



Public Input No. 14-NFPA 221-2015 [Section No. 1.4.1]

1.4.1

The provisions of this standard reflect ~~a consensus of~~ what is necessary to provide an acceptable degree of protection from the hazards addressed in this standard at the time the standard was issued.

Statement of Problem and Substantiation for Public Input

The term is suggested for deletion because it is not necessary for code compliance. Not all NFPA documents use this same language in the administrative provisions. It is noted in all NFPA standards that NFPA uses a consensus process in the preamble.

Submitter Information Verification

Submitter Full Name: Jim Muir

Organization: Building Safety Division, Clark County, Washington

Affiliation: NFPA's Building Code Development Committee (BCDC)

Street Address:

City:

State:

Zip:

Submittal Date: Sat Jul 04 16:32:48 EDT 2015

Committee Statement

Resolution: This is boiler plate language used in many NFPA codes and standards as the provisions do represent a consensus. In addition, deleting the term would be inconsistent with the NFPA Manual of Style (MOS) example shown in A .1.6.1.4 of the MOS.



Public Input No. 9-NFPA 221-2015 [Section No. 2.3]

2.3 Other Publications. (Reserved)

2.3.1 ACI Publications.

American Concrete Institute, P.O. Box 9094, **38800 Country Club Dr.**, Farmington Hills, MI 48333 **48331-3439**.

ACI 216.1/TMS 0216.1, ~~Code Requirements for Determining Fire Resistance of Concrete and Masonry Construction Assemblies~~, 2008 **2014**.

2.3.2 ASCE Publications.

American Society of Civil Engineers, 1801 Alexander Bell Drive, Reston, VA 20191-4400.

ASCE/SEI 7, ~~Minimum Design Loads for Buildings and Other Structures~~, 2005 with Supplement 1 **2010**.

ASCE/SFPE 29, ~~Standard Calculation Methods for Structural Fire Protection~~, 2005.

2.3.3 ASTM Publications.

ASTM International, P.O. Box C700, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

ASTM E 119 ~~E119~~, ~~Standard Test Methods for Fire Tests of Building Construction and Materials~~, 2012a **2014**.

ASTM E 814 ~~E814~~, ~~Standard Test Method for Fire Tests of Through-Penetration Fire Stops~~, 2011a **2013a**.

ASTM E 1966 ~~E1966~~, ~~Standard Test Method for Fire-Resistive Joint Systems~~, 2007- (**reapproved 2011**) .

2.3.4 SPRI Publications.

Single Ply Roofing Industry (SPRI), ~~77 Rumford Avenue~~ **465 Waverley Oaks Road, Suite 3B 421, Waltham, MA 02453 02452**.

ANSI/SPRI RP-4, ~~Wind Design Standard for Ballasted Single-Ply Roofing Systems~~, 2002 **2013**.

2.3.5 UL Publications.

Underwriters Laboratories Inc., 333 Pfingsten Road, Northbrook, IL 60062-2096.

ANSI/UL 10C, ~~Standard for Positive Pressure Fire Tests of Door Assemblies~~, 2009, **Revised 2015**.

ANSI/UL 263, ~~Standard for Fire Tests of Building Construction and Materials~~, 2011, **Revised 2014**.

ANSI/UL 555, ~~Standard for Fire Dampers~~, 2006, Revised 2011 **2014**.

ANSI/UL 1479, ~~Standard for Fire Tests of Through-Penetration Firestops~~, 2003, Revised 2010 **2012**.

ANSI/UL 2079, ~~Standard for Tests for Fire Resistance of Building Joint Systems~~, 2004, Revised 2008 **2014**.

2.3.6 Other Publications.

Merriam-Webster's Collegiate Dictionary, 11th edition, Merriam-Webster, Inc., Springfield, MA, 2003.

Statement of Problem and Substantiation for Public Input

Referenced current SDO addresses, standard names, and editions.

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
<u>Public Input No. 11-NFPA 221-2015 [Chapter B]</u>	

Submitter Information Verification

Submitter Full Name: Aaron Adamczyk

Organization: [Not Specified]

Street Address:

City:

State:

Zip:

Submittal Date: Sat Mar 21 18:46:09 EDT 2015

Committee Statement

Resolution: FR-14-NFPA 221-2015

Statement: The committee updated the referenced documents and contact information including SDO addresses, standard names, and editions. The space between the ASTM document letter and number should be removed throughout the document.



Public Input No. 25-NFPA 221-2015 [Section No. 2.3.1]

2.3.1 ACI Publications.

American Concrete Institute, P.O. Box 9094, Farmington Hills, MI 48333.

ACI 216.1/TMS 0216.1, *Code Requirements for Determining Fire Resistance of Concrete and Masonry Construction Assemblies*, 2008 2014 .

Statement of Problem and Substantiation for Public Input

update reference.

Submitter Information Verification

Submitter Full Name: RICHARD DAVIS

Organization: FM GLOBAL

Street Address:

City:

State:

Zip:

Submittal Date: Mon Jul 06 15:44:42 EDT 2015

Committee Statement

Resolution: FR-14-NFPA 221-2015

Statement: The committee updated the referenced documents and contact information including SDO addresses, standard names, and editions. The space between the ASTM document letter and number should be removed throughout the document.



Public Input No. 26-NFPA 221-2015 [Section No. 2.3.4]

2.3.4 SPRI Publications.

Single Ply Roofing Industry (SPRI), 77 Rumford Avenue, Suite 3B, Waltham, MA 02453.

ANSI/SPRI RP-4, *Wind Design Standard for Ballasted Single-Ply Roofing Systems*, - 2002
2013.

Statement of Problem and Substantiation for Public Input

update reference.

Submitter Information Verification

Submitter Full Name: RICHARD DAVIS

Organization: FM GLOBAL

Street Address:

City:

State:

Zip:

Submittal Date: Mon Jul 06 15:45:33 EDT 2015

Committee Statement

Resolution: FR-14-NFPA 221-2015

Statement: The committee updated the referenced documents and contact information including SDO addresses, standard names, and editions. The space between the ASTM document letter and number should be removed throughout the document.



Public Input No. 13-NFPA 221-2015 [Section No. 2.3.5]

2.3.5 UL Publications.

Underwriters Laboratories Inc., 333 Pfingsten Road, Northbrook, IL 60062-2096.

ANSI/UL 10C, *Standard for Positive Pressure Fire Tests of Door Assemblies*, 2009 2015 .

ANSI/UL 263, *Standard for Fire Tests of Building Construction and Materials*, 2011 2014 .

ANSI/UL 555, *Standard for Fire Dampers*, 2006, Revised 2011 2014 .

ANSI/UL 1479, *Standard for Fire Tests of ~~Through-~~ Penetration Firestops*, 2003, Revised 2010 2012 .

ANSI/UL 2079, *Standard for Tests for Fire Resistance of Building Joint Systems*, 2004, Revised 2008 2014 .

Statement of Problem and Substantiation for Public Input

The proposed changes reflect updated editions of UL Standards as well as a name change to UL 1479.

Submitter Information Verification

Submitter Full Name: RONALD FARR

Organization: UL LLC

Street Address:

City:

State:

Zip:

Submittal Date: Wed Jul 01 09:56:55 EDT 2015

Committee Statement

Resolution: FR-14-NFPA 221-2015

Statement: The committee updated the referenced documents and contact information including SDO addresses, standard names, and editions. The space between the ASTM document letter and number should be removed throughout the document.



Public Input No. 17-NFPA 221-2015 [Sections 4.2, 4.3]

Sections 4.2, 4.3

4.2* Design Loads.

4.2.1 All walls and their supports shall be designed for loads in accordance with ASCE/SEI 7, *Minimum Design Loads for Buildings and Other Structures*, and to withstand a minimum uniform load of 5 lbf/ft² (0.24 kPa) ~~from either direction~~ for Allowable Stress Design or 8 lbf/ft² (0.38 kPa) for Strength Design. Lateral loads shall be applied perpendicular to the face of the wall ~~from either direction~~.

4.2.2 Loads used in design of walls during fire exposure shall be in accordance with the requirements of 4.3 Fire Resistance Ratings or 4.4 for Performance-Based Design.

4.3 Fire Resistance Ratings

4.3.1

The fire resistance rating of assemblies shall be determined in accordance, ASTM E 119, *Standard Test Methods for Fire Tests of Building Construction and Materials*, or ANSI/UL 263, *Standard for Fire Tests of Building Construction and Materials*, or other approved test methods or analytical methods in accordance with 4.3.2.

4.3.2 Analytical Methods.

4.3.2.1 General.

Analytical methods utilized to determine the fire resistance rating of building assemblies shall comply with 4.3.2.2 or 4.3.2.3. Design Loads shall be determined and reported in accordance with requirements of ASTM E 119, *Standard Test Methods for Fire Tests of Building Construction and Materials*, or UL 263, *Standard for Fire Tests of Building Construction and Materials*.

4.3.2.2* Calculations.

4.3.2.2.1

Where calculations are used to establish the fire resistance rating of structural elements or assemblies, they shall be permitted to be performed in accordance with ASCE/SFPE 29.

4.3.2.2.2

Where calculations are used to establish the fire resistance rating of concrete or masonry elements or assemblies, the provisions of ACI 216.1/TMS 0216.1, *Code Requirements for Determining Fire Resistance of Concrete and Masonry Construction Assemblies*, shall be permitted to be used.

4.3.2.3 Methods.

4.3.2.3.1

Except for the method specified in 4.3.2.2, analytical methods used to calculate the fire resistance rating of building assemblies or structural elements shall be approved.

4.3.2.3.2

Where an approved analytical method is utilized to establish the fire resistance rating of a structural element or building assembly, the calculations shall be based on the fire exposure and acceptance criteria specified in ASTM E 119, *Standard Test Methods for Fire Tests of Building Construction and Materials*, or UL 263, *Standard for Fire Tests of Building Construction and Materials*.

4.4 Performance-Based Design [new section]

Analytical methods used to calculate the fire performance of building assemblies or structural elements shall be approved. All walls and their supports shall be designed for loads in accordance with Section 2.5 Load Combinations for Extraordinary Events of ASCE/SEI 7, *Minimum Design Loads for Buildings and Other Structures*, where A_k is taken as a uniform lateral load of $8 \text{ lb}_f/\text{ft}^2$ (0.24 kPa) applied perpendicular to the face of the wall from either direction.

Additional Proposed Changes

<u>File Name</u>	<u>Description</u>	<u>Approved</u>
Douglas.NFPA_221.Section_4.2_4.3_new_4.4.docx	Douglas change to 4.2, 4.3, and addition of new section 4.4.	

Statement of Problem and Substantiation for Public Input

There is significant confusion as to the design loads intended by NFPA 221. As a result, several attempts have been made to clarify the intent in the building codes, including a recent ICC code change proposal to bring forward provisions from ASCE 7 that are intended for performance-based design. If this latest code change proposal had been successful, fire resistance-ratings of fire walls per existing NFPA 221 would not be compliant with the code.

The change to 4.2 clarifies that the gravity loads and lateral loads are intended for structural design, not intended for fire testing or analytical methods of determining fire resistance ratings. A new subsection 4.2.2 sends the user to 4.3 for determining loads for fire testing or analytical methods of determining fire resistance ratings, and a new section 4.4 for Performance-Based Design.

The change to 4.3.2.1 clarifies that the design loads for fire testing or analytical methods of determining fire resistance ratings shall be in accordance with the requirements of ASTM E 119 or UL 263.

The new section 4.4 provides for Performance-Based Design of walls per ASCE 7 under the provisions of Section 2.5 Load Combinations for Extraordinary Events when approved by the authority having jurisdiction. These provisions provide for reduced live loads during a fire event, but also add provisions to add fire-related actions from design fires to the loading provisions, such as the addition of lateral loads, which can't be tested in a standard E 119 or UL 263 test.

It is hoped that these changes will provide the needed guidance to differentiate between a code-required Fire Resistance Rating using standard fire exposures such as ASTM E 119 or UL 263 versus a Performance-Based Design using design fire exposures and special load combinations.

Submitter Information Verification

Submitter Full Name: Bradford Douglas

Organization: American Wood Council

Street Address:

City:

State:

Zip:

Submittal Date: Mon Jul 06 11:26:44 EDT 2015

Committee Statement

Resolution: [FR-15-NFPA 221-2015](#)

Statement: Revisions to 4.2 and 4.3 clarify that gravity loads and lateral loads are intended for structural design, not determining fire resistance ratings. A new section (4.4) was added to provide an option for performance-based design of walls using ASCE 7. In addition to the changes recommended, the committee further revised the change to clarify that gravity loads are considered (Section 4.3.2.1) and that the Ak factor relates to the lateral load (Section 4.4).

NFPA 221

4.1 Scope. The provisions of this chapter apply to high challenge (HC) fire walls, fire walls, and fire barrier walls unless modified by provisions of Chapter 5, 6, or 7, respectively, and shall hereafter in this chapter be referred to as walls.

4.2 Design Loads.

4.2.1 All walls and their supports shall be designed for gravity loads in accordance with ASCE/SEI 7, *Minimum Design Loads for Buildings and Other Structures*, and to withstand a minimum uniform lateral load of 5 lbf/ft² (0.24 kPa) for Allowable Stress Design or 8 lbf/ft² (0.24 kPa) for Strength Design from either direction applied perpendicular to the face of the wall from either direction.

4.2.2 Loads used in design of walls during fire exposure shall be in accordance with the requirements of 4.3 for Fire Resistance Ratings or 4.4 for Performance-Based Design.

4.3 Fire Resistance Ratings

4.3.1. The fire resistance rating of assemblies shall be determined in accordance with ASTM E 119, *Standard Test Methods for Fire Tests of Building Construction and Materials*, or ANSI/UL 263, *Standard for fire Tests of Building Construction and Materials*, or other approved test methods or analytical methods in accordance with 4.3.2.

4.3.2 Analytical Methods.

4.3.2.1 General. Analytical methods utilized to determine the fire resistance rating of building assemblies shall comply with 4.3.2.2 or 4.3.2.3. Design loads shall be determined and reported in accordance with requirements of ASTM E 119, Standard Test Methods for Fire Tests of Building Construction and Materials, or UL 263, Standard for Fire Tests of Building Construction and Materials.

4.3.2.2 Calculations.

4.3.2.2.1 Where calculations are used to establish the fire resistance rating of structural elements or assemblies, they shall be permitted to be performed in accordance with ASCE/SFPE 29.

4.3.2.2.2 Where calculations are used to establish the fire resistance rating of concrete or masonry elements or assemblies the provision of ACI 216.1/TMS 0216.1, *Code Requirements for Determining Fire Resistance of Concrete and Masonry Construction Assemblies*, shall be permitted to be used.

4.3.2.3 Methods.

4.3.2.3.1 Except for the method specified in 4.3.2.2, analytical methods used to calculate the fire resistance rating of building assemblies or structural elements shall be approved.

4.3.2.3.2 Where an approved analytical method is utilized to establish the fire resistance rating of a structural element or building assembly, the calculations shall be based on the fire exposure and

acceptance criteria specified in ASTM E 119, *Standard Test Methods for Fire Tests of Building Construction and Materials*, or UL 263, *Standard for Fire Tests of Building Construction and Materials*.

[new section] 4.4 Performance-Based Design

Analytical methods used to calculate the fire performance of building assemblies or structural elements shall be approved. All walls and their supports shall be designed for loads in accordance with Section 2.5 Load Combinations for Extraordinary Events of ASCE/SEI 7, *Minimum Design Loads for Buildings and Other Structures*, where A_k is taken as a uniform lateral load of 8 lb/ft² (0.24 kPa) applied perpendicular to the face of the wall from either direction.



Public Input No. 27-NFPA 221-2015 [New Section after 4.3.1]

TITLE OF NEW CONTENT

Type your content here ...

A4.3.1 Where the potential fire exposure is from a large hydrocarbon fuel fire, the fire resistance rating should be determined in accordance with ASTM E 1529 (2014a), Standard Test Methods for Determining Effects of Large Hydrocarbon Pool Fires on Structural Members and Assemblies; or UL 1709, Rapid Rise Fire Test for Protection Materials for Structural Steel (2011).

Statement of Problem and Substantiation for Public Input

Neither ASTM E119 or ANSI/UL 263 represent a hydrocarbon spill fire exposure. Appropriate tests are included in this proposal.

Submitter Information Verification

Submitter Full Name: RICHARD DAVIS

Organization: FM GLOBAL

Street Address:

City:

State:

Zip:

Submittal Date: Mon Jul 06 16:14:18 EDT 2015

Committee Statement

Resolution: [FR-16-NFPA 221-2015](#)

Statement: Neither ASTM E119 or ANSI/UL 263 represent a hydrocarbon spill fire exposure. Appropriate tests are included in this FR. The committee added clarification relating to applicability of ASTM E119 and UL 263 to the test protocol as elements of those standards still apply.



Public Input No. 15-NFPA 221-2015 [Section No. 4.8.4.2.1]

4.8.4.2.1

In any building of low or ordinary hazard contents, as defined in 3.3.1, or where approved by the authority having jurisdiction, door leaves shall be permitted to be automatic-closing, provided that the following criteria are met:

- (1) Upon release of the hold-open mechanism, the door leaf becomes self-closing.
- (2) The release device is designed so that the door leaf instantly releases manually and, upon release, becomes self-closing, ~~or the leaf can be readily closed~~.
- (3) The automatic releasing mechanism or medium is activated by the operation of approved smoke detectors installed in accordance with the requirements for smoke detectors for door leaf release service in *NFPA 72*.
- (4) Upon loss of power to the hold-open device, the hold-open mechanism is released, and the door leaf becomes self-closing.
- (5) The release by means of smoke detection of one door leaf in a stair enclosure results in closing all door leaves serving that stair.

Statement of Problem and Substantiation for Public Input

To be effective the doors must be self-closing. The deleted text implies that the door does not need to be self-closing. How would any labeled rating be retained for a door that may or may not be closed because of the manual intervention to secure it closed?

Submitter Information Verification

Submitter Full Name: Jim Muir

Organization: Building Safety Division, Clark County, Washington

Affiliation: NFPA's Building Code Development Committee (BCDC)

Street Address:

City:

State:

Zip:

Submittal Date: Sat Jul 04 16:35:11 EDT 2015

Committee Statement

Resolution: The doors governed by this section must as a minimum be self closing or automatic closing. See Section 4.8.4.1. Manually closing the door is always an option but that is in addition to the self closing/automatic closing requirement.



Public Input No. 16-NFPA 221-2015 [Section No. 5.2.4]

5.2.4

Structural framing within the plane of the wall shall be permitted to be load-bearing only to the extent of carrying the load imposed by that wall .

Statement of Problem and Substantiation for Public Input

For clarification.

Submitter Information Verification

Submitter Full Name: Jim Muir

Organization: Building Safety Division, Clark County, Washington

Affiliation: NFPA's Building Code Development Committee (BCDC)

Street Address:

City:

State:

Zip:

Submittal Date: Sat Jul 04 16:37:04 EDT 2015

Committee Statement

Resolution: You can have tied fire walls or double fire walls that can be carrying other types of loads in addition to the load applied by the fire wall. The language that was proposed would allow such conditions to be ignored.



Public Input No. 18-NFPA 221-2015 [Section No. A.5.8.5]

A.5.8.5

Limited guidance on protection used where material handling systems penetrate HC fire walls or fire walls can be found in NFPA 80, *Standard for Fire Doors and Other Opening Protectives*. Additional guidance can be found in FM Global Loss Prevention Data Sheet 1-23, Fire Barriers and Protection of Openings, 1998 2012 .

Statement of Problem and Substantiation for Public Input

Updating title and date of reference document.

Submitter Information Verification

Submitter Full Name: RICHARD DAVIS

Organization: FM GLOBAL

Street Address:

City:

State:

Zip:

Submittal Date: Mon Jul 06 15:01:50 EDT 2015

Committee Statement

Resolution: FR-2-NFPA 221-2015

Statement: Updating title and date of reference document.



Public Input No. 11-NFPA 221-2015 [Chapter B]

Annex B Informational References

B.1 Referenced Publications.

The documents or portions thereof listed in this annex are referenced within the informational sections of this standard and are not part of the requirements of this document unless also listed in Chapter 2 for other reasons.

B.1.1 NFPA Publications.

National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.

NFPA 70[®], *National Electrical Code*[®], 2014 edition.

NFPA 80, *Standard for Fire Doors and Other Opening Protectives*, 2013 edition.

NFPA 80A, *Recommended Practice for Protection of Buildings from Exterior Fire Exposures*, 2012 edition.

NFPA 92, *Standard for Smoke Control Systems*, 2012 edition.

NFPA 101[®], *Life Safety Code*[®], 2015 edition.

B.1.2 Other Publications.

B.1.2.1 ACI Publications.

American Concrete Institute, P.O. Box 9094, **38800 Country Club Drive**, Farmington Hills, MI 48333 **48331-3434**.

ACI 216.1/TMS-0246.1, *Standard Method for Determining Fire Resistance of Concrete and Masonry Assemblies*, 2007 **2014**.

B.1.2.2 ASCE/SEI Publications.

American Society of Civil Engineers, 1801 Alexander Bell Drive, Reston, VA 20191-4400.

ASCE/SEI 7, *Minimum Design Loads for Buildings and Other Structures*, 2010.

ASCE/SFPE 29, *Standard Calculation Methods for Structural Fire Protection*, 2005.

B.1.2.3 ASTM Publications.

ASTM International, P.O. Box C700, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

ASTM E 419 **E119**, *Standard Test Methods for Fire Tests of Building Construction and Materials*, 2012 **2014**.

ASTM E 844 **E814**, *Standard Test Method for Fire Tests of Through-Penetration Fire Stops*, 2011a **2013a**.

ASTM E 4966 **E1966**, *Standard Test Method for Fire Resistive Joint Systems*, 2007- (**reapproved 2011**) .

B.1.2.4 FM Global Publications.

FM Global, 4301 Atwood **270 Central Avenue**, P.O. Box 7500, Johnston, RI 02919.

Data Sheet 1-22, *Criteria for Maximum Foreseeable Loss Fire Walls and Space Separations*, 1998.

Data Sheet 1-23, *Protection of Openings*, 1998.

B.1.2.5 UL Publications.

Underwriters Laboratories Inc., 333 Pfingsten Road, Northbrook, IL 60062-2096.

ANSI/ UL 263, *Standard for Fire Tests of Building Construction and Materials*, 2011, **revised 2014** .

ANSI/ UL 1479, *Standard for Fire Tests of Through-Penetration Firestops*, 2003, Revised 2010 **2012** .

ANSI/ UL 2079, *Standard for Tests for Fire Resistance of Building Joint Systems*, 2004, Revised 2008 **2014** .

B.2 Informational References.

The following documents or portions thereof are listed here as informational resources only. They are not a part of the requirements of this document.

B.2.1 FM Global Publications.

FM Global, ~~4301 Atwood~~ **270 Central Avenue** , P.O. Box 7500, Johnston, RI 02919.

Data Sheet 1-21, *Fire Resistance of Building Assemblies*, 2006.

Specification Tested Products Guide, 2004.

B.2.2 GA Publications.

Gypsum Association, ~~810 First Street, NE, #510, Washington, DC 20002.~~ **6525 Belcrest Road, Suite 480, Hyattsville, MD 20782.** .

GA 600, *Fire Resistance Design Manual* **Sound Control** , -2003 **2012** .

B.2.3 GE GAP Publications.

GE GAP Services, 20 Security Drive, Avon, CT 06001.

GAP.2.2.1, *Fire Walls, Fire Barriers and Fire Partitions*, 2002.

GAP.2.2.2, *Fire Doors and Through-Penetration Protection*, 2002.

B.2.4 ITS Warnock Hersey Publications.

ITS Warnock Hersey, 8431 Murphy Drive, Middleton, WI 53562.

ITS Warnock Hersey Certification Listings, 2004.

B.2.5 UL Publications.

Underwriters Laboratories Inc., 333 Pfingsten Road, Northbrook, IL 60062-2096.

Fire Resistance Directory, 2012.

B.3 References for Extracts in Informational Sections. (Reserved)**Statement of Problem and Substantiation for Public Input**

Updated edition years.

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
<u>Public Input No. 9-NFPA 221-2015 [Section No. 2.3]</u>	Updated edition years.

Submitter Information Verification

Submitter Full Name: Aaron Adamczyk

Organization: [Not Specified]

Street Address:

City:

State:

Zip:

Submittal Date: Sun Apr 26 00:38:44 EDT 2015

Committee Statement

Resolution: Titles, year/edition and contact information was updated as appropriate by other First Revisions. See FR 3, FR 4 and FR 5.



Public Input No. 23-NFPA 221-2015 [Section No. B.1.2.1]

B.1.2.1 ACI Publications.

American Concrete Institute, P.O. Box 9094, Farmington Hills, MI 48333.

ACI 216.1/TMS 0216.1, ~~Standard Method~~ Code Requirements for Determining Fire Resistance of Concrete and Masonry Construction Assemblies, 2007 2014 .

Statement of Problem and Substantiation for Public Input

Updated title and date for existing reference.

Submitter Information Verification

Submitter Full Name: RICHARD DAVIS

Organization: FM GLOBAL

Street Address:

City:

State:

Zip:

Submittal Date: Mon Jul 06 15:35:22 EDT 2015

Committee Statement

Resolution: FR-3-NFPA 221-2015

Statement: Updated title and date for existing reference.



Public Input No. 22-NFPA 221-2015 [Section No. B.1.2.2]

B.1.2.2 ASCE/SEI Publications.

American Society of Civil Engineers, 1801 Alexander Bell Drive, Reston, VA 20191-4400.

ASCE/SEI 7, *Minimum Design Loads for Buildings and Other Structures*, 2010.

ASCE/SEI/ SFPE 29, *Standard Calculation Methods for Structural Fire Protection*, 2005.

Statement of Problem and Substantiation for Public Input

updating existing reference.

Submitter Information Verification

Submitter Full Name: RICHARD DAVIS

Organization: FM GLOBAL

Street Address:

City:

State:

Zip:

Submittal Date: Mon Jul 06 15:33:04 EDT 2015

Committee Statement

Resolution: FR-4-NFPA 221-2015

Statement: Updating existing reference.



Public Input No. 24-NFPA 221-2015 [Section No. B.1.2.3]

B.1.2.3 ASTM Publications.

ASTM International, P.O. Box C700, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

ASTM E 119, *Standard Test Methods for Fire Tests of Building Construction and Materials*, 2012 2014 .

ASTM E 814, *Standard Test Method for Fire Tests of Through-Penetration Fire Stops*, 2011a 2013a .

ASTM E 1966, *Standard Test Method for Fire Resistive Joint Systems*, 2007 (2011).

Statement of Problem and Substantiation for Public Input

updating existing references.

Submitter Information Verification

Submitter Full Name: RICHARD DAVIS

Organization: FM GLOBAL

Street Address:

City:

State:

Zip:

Submittal Date: Mon Jul 06 15:39:27 EDT 2015

Committee Statement

Resolution: FR-5-NFPA 221-2015

Statement: updating existing references.



Public Input No. 19-NFPA 221-2015 [Section No. B.1.2.4]

B.1.2.4 FM Global Publications.

FM Global, 1301 Atwood Avenue, P.O. Box 7500, Johnston, RI 02919.

Data Sheet 1-22, Criteria for ~~Maximum Foreseeable Loss- Fire Walls and Space Separations~~ ,
1998 2014 .

Data Sheet 1-23, Fire Barriers and ~~Protection of Openings~~ , 1998 2012 .

Statement of Problem and Substantiation for Public Input

Updating existing reference titles and dates. Documents are available for free at FMGlobal.com.

Submitter Information Verification

Submitter Full Name: RICHARD DAVIS

Organization: FM GLOBAL

Street Address:

City:

State:

Zip:

Submittal Date: Mon Jul 06 15:06:20 EDT 2015

Committee Statement

Resolution: FR-6-NFPA 221-2015

Statement: Updating existing reference titles and dates.



Public Input No. 12-NFPA 221-2015 [Section No. B.1.2.5]

B.1.2.5 UL Publications.

Underwriters Laboratories Inc., 333 Pfingsten Road, Northbrook, IL 60062-2096.

ANSI/UL 263, *Standard for Fire Tests of Building Construction and Materials*, - ~~2011~~ 2014 .

ANSI/UL 1479, *Standard for Fire Tests of Through-Penetration Firestops*, 2003, Revised ~~2010~~ 2012 .

ANSI/UL 2079, *Standard for Tests for Fire Resistance of Building Joint Systems*, 2004, Revised ~~2008~~ 2014 .

Statement of Problem and Substantiation for Public Input

The proposed changes reflect updated editions of UL Standards

Submitter Information Verification

Submitter Full Name: RONALD FARR

Organization: UL LLC

Street Address:

City:

State:

Zip:

Submittal Date: Wed Jul 01 09:55:22 EDT 2015

Committee Statement

Resolution: FR-7-NFPA 221-2015

Statement: The proposed changes reflect updated editions of UL Standards and adds "Standard for Safety for..." to the titles.



Public Input No. 20-NFPA 221-2015 [Section No. B.2.1]

B.2.1 FM Global Publications.

FM Global, 1301 Atwood Avenue, P.O. Box 7500, Johnston, RI 02919.

Data Sheet 1-21, *Fire Resistance of Building Assemblies*, -2006_2012.

Building Materials - Specification Tested Products Guide, , an on-line resource of FM Approvals, _2004.

Statement of Problem and Substantiation for Public Input

Updating existing reference titles and dates. Both are available for free at FMGlobal.com or FMAApprovals.com.

Submitter Information Verification

Submitter Full Name: RICHARD DAVIS

Organization: FM GLOBAL

Street Address:

City:

State:

Zip:

Submittal Date: Mon Jul 06 15:10:31 EDT 2015

Committee Statement

Resolution: FR-8-NFPA 221-2015

Statement: Updating existing reference titles and dates.



Public Input No. 21-NFPA 221-2015 [Section No. B.2.2]

B.2.2 GA Publications.

~~Gypsum Association, 810 First Street, NE, #510, Washington, DC 20002. 6525 Belcrest Rd., Suite 489, Hyattsville, MD. 20782.~~

GA 600, *Fire Resistance Design Manual*, - 2003 _ 20th edition, 2012 .

Statement of Problem and Substantiation for Public Input

Updating existing reference.

Submitter Information Verification

Submitter Full Name: RICHARD DAVIS

Organization: FM GLOBAL

Street Address:

City:

State:

Zip:

Submittal Date: Mon Jul 06 15:25:27 EDT 2015

Committee Statement

Resolution: FR-9-NFPA 221-2015

Statement: Updating existing reference.