Tests of Through Penetration Firestops*, at a minimum positive pressure differential of 0.01 in. water column (2.5 N/m²) between the exposed and the unexposed surface of the test assembly.~~

8.3.6.1.1

The requirements of 8.3.4.2 shall not apply where otherwise permitted by any one of the following:

~~Where penetrations are tested and installed as part of an assembly tested and rated in accordance with ASTM E119, *Standard Test Methods for Fire Tests of Building Construction and Materials*, or ANSI/UL 263, *Standard for Fire Tests of Building Construction and Materials*~~

~~Where penetrations through floors are enclosed in a shaft enclosure designed as a fire barrier~~

~~Where concrete, grout, or mortar has been used to fill the annular spaces around cast iron, copper, or steel piping that penetrates one or more concrete or masonry fire resistance-rated assemblies and both of the following criteria are also met:~~

~~The nominal diameter of each penetrating item shall not exceed 6 in. (150 mm), and the opening size shall not exceed 1 ft² (0.09 m²).~~

~~The thickness of the concrete, grout, or mortar shall be the full thickness of the assembly.~~

~~Where firestopping materials are used with the following penetrating items, the penetration is limited to one floor, and the firestopping material is capable of preventing the passage of flame and hot gases sufficient to ignite cotton waste when subjected to the time-temperature fire conditions of ASTM E119, *Standard Test Methods for Fire Tests of Building Construction and Materials*, or ANSI/UL 263, *Standard for Fire Tests of Building Materials*, NFPA 251 under a minimum positive pressure differential of 0.01 in. water column (2.5 Pa) at the location of the penetration for the time period equivalent to the required fire resistance rating of the assembly penetrated:~~

~~Steel, ferrous, or copper cables~~

~~Cable or wire with steel jackets~~

~~Cast iron, steel, or copper pipes~~

~~Steel conduit or tubing~~

8.3.6.1.2

The maximum nominal diameter of the penetrating item, as indicated in 8.3.4.2.5.1(4)(a) through (d), shall not be greater than 4 in. (100 mm) and shall not exceed an aggregate 100 in.² (64,520 mm²) opening in any 100 ft² (9.3 m²) of floor or wall area.

8.3.6.1.3

Firestop systems and devices shall have a minimum 1-hour F rating, but not less than the required fire resistance rating of the fire barrier penetrated.

8.3.6.1.4 T-Ratings.

Penetrations in fire resistance-rated horizontal assemblies shall be required to have a T rating of at least 1 hour, but not less than the fire resistance rating of the horizontal assembly, and shall not be required for either of the following:

Floor penetrations contained within the cavity of a wall assembly.

Penetrations through floors or floor assemblies where the penetration is not in direct contact with combustible material.

8.3.6.2 Sleeves.

Where the penetrating item uses a sleeve to penetrate the wall or floor, the sleeve shall be securely set in the wall or floor, and the space between the item and the sleeve shall be filled with a material that complies with [8.3.4.2](#).

8.3.6.3 Insulation and Coverings.

Insulation and coverings for penetrating items shall not pass through the wall or floor unless the insulation or covering has been tested as part of the firestop system or device.

8.3.6.4 Transmission of Vibrations.

Where designs take transmission of vibrations into consideration, any vibration isolation shall meet one of the following conditions:

It shall be provided on either side of the wall or floor.

It shall be designed for the specific purpose.

8.3.6.5 Transitions.

8.3.6.5.1

Where piping penetrates a fire resistance-rated wall or floor assembly, combustible piping shall not connect to noncombustible piping within 36 in. (915 mm) of the firestop system or device without demonstration that the transition will not reduce the fire resistance rating, except in the case of previously approved installations.

8.3.6.5.2

Unshielded couplings shall not be used to connect noncombustible piping to combustible piping unless it can be demonstrated that the transition complies with the fire-resistive requirements of [8.3.4.2](#).

8.3.6.6 Membrane Penetrations.

8.3.6.6.1

Membrane penetrations for cables, cable trays, conduits, pipes, tubes, combustion vents and exhaust vents, wires, and similar items to accommodate electrical, mechanical, plumbing, and communications systems that pass through a membrane of a wall, floor, or floor/ceiling assembly constructed as a fire barrier shall be protected by a firestop system or device and shall comply with [8.3.4.2](#) through [8.3.4.6.2](#).

8.3.6.6.2

The firestop system or device shall be tested in accordance with ASTM E814, *Standard Test Method for Fire Tests of Through Penetration Fire Stops*, or ANSI/UL 1479, *Standard for Fire Tests of Through Penetration Firestops*, at a minimum positive pressure differential of 0.01 in. water column (2.5 N/m^2) between the exposed and the unexposed surface of the test assembly, unless one of the following applies:

Membrane penetrations of ceilings that are not an integral part of a fire resistance-rated floor/ceiling or roof/ceiling assembly shall be permitted.

Membrane penetrations of steel, ferrous, or copper conduits, and pipes, tubes, or combustion vents or exhaust vents, shall be permitted where the annular space is protected with an approved material and the aggregate area of the openings does not exceed 0.7 ft^2 (0.06 m^2) in any 100 ft^2 (9.3 m^2) of ceiling area.

Electrical outlet boxes and fittings shall be permitted, provided that such devices are listed for use in fire resistance-rated assemblies and are installed in accordance with their listing.

The annular space created by the membrane penetration of a fire sprinkler shall be permitted, provided that the space is covered by a metal escutcheon plate.

8.3.6.6.3

Where walls or partitions are required to have a minimum 1-hour fire resistance rating, recessed fixtures shall be installed in the wall or partition in such a manner that the required fire resistance is not reduced, unless one of the following is met:

Any steel electrical box not exceeding 0.1 ft^2 (0.01 m^2) shall be permitted where the aggregate area of the openings provided for the boxes does not exceed 0.7 ft^2 (0.06 m^2) in any 100 ft^2 (9.3 m^2) of wall area, and, where outlet boxes are installed on opposite sides of the wall, the boxes shall be separated by one of the following:

Horizontal distance of not less than 24 in. (610 mm)

Horizontal distance of not less than the depth of the wall cavity, where the wall cavity is filled with cellulose loose-fill, rock wool, or slag wool insulation

* Solid fireblocking

Other listed materials and methods

Membrane penetrations for any listed electrical outlet box made of any material shall be permitted, provided that such boxes have been tested for use in fire resistance-rated assemblies and are installed in accordance with the instructions included in the listing.

The annular space created by the membrane penetration of a fire sprinkler shall be permitted, provided that the space is covered by a metal escutcheon plate.

Membrane penetrations by electrical boxes of any size or type, which have been listed as part of a wall opening protective material system for use in fire resistance-rated assemblies and are installed in accordance with the instructions included in the listing, shall be permitted.

8.3.6.7 ~~Openings for Air-Handling Ductwork~~.

~~Openings in fire barriers for air-handling ductwork or air movement shall be protected in accordance with 9.2.1~~.

Supplemental Information

<u>File Name</u>	<u>Description</u>
NFPA_101_Opening_Protectives_FIRST_REVISION_attachment.docx	
101_A.8.3.3.5.3.docx	

Submitter Information Verification

Submitter Full Name: KRISTIN BIGDA
Organization: NATIONAL FIRE PROTECTION ASSOC
Street Address:
City:
State:
Zip:
Submittal Date: Tue Aug 11 10:59:11 EDT 2015

Committee Statement

Committee Statement: ALL: At the end of the 2015 revision cycle a task group was formed to evaluate the requirements for opening protectives. The current requirements for opening protectives are unorganized and not presented in a logical, user friendly format. The goal of the proposed changes is to reorganize the provisions for opening protectives and to make consistent the provisions in both NFPA 101 and NFPA 5000. The proposed changes are intended to be strictly editorial in nature and include reordering and renumbering requirements for better usability and application of the opening protective provisions. Any revisions that were outside of the scope of the task group were discussed by the committee and are substantiated below.

Former section 8.3.3.2.1 was deleted as NFPA 257 requires all fire protection rated glazing shall be evaluated under positive pressure and is addressed by the general reference to NFPA 257.

Section 8.3.3.7: Deleted as it is a duplicate of Section 8.3.3.1.1 (newly renumbered 8.3.3.6.7)

Section 8.3.3.3.1: 2015 text has multiple references for fire doors to be compliant with NFPA 80. References to NFPA 80 was combined to require installation, inspection, testing, and maintenance in accordance with NFPA 80 in once section.

Section 8.3.3.3.6: The pointer to Section 7.2.1.8 was deleted as it is too limiting and implies that the provision may only be applicable to those doors in the means of egress as addressed by 7.2.1.8.1 or buildings with low or ordinary hazard contents.

Section 8.3.3.3.7: Existing provision referencing NFPA 72 was deleted as it is already addressed by the reference to NFPA 80 noted above.

Section 8.3.4.2.1 and 8.3.5.2.3: To be consistent with other opening protectives, the

'Testing, Installation, Inspection, and Maintenance' directives for penetrations and joints need to be specific in the code. New language provides installation and maintenance provisions for penetrations. Language is consistent with opening protectives such as fire doors and glazing providing language that installation, testing and maintenance be in accordance with NFPA 80.

Section 8.3.5: The current requirements do not clearly explain the purpose for the joint protection in the fire barrier or when a fire barrier is used as a smoke barrier. This input consolidates the requirements already scattered through the section into an easier to use format.

A.8.3.3.5.3 is being added for consistency with NFPA 5000.

Response**Message:**

[Public Input No. 265-NFPA 101-2015 \[Sections 8.3.3, 8.3.4, 8.3.5, 8.3.6\]](#)

NFPA 101

8.3.3 Opening Protectives.

8.3.3.1 General. Every opening in a fire barrier shall be protected to limit the spread of fire and restrict the movement of smoke from one side of the fire barrier to the other.

8.3.3.2 Minimum Fire Protection Rating

8.3.3.2.1* Fire protection ratings for products required to comply with 8.3.3 shall be as determined and reported by a nationally recognized testing agency in accordance with NFPA 252; ANSI/UL 10B; ANSI/UL 10C; NFPA 257; or ANSI/UL 9.

8.3.3.2.2* The fire protection rating for opening protectives in fire barriers, fire-rated smoke barriers, and fire-rated smoke partitions shall be in accordance with Table 8.3.3.2.2, except as otherwise permitted in 8.3.3.2.3 or 8.3.3.2.4.

Table 8.3.3.2.2 Minimum Fire Ratings for Opening Protectives in Fire Resistance–Rated Assemblies and Fire-Rated Glazing Markings

INSERT TABLE 8.3.4.2 FROM NFPA 101 2015 EDITION AS TABLE 8.3.3.2.2

8.3.3.2.3 Existing fire door assemblies having a minimum $\frac{3}{4}$ -hour fire protection rating shall be permitted to continue to be used in vertical openings and in exit enclosures in lieu of the minimum 1-hour fire protection rating required by Table 8.3.3.2.2.

8.3.3.2.4 Where a 20-minute fire protection–rated door is required in existing buildings, an existing $1\frac{3}{4}$ in. (44 mm) solid-bonded wood-core door, an existing steel-clad (tin-clad) wood door, or an existing solid-core steel door with positive latch and closer shall be permitted, unless otherwise specified by Chapters 11 through 43.

8.3.3.2.5 Openings required to have a fire protection rating by Table 8.3.3.2.2 shall be protected by approved, listed, labeled fire door assemblies and fire window assemblies and their accompanying hardware, including all frames, closing devices, anchorage, and sills in accordance with the requirements of NFPA 80 except as otherwise specified in this Code.

8.3.3.3 Fire Doors

8.3.3.3.1 Fire door assemblies shall be installed, inspected, tested, and maintained in accordance with NFPA 80.

8.3.3.3.2 All fire door assemblies shall bear an approved label.

8.3.3.3.3 Labels on fire door assemblies shall be maintained in a legible condition.

8.3.3.3.4* In existing installations, steel door frames without a label shall be permitted where approved by the authority having jurisdiction.

8.3.3.3.5 The maximum size of the fire doors shall not exceed that specified in NFPA 80, except as modified by Chapter 7.

8.3.3.3.6 Unless otherwise specified, fire doors shall be self-closing or automatic-closing.

8.3.3.4 Floor Fire Door Assemblies

8.3.3.4.1 Floor fire door assemblies used to protect openings in fire-resistance-rated floors shall be tested in accordance with NFPA 288 and shall achieve a fire resistance rating not less than the assembly being penetrated.

8.3.3.4.2 Floor fire door assemblies shall be listed and labeled.

8.3.3.5 Fire Windows

8.3.3.5.1 Fire window assemblies shall be installed, inspected, tested and maintained in accordance with NFPA 80.

8.3.3.5.2 All fire window assemblies shall bear an approved label.

8.3.3.5.3* Fire window assemblies shall be permitted in fire barriers having a required fire resistance rating of 1 hour or less and shall be of an approved type with the appropriate fire protection rating for the location in which they are installed.

8.3.3.6 Glazing

8.3.3.6.1 Glazing materials that have been listed and labeled to indicate the type of opening to be protected for fire protection purposes shall be permitted to be used in approved opening protectives in accordance with Table 8.3.3.2.2 and in sizes in accordance with NFPA 80.

8.3.3.6.2 Fire-rated glazing assemblies marked as complying with hose stream requirements (H) shall be permitted in applications that do not require compliance with hose stream requirements. Fire-rated glazing assemblies marked as complying with temperature rise requirements (T) shall be permitted in applications that do not require compliance with temperature rise requirements. Fire-rated glazing assemblies marked with ratings that exceed the ratings required by this Code (XXX) shall be permitted.

8.3.3.6.3 New fire protection-rated glazing shall be marked in accordance with Table 8.3.3.6.3 and Table 8.3.3.2.2, and such marking shall be permanently affixed.

INSERT TABLE 8.3.3.12 FROM NFPA 101 2015 EDITION AS TABLE 8.3.3.6.3

8.3.3.6.4 New fire resistance-rated glazing shall be marked in accordance with Table 8.3.3.6.3 and Table 8.3.3.2.2. Such marking shall be permanently affixed.

8.3.3.6.5 Fire protection-rated glazing shall be permitted in fire barriers having a required fire resistance rating of 1 hour or less and shall be of an approved type with the appropriate fire protection rating for the location in which the barriers are installed.

8.3.3.6.6 * Glazing in fire window assemblies, other than in existing fire window installations of wired glass and other fire-rated glazing material, shall be of a design that has been tested to meet the conditions of acceptance of NFPA 257 or ANSI/UL 9 . Fire protection-rated glazing in fire door assemblies, other than in existing fire-rated door assemblies, shall be of a design that has been tested to meet the conditions of acceptance of NFPA 252, ANSI/UL 10B, or ANSI/UL 10C.

8.3.3.6.7 Fire resistance-rated glazing tested in accordance with ASTM E 119 or ANSI/UL 263 shall be permitted in fire door assemblies and fire window assemblies where tested and installed in accordance with their listings.

8.3.3.6.8 Nonsymmetrical fire protection-rated glazing systems shall be tested with each face exposed to the furnace, and the assigned fire protection rating shall be that of the shortest duration obtained from the two tests conducted in compliance with NFPA 257 or ANSI/UL 9.

8.3.3.6.9 The total combined area of glazing in fire-rated window assemblies and fire-rated door assemblies used in fire barriers shall not exceed 25 percent of the area of the fire barrier that is common with any room, unless the installation meets one of the following criteria:

- (1) The installation is an existing fire window installation of wired glass and other fire-rated glazing materials in approved frames.
- (2) The fire protection-rated glazing material is installed in approved existing frames.

8.3.3.6.10 Existing installations of wired glass of 1/4 in. (6.3 mm) thickness and labeled for fire protection purposes shall be permitted to be used in approved opening protectives, provided that the maximum size specified by the listing is not exceeded.

8.3.3.7 Sidelights and Transoms. Glazing used in sidelights and transoms adjacent to 20-minute doors in 1-hour corridor fire barriers shall be tested in accordance with 8.7.6, including hose stream, and shall attain a minimum 45-minute fire protection rating.

8.3.4 Penetrations.

8.3.4.1 General.

8.3.4.1.1 The provisions of 8.3.4 shall govern the materials and methods of construction used to protect through-penetrations and membrane penetrations in fire walls, fire barrier walls, and fire resistance-rated horizontal assemblies.

8.3.4.1.2 The provisions of 8.3.4 shall not apply to approved existing materials and methods of construction used to protect existing through-penetrations and existing membrane penetrations in fire walls, fire barrier walls, or fire resistance-rated horizontal assemblies, unless otherwise required by Chapters 11 through 43.

8.3.4.1.3 Penetrations shall be installed in accordance with a tested system, and installed and maintained in accordance with the manufacturer's instructions.

8.3.4.2* Firestop Systems and Devices Required.

8.3.4.2.1 Penetrations for cables, cable trays, conduits, pipes, tubes, combustion vents and exhaust vents, wires, and similar items to accommodate electrical, mechanical, plumbing, and communications systems that pass through a wall, floor, or floor/ceiling assembly constructed as a fire barrier shall be protected by a firestop system or device.

8.3.4.2.2 Testing. The firestop system or device shall be tested in accordance with ASTM E 814 or ANSI/UL 1479 at a minimum positive pressure differential of 0.01 in. water column (2.5 Pa) between the exposed and the unexposed surface of the test assembly.

8.3.4.2.3 F Ratings. Firestop systems and devices shall have an F-rating of not less than 1-hour, and not less than the required fire resistance rating of the fire barrier penetrated.

8.3.4.2.4 T Ratings.

8.3.4.2.4.1 Penetrations in fire resistance-rated horizontal assemblies shall have a T rating of not less than 1 hour, and not less than the fire resistance rating of the horizontal assembly.

8.3.4.2.4.2 A T rating shall not be required for either of the following:

- (1) Floor penetrations contained within the cavity of a wall assembly.
- (2) Penetrations through floors or floor assemblies where the penetration is not in direct contact with combustible material.

8.3.4.2.5 Alternative Firestop Requirements

8.3.4.2.5.1 The requirements of 8.3.4.2 shall not apply where otherwise permitted by any one of the following:

- (1) Where penetrations are tested and installed as part of an assembly tested and rated in accordance with ASTM E 119, or ANSI/UL 263
- (2) Where penetrations through floors are enclosed in a shaft enclosure designed as a fire barrier
- (3) Where concrete, grout, or mortar has been used to fill the annular spaces around cast-iron, copper, or steel piping, conduit, or tubing, that penetrates one or more concrete or masonry fire resistance-rated assemblies and both of the following shall apply:
 - (a) The nominal diameter of each penetrating item shall not exceed 6 in. (150 mm),
 - (b) The opening size shall not exceed 1 ft² (0.09 m²).
 - (c) The thickness of the concrete, grout, or mortar shall be the full thickness of the assembly.
- (4) Where firestopping materials are used with the following penetrating items, the penetration is limited to one floor, and the firestopping material is capable of preventing the passage of flame and hot gases sufficient to ignite cotton waste when subjected to the time-temperature fire conditions of ASTM E 119 or ANSI/UL 263 under a minimum positive pressure differential of 0.01 in. water column (2.5 Pa) at the location of the penetration for the time period equivalent to the required fire resistance rating of the assembly penetrated:
 - (a) Steel, ferrous, or copper cables
 - (b) Cable or wire with steel jackets
 - (c) Cast-iron, steel, or copper pipes
 - (d) Steel conduit or tubing

8.3.4.2.5.2 The maximum nominal diameter of the penetrating item, as indicated in 8.3.4.2.5.1(4)(a) through (d), shall not be greater than 4 in. (100 mm) and shall not exceed an aggregate 100 in.² (64,520 mm²) opening in any 100 ft² (9.3 m²) of floor or wall area.

8.3.4.3 Sleeves. Where the penetrating item uses a sleeve to penetrate the wall or floor, the sleeve shall be securely set in the wall or floor, and the space between the item and the sleeve shall be filled with a material that complies with 8.3.4.2.

8.3.4.4 Insulation and Coverings. Insulation and coverings for penetrating items shall not pass through the wall or floor unless the insulation or covering has been tested as part of the firestop system or device.

8.3.4.5 Vibration Isolation . Where designs take transmission of vibrations into consideration, any vibration isolation shall meet one of the following conditions:

- (1) It shall be provided on either side of the wall or floor.
- (2) It shall be designed for the specific purpose.

8.3.4.6 Transitions.

8.3.4.6.1 Where piping penetrates a fire resistance-rated wall or floor assembly, combustible piping shall not connect to noncombustible piping within 36 in. (915 mm) of the firestop system or device without demonstration that the transition will not reduce the fire resistance rating, except in the case of previously approved installations.

8.3.4.6.2 Unshielded couplings shall not be used to connect noncombustible piping to combustible piping unless it can be demonstrated that the transition complies with the fire-resistive protection requirements of 8.3.4.2.

8.3.4.7 Membrane Penetrations.

8.3.4.7.1 Membrane penetrations for cables, cable trays, conduits, pipes, tubes, combustion vents, and exhaust vents, wires, and similar items to accommodate electrical, mechanical, plumbing, and communications systems that pass through a membrane of a wall, floor, or floor/ceiling assembly constructed as a fire barrier shall be protected by a firestop system or device and shall comply with 8.3.4.2 through 8.3.4.6.2.

8.3.4.7.2 The firestop system or device shall be tested in accordance with ASTM E 814 or ANSI/UL 1479 at a minimum positive pressure differential of 0.01 in. water column (2.5 N/m²) between the exposed and the unexposed surface of the test assembly, unless one of the following applies criteria is met:

- (1) Membrane penetrations of ceilings that are not an integral part of a fire resistance-rated floor/ceiling or roof/ceiling assembly.
- (2) Membrane penetrations of steel, ferrous, or copper conduits, and pipes, tubes, or combustion vents or exhaust vents, where the annular space is protected with an approved material and the aggregate area of the openings does not exceed 0.7 ft² (0.06 m²) in any 100 ft² (9.3 m²) of ceiling area.
- (3) Electrical outlet boxes and fittings, provided that such devices are listed for use in fire resistance-rated assemblies and are installed in accordance with their listing.
- (4) The annular space created by the membrane penetration of a fire sprinkler, provided that the space is covered by a metal escutcheon plate.

8.3.4.7.3 Where walls or partitions are required to have a minimum 1-hour fire resistance rating, recessed fixtures shall be installed in the wall or partition in such a manner that the required fire resistance is not reduced, unless one of the following criteria is met:

(1) Any steel electrical box not exceeding 0.1 ft² (0.01 m²) in area shall be permitted where the aggregate area of the openings provided for the boxes does not exceed 0.7 ft² (0.06 m²) in any 100 ft² (9.3 m²) of wall area, and, where outlet boxes are installed on opposite sides of the wall, the boxes shall be separated by one of the following means:

(a) Horizontal distance of not less than 24 in. (610 mm)

(b) Horizontal distance of not less than the depth of the wall cavity, where the wall cavity is filled with cellulose loose-fill, rock wool, or slag wool insulation

(c) *Solid fireblocking

(d) Other listed materials and methods

(2) Membrane penetrations for any listed electrical outlet box made of any material shall be permitted, provided that such boxes have been tested for use in fire resistance-rated assemblies and are installed in accordance with the instructions included in the listing.

(3) The annular space created by the membrane penetration of a fire sprinkler shall be permitted, provided that the space is covered by a metal escutcheon plate.

(4) Membrane penetrations by electrical boxes of any size or type, which have been listed as part of a wall opening protective material system for use in fire resistance-rated assemblies and are installed in accordance with the instructions included in the listing, shall be permitted.

8.3.4.8 Ducts and Air-Transfer Openings. Openings for air-handling ductwork or air movement shall be protected in accordance with 9.2.1.

8.3.5 Joints.

8.3.5.1 General

8.3.5.1.1 The provisions of 8.3.5 shall govern the materials and methods of construction used to protect joints in fire barriers, in between fire barriers and at the perimeter of fire barriers where fire barriers meet other fire barriers, the floor or roof deck above, or the outside walls.

8.3.5.1.2 The provisions of 8.3.5 shall not apply to approved existing materials and methods of construction used to protect existing joints in fire barriers, unless otherwise required by Chapters 11 through 43.

8.3.5.2 Joint System Requirements

8.3.5.2.1* Joints made within or at the perimeter of fire barriers or between fire resistance-rated assemblies, or where fire barriers meet other fire barriers, the floor or rook deck above, or the outside walls shall be protected with a joint system that is designed and tested to prevent the spread of fire for a time period equal to that of the assembly in which the joint is located.

8.3.5.2.2 Joints made within or at the perimeter of fire barriers used as smoke barriers shall be capable of restricting the transfer of smoke in accordance with 8.5.7.4.

8.3.5.2.3 Joints shall be installed in accordance with a tested system, and installed and maintained in accordance with the manufacturer's instructions.

8.3.5.2.4 Testing of the joint system in a fire barrier shall be representative of the actual installation suitable for the required engineering demand without compromising the fire resistance rating of the assembly or the structural integrity of the assembly.

8.3.5.2.5 Such materials, systems, or devices shall be tested as part of the assembly in accordance with the requirements of ASTM E 1966 or ANSI/UL 2079.

8.3.5.2.6 All joint systems shall be tested at their maximum joint width in accordance with the requirements of ASTM E 1966, or ANSI/UL 2079, under a minimum positive pressure differential of 0.01 in. water column (2.5 N/m²) for a time period equal to that of the assembly.

8.3.5.2.7 All test specimens shall comply with the minimum height or length required by the standard.

8.3.5.2.8 Wall assemblies shall be subjected to a hose stream test in accordance with ASTM E 119 or ANSI/UL 263.

8.3.5.3* Exterior Curtain Walls and the Perimeter Joints.

8.3.5.3.1 Voids created between the fire resistance-rated floor assembly and the exterior curtain wall shall be protected with a perimeter joint system that is designed and tested in accordance with ASTM E 2307, Standard Test Method for Fire Resistance of Perimeter Fire Barriers Using Intermediate-Scale, Multi-story Apparatus.

8.3.5.3.2 The perimeter joint system shall have an F rating equal to the fire resistance rating of the floor assembly.

A.8.3.3.5.3 Some doors and glazing assemblies have been tested to meet the conditions of acceptance of ASTM E 119 or UL263. Where such assemblies are used, the provisions of Section 8.3 should be applied instead of those of 8.3.3.2.1.



First Revision No. 2504-NFPA 101-2015 [Section No. 8.4.3.1]

8.4.3.1

Doors in smoke partitions shall comply with 8.4.3.2 through 8.4.3.6.

Submitter Information Verification

Submitter Full Name: Kristin Bigda

Organization: [Not Specified]

Street Address:

City:

State:

Zip:

Submittal Date: Thu Jul 30 15:41:31 EDT 2015

Committee Statement

Committee Statement: Renumbering of section per new 8.4.3.6.

Response Message:

[Public Input No. 310-NFPA 101-2015 \[Section No. 8.4.3.1\]](#)



First Revision No. 2503-NFPA 101-2015 [New Section after 8.4.3.5]

8.4.3.6

Shutters that protect openings shall be automatic-closing upon detection of smoke by smoke detectors installed in accordance with *NFPA 72* .

Submitter Information Verification

Submitter Full Name: Kristin Bigda

Organization: [Not Specified]

Street Address:

City:

State:

Zip:

Submittal Date: Thu Jul 30 15:37:46 EDT 2015

Committee Statement

Committee Statement: In order to limit the transfer of smoke an opening provided with a shutter must close upon smoke detector activation and not merely a fusible link. The new language will provide direction on how to install a shutter in a smoke partition to avoid problems during commissioning.

Response

Message:

Public Input No. 302-NFPA 101-2015 [New Section after 8.4.3.5]

**First Revision No. 2505-NFPA 101-2015 [Sections 8.5.6.2, 8.5.6.3, 8.5.6.4,****8.5.6.5]****8.5.6.2**

Penetrations for cables, cable trays, conduits, pipes, tubes, vents, wires, and similar items to accommodate electrical, mechanical, plumbing, and communications systems that pass through a wall, floor, or floor/ceiling assembly constructed as a smoke barrier, or through the ceiling membrane of the roof/ceiling of a smoke barrier assembly, shall be protected by a system or material capable of restricting the transfer of smoke.

8.5.6.3

Where a smoke barrier is also constructed as a fire barrier, the penetrations shall be protected in accordance with the requirements of 8.3.4 to limit the spread of fire for a time period equal to the fire resistance rating of the assembly and the requirements of 8.5.6 to restrict the transfer of smoke, unless the requirements of 8.5.6.4 are met.

8.5.6.4

Where sprinklers penetrate a single membrane of a fire resistance-rated assembly in buildings equipped throughout with an approved automatic fire sprinkler system, noncombustible escutcheon plates shall be permitted, provided that the space around each sprinkler penetration does not exceed ½ in. (13 mm), measured between the edge of the membrane and the sprinkler.

8.5.6.5

In new construction, penetrations shall be protected by an approved through-penetration firestop system installed and tested in accordance with the requirements of ANSI/UL 1479, Standard for Fire Tests of Through-Penetration Firestops, for air leakage. The L rating of the system measured at 0.30 in. (7.47 Pa) of water, in both the ambient temperature and elevated temperature tests, shall comply with one of the following:

- (1) $5 \text{ ft}^3 / \text{m per ft}^2$ ($0.025 \text{ m}^3 / \text{s per m}^2$) of penetration opening for each through-penetration firestop system
- (2) A total cumulative leakage of $50 \text{ ft}^3 / \text{m}$ ($0.024 \text{ m}^3 / \text{s}$) for any 100 ft^2 (9.3 m^2) of wall area or floor area

8.5.6.6

Where the penetrating item uses a sleeve to penetrate the smoke barrier, the sleeve shall be securely set in the smoke barrier, and the space between the item and the sleeve shall be filled with a listed system or of a material capable of or restricting the transfer of smoke.

Submitter Information Verification

Submitter Full Name: Kristin Bigda

Organization: [Not Specified]

Street Address:

City:

State:

Zip:

Submittal Date: Thu Jul 30 15:47:52 EDT 2015

Committee Statement

Committee Statement: Penetrations through smoke barriers are to restrict the passage of smoke. In NFPA 101/5000, there is no performance test standard listed nor value provided for the designer to use for compliance. Using this performance requirement will provide a measure of consistency and predictability for the installed system.

A nationally recognized testing laboratory through performance testing proves that any product is smoke resistant after it is tested. Otherwise, smoke barriers receive whatever material that the contractors think works for limiting smoke. The quantified air leakage rating ("L") in UL 1479 provides designers a quantified value to communicate through construction documents to contractors for compliance.

Over 1/3 of the tested Firestop Systems have L Ratings. The labor and material to install an L rated firestop system is the same as non L Rated firestop assembly.

This would follow the same approach currently taken in NFPA 101 for other elements within smoke barriers and would be consistent with the current smoke barrier requirements in other model codes. Consistent changes are also being proposed for NFPA 5000.

Section 8.5.6.6 remains unchanged from the 2015 language to address existing smoke barriers.

Response

Message:

[Public Input No. 331-NFPA 101-2015 \[Sections 8.5.6.2, 8.5.6.3, 8.5.6.4, 8.5.6.5\]](#)



First Revision No. 2506-NFPA 101-2015 [Sections 8.5.7.1, 8.5.7.2, 8.5.7.3, 8.5.7.4]

8.5.7.1

The provisions of [8.5.7](#) shall govern the materials and methods of construction used to protect joints in between and at the perimeter of smoke barriers or, where smoke barriers meet other smoke barriers, the floor or roof deck above, or the outside walls. The provisions of [8.5.7](#) shall not apply to approved existing materials and methods of construction used to protect existing joints in smoke barriers, unless otherwise required by Chapters [11](#) through [43](#).

8.5.7.2

Joints made within, ~~between,~~ or at the perimeter of smoke barriers shall be protected with a joint system that is ~~capable of limiting the transfer of smoke~~ tested in accordance with the requirements of ANSI/UL 2079, *Standard for Tests for Fire Resistance of Building Joint Systems*, for air leakage. The L rating of the joint system shall not exceed 5 ft³ /m per ft (0.00775 m³ /s per m) of joint at 0.30 in. (7.47 Pa) of water for both the ambient temperature and elevated temperature tests .

8.5.7.3

~~Joints made within or between smoke barriers shall be protected with a smoke-tight joint system that is capable of limiting the transfer of smoke.~~

8.5.7.3

Smoke barriers that are also constructed as fire barriers shall be protected with a joint system that is designed and tested to resist the spread of fire for a time period equal to the required fire resistance rating of the assembly and restrict the transfer of smoke in accordance with [8.5.7.2](#) .

Submitter Information Verification

Submitter Full Name: Kristin Bigda

Organization: [Not Specified]

Street Address:

City:

State:

Zip:

Submittal Date: Thu Jul 30 16:06:29 EDT 2015

Committee Statement

Committee Statement: Joints in or between smoke barriers are to restrict the passage of smoke. In NFPA 101/5000, there is no performance test standard listed nor value provided for the designer to use for compliance.

A nationally recognized testing laboratory through performance testing proves that any product is smoke resistant after it is tested. Otherwise, smoke barriers receive whatever

material that the contractors think works for limiting smoke. The quantified air leakage rating ("L") based on UL 2079 testing provides designers a quantified value to communicate through construction documents to contractors for compliance.

Over 1/3 of the tested Firestop Systems have L Ratings. The labor and material to install an L rated firestop system is the same as non L Rated firestop assembly.

This would follow the same approach currently taken in NFPA 101 for other elements within smoke barriers and would be consistent with the current smoke barrier requirements in other model codes.

Using this performance requirement will provide a measure of consistency and predictability for the installed system.

Response

Message:

[Public Input No. 333-NFPA 101-2015 \[Sections 8.5.7.1, 8.5.7.2, 8.5.7.3, 8.5.7.4\]](#)



First Revision No. 2512-NFPA 101-2015 [Section No. 8.6.9.1]

8.6.9.1

Where permitted by Chapters 11 through 43, unenclosed vertical openings not concealed within the building construction shall be permitted as follows:

- (1) Such openings shall connect not more than two adjacent stories (one floor pierced only).
- (2) Such openings shall be separated from unprotected vertical openings serving other floors by a barrier complying with 8.6.5.
- (3)* Such openings shall be separated from corridors.
- (4)* In other than approved, existing convenience openings, such openings shall be separated from other fire or smoke compartments on the same floor.
- (5) In new construction, the convenience opening shall be separated from the corridor referenced in 8.6.9.1(3) by a smoke partition, unless Chapters 11 through 43 require the corridor to have a fire resistance rating.
- (6)* Such openings shall not serve as a required means of egress.

Supplemental Information

<u>File Name</u>	<u>Description</u>
101_A.8.6.9.1_3_.docx	

Submitter Information Verification

Submitter Full Name: Kristin Bigda
Organization: [Not Specified]
Street Address:
City:
State:
Zip:
Submittal Date: Wed Aug 05 13:58:02 EDT 2015

Committee Statement

Committee Statement: This annex note is intended to clarify the code requirement, not change it. It is not clear to all AHJ's and designers what type of separation from corridors is required, as this provision is allowed by 10 of the occupancy chapters for new construction, not all of which have the same requirements for construction of corridor walls.

Response Message:

[Public Input No. 451-NFPA 101-2015 \[New Section after A.8.6.7\(6\)\]](#)

A.8.6.9.1(3) The intent of this requirement is to provide the same separation as required for corridor walls of the applicable occupancy chapter. For example, a convenience opening on one floor in a health care occupancy would be required to be separated from the corridor and areas open to the corridor on the adjacent floor by a barrier that limits the transfer of smoke, in accordance with 18.3.6.2.3, not a one hour rated wall with opening protectives.



First Revision No. 2510-NFPA 101-2015 [Section No. 8.6.10.2.1]

8.6.10.2.1

The aggregate area of mezzanines located within a room, other than those located in special-purpose industrial occupancies normally unoccupied equipment platforms, shall not exceed one-third the open area of the room in which the mezzanines are located. Enclosed space shall not be included in a determination of the size of the room in which the mezzanine is located.

Submitter Information Verification

Submitter Full Name: Kristin Bigda

Organization: [Not Specified]

Street Address:

City:

State:

Zip:

Submittal Date: Thu Jul 30 17:13:53 EDT 2015

Committee Statement

Committee Statement: Current 8.6.10.2.1 does not mean to exempt partial levels serving as equipment platforms from the 1/3 aggregate area criterion where those platforms are there for the function/access/servicing of the large pieces of industrial equipment (think, for example, of a distillation tower). The exemption is meant to keep from penalizing the multiple industrial levels around a piece of equipment, regardless of occupancy, as would occur if the levels, in aggregate, failed the mezzanine maximum area test and had to be considered as floors or stories.

Response Message:



First Revision No. 4506-NFPA 101-2015 [Section No. 8.6.11.1]

8.6.11.1

Any concealed combustible space in which exposed building materials having a flame spread index greater than ~~Class A~~ are exposed 25, when tested in accordance with 10.2.3 , shall be draftstopped as follows:

- (1) Every exterior and interior wall and partition shall be firestopped at each floor level, at the top-story ceiling level, and at the level of support for roofs.
- (2) Every unoccupied attic space shall be subdivided by draftstops into areas not to exceed 3000 ft² (280 m²).
- (3) Any concealed space between the ceiling and the floor or roof above shall be draftstopped for the full depth of the space along the line of support for the floor or roof structural members and, if necessary, at other locations to form areas not to exceed 1000 ft² (93 m²) for any space between the ceiling and floor, and 3000 ft² (280 m²) for any space between the ceiling and roof.

Submitter Information Verification

Submitter Full Name: Kristin Bigda

Organization: [Not Specified]

Street Address:

City:

State:

Zip:

Submission Date: Thu Jul 30 10:14:16 EDT 2015

Committee Statement and Meeting Notes

Committee Statement: In reference to attic draftstops, both 101 and 5000 exempt attics with materials “having a flame spread index greater than Class A” There is no such thing as a flame spread index greater than Class A – flame spread index is a dimensionless, numerical value that comes from the tunnel test (ASTM E84); Class A refers to an interior finish classification defined by the code (FSI of 0-25 and SDI of 0-450).

Response Message:

Editorial Comment

[Click here](#)



First Revision No. 2511-NFPA 101-2015 [Section No. 8.6.11.3]

8.6.11.3*

Draftstopping materials shall be not less than ½ in. (13 mm) thick type X gypsum board, ⁴⁵/₃₂ in. (12 mm) thick wood structural panel, or other approved materials that are adequately supported.

Submitter Information Verification

Submitter Full Name: Kristin Bigda

Organization: [Not Specified]

Street Address:

City:

State:

Zip:

Submittal Date: Thu Jul 30 18:22:11 EDT 2015

Committee Statement

Committee Statement: Recent significant fires in buildings with unsprinklered concealed combustible attics demonstrate the need for additional performance from draftstopping materials in limiting fire spread in these spaces. This proposal changes the materials so a minimum 25 minute calculated fire resistive material is utilized in lieu of the current allowance for a 10 minute material. This will provide improvements to fire containment in non-fire sprinkler protected concealed combustible spaces, improved firefighter safety and allow firefighters much needed additional time during response and mobilization in dealing with fires that progress into these spaces.

Response Message:



First Revision No. 2507-NFPA 101-2015 [Section No. 8.7.3]

~~8.7.3 Flammable Liquids and Gases Hazardous Materials .~~

~~8.7.3.1~~

~~The storage and handling of flammable liquids or gases shall be in accordance with the following applicable standards:~~

~~NFPA 30 , *Flammable and Combustible Liquids Code*~~

~~NFPA 54 , *National Fuel Gas Code*~~

~~NFPA 58 , *Liquefied Petroleum Gas Code*~~

~~Where required by the provisions of Chapters [11](#) through [43](#) , occupancies with storage and handling of hazardous materials shall comply with the following codes unless otherwise modified by other provisions of this Code : [NFPA 30](#) , [NFPA 54](#) , [NFPA 55](#) , [NFPA 58](#) , [NFPA 400](#) , and [NFPA 495](#) .~~

~~8.7.3.2*~~

~~No storage, use, or handling of flammable liquids or gases hazardous materials shall be permitted in any location where such storage, use, or handling would jeopardize egress from the structure, unless otherwise permitted by a document listed in [8.7.3.1](#) .~~

8.7.3.3* Alcohol-Based Hand-Rub Dispensers.

Where permitted by Chapters 11 through 43, alcohol-based hand-rub dispensers shall be permitted provided they meet all of the following criteria:

- (1) The maximum individual dispenser fluid capacity shall be as follows:
 - (a) 0.32 gal (1.2 L) for dispensers in corridors and areas open to corridors
 - (b) 0.53 gal (2.0 L) for dispensers in rooms or suites of rooms separated from corridors
- (2) Where aerosol containers are used, the maximum capacity of the aerosol dispenser shall be 18 oz (0.51 kg) and shall be limited to Level 1 aerosols as defined in NFPA 30B, *Code for the Manufacture and Storage of Aerosol Products*.
- (3) Dispensers shall be separated from each other by horizontal spacing of not less than 48 in. (1220 mm).
- (4) Not more than an aggregate 10 gal (37.8 L) of alcohol-based hand-rub solution or 1135 oz (32.2 kg) of Level 1 aerosols, or a combination of liquids and Level 1 aerosols not to exceed, in total, the equivalent of 10 gal (37.8 L) or 1135 oz (32.2 kg,) shall be in use outside of a storage cabinet in a single smoke compartment or fire compartment or story, whichever is less in area. One dispenser complying with 8.7.3.3(1) per room and located in that room shall not be included in the aggregated quantity.
- (5) Storage of quantities greater than 5 gal (18.9 L) in a single smoke compartment or fire compartment or story, whichever is less in area, shall meet the requirements of NFPA 30, *Flammable and Combustible Liquids Code*.
- (6) Dispensers shall not be installed in the following locations:
 - (a) Above an ignition source for a horizontal distance of 1 in. (25 mm) to each side of the ignition source
 - (b) To the side of an ignition source within a 1 in. (25 mm) horizontal distance from the ignition source
 - (c) Beneath an ignition source within a 1 in. (25 mm) vertical distance from the ignition source
- (7) Dispensers installed directly over carpeted floors shall be permitted only in sprinklered areas of the building.
- (8) The alcohol-based hand-rub solution shall not exceed 95 percent alcohol content by volume.
- (9) Operation of the dispenser shall comply with the following criteria:
 - (a) The dispenser shall not release its contents except when the dispenser is activated, either manually or automatically by touch-free activation.
 - (b) Any activation of the dispenser shall only occur when an object is placed within 4 in. (100 mm) of the sensing device.
 - (c) An object placed within the activation zone and left in place shall not cause more than one activation.
 - (d) The dispenser shall not dispense more solution than the amount required for hand hygiene consistent with label instructions.
 - (e) The dispenser shall be designed, constructed, and operated in a manner that ensures accidental or malicious activation of the dispensing device is minimized.
 - (f) The dispenser shall be tested in accordance with the manufacturer's care and use instructions each time a new refill is installed.

Supplemental Information

<u>File Name</u>	<u>Description</u>
101_A.8.7.3.2.docx	

Submitter Information Verification

Submitter Full Name: Kristin Bigda

Organization: [Not Specified]

Street Address:

City:

State:

Zip:

Submittal Date: Thu Jul 30 16:51:11 EDT 2015

Committee Statement

Committee Statement: This Public Input is submitted on behalf of the Hazardous Materials Task Group. The Life Safety Code Correlating Committee appointed the Hazardous Materials Task Group to review hazardous materials provisions within the code and provide a recommendation. This Task Group included representative membership from the Life Safety Code core and occupancy chapters. The Task Group agreed that a gap existed and ultimately recommended additional provisions to more comprehensively address hazardous materials within the Life Safety Code. The majority of the revisions reference existing NFPA standards, rather than create new technical requirements within the code. Scoping sections for these standards are reproduced within a new Annex C to provide guidance. Proposed Annex Section A.8.7.3.2 is provided for clarity.

Response

Message:

[Public Input No. 99-NFPA 101-2015 \[Section No. 8.7.3\]](#)

A.8.7.3.2 NFPA 58 permits portable butane-fueled appliances in restaurants and in attended commercial food catering operations where fueled by not in excess of two 10 oz (0.28 kg) LP-Gas capacity, nonrefillable butane containers having a water capacity not in excess of 1.08 lb (0.4 kg) per container. Containers are required to be directly connected to the appliance, and manifolding of containers is not permitted. Storage of cylinders is also limited to 24 containers, with an additional 24 permitted where protected by a 2-hour fire resistance-rated barrier.

See 4.1.3 and Annex C for referenced documents on hazardous materials.



First Revision No. 2508-NFPA 101-2015 [Section No. 8.7.5]

8.7.5* Hyperbaric Facilities.

All occupancies containing hyperbaric facilities shall comply with [Chapter 14](#) of NFPA 99, ~~Health Care Facilities Code~~, ~~Chapter 20~~, unless otherwise modified by other provisions of this Code.

Submitter Information Verification

Submitter Full Name: Kristin Bigda

Organization: [Not Specified]

Street Address:

City:

State:

Zip:

Submittal Date: Thu Jul 30 16:56:30 EDT 2015

Committee Statement

Committee Statement: Hyperbaric facilities is now chapter 14 in NFPA 99. No updates were needed for A.8.7.5.

Response Message:

[Public Input No. 203-NFPA 101-2015 \[Section No. 8.7.5\]](#)