



NFPA Technical Committee on Merchant Vessels (MER-AAA)

NFPA 301 Second Draft Meeting Agenda A2017 Web/Teleconference Only

Thursday, August 18, 2016 – 2:00 PM (EDT) to 4:00 PM (EDT)

To Join the Meeting: <http://nfpa.adobeconnect.com/nfpa301sdtelecon/>

Call In: 1-855-747-8824

Participant Pin Number: 377593#

1. Call to order by Chair William Cummings at 2:00 PM (EDT).
2. Self-introduction of Members and Guests. For a current committee roster, **see page 2.**
Attachment:

- Committee Roster – Technical Committee on Merchant Vessels

3. NFPA 301 Public Comments (5 Items), **see page 4.**

Attachments:

- Public Comment Report
- Second Draft Action on Comments
- Notes for 301 Chair and TC on Comments
- NFPA Glossary of Terms (2016 Noncombustible Material)

4. Second Draft Balloting Information – Posting of Second Draft and TC Ballot deadline is December 12, 2016 (Technical Committees without a Correlating Committee)

5. Other Business.

6. Adjournment.

Address List No Phone

08/15/2016
Lawrence Russell
MER-AAA

Merchant Vessels

William D. Cummings Chair Fire Risk Management, Inc. Customs House, 2nd Floor 1 Front Street Bath, ME 04530-2562	SE 7/1/1994 MER-AAA	Gerard G. Back Principal JENSEN HUGHES 3610 Commerce Drive, Suite 817 Baltimore, MD 21227-1652 JENSEN HUGHES Alternate: David B. Satterfield	SE 11/14/1997 MER-AAA
Kerry M. Bell Principal UL LLC 333 Pfingsten Road Northbrook, IL 60062-2096 Alternate: Rossen E. Marinov	RT 7/1/1994 MER-AAA	Rupert P. Chandler Principal US Joiner LLC 5690 Three Notched Road Crozet, VA 22932	M 7/1/1994 MER-AAA
Warren A. Chigoy, Jr. Principal SOTEC 5800 Jefferson Highway, Suite E New Orleans, LA 70123 Fire Suppression Systems Association Alternate: Michael C. Donovan	M 1/1/1995 MER-AAA	Joseph A. Derie Principal SW Passage Marine Surveys 1205 SE 57th Avenue Portland, OR 97215 National Association of Marine Surveyors, Inc.	I 07/29/2013 MER-AAA
Charles J. Dorchak Principal ABS Americas ABS Plaza 16855 Northchase Drive Houston, TX 77060	E 7/1/1994 MER-AAA	Russell P. Fleming Principal National Fire Sprinkler Association, Inc. 40 Jon Barrett Road Patterson, NY 12563-2164 National Fire Sprinkler Association Alternate: Timothy W. Bowe	M 7/1/1994 MER-AAA
Kelly Lee Glanding Principal AMG Engineering, Inc. 1400 Broadfield, Suite 200 Houston, TX 77084	SE 8/5/2009 MER-AAA	Thomas Guldner Principal Marine Firefighting Inc. 850 Horizons East, #312 Boynton Beach, FL 33435	SE 7/28/2006 MER-AAA
Marcelo M. Hirschler Principal GBH International 2 Friar's Lane Mill Valley, CA 94941 Alternate: Timothy Earl	SE 4/17/1998 MER-AAA	Craig E. Hofmeister Principal The Fire Consultants, Inc. 182 Briarfield Drive Apex, NC 27502-7007	SE 11/2/2006 MER-AAA
Clay Kesinger Principal Seadrill Americas 1465 FM 328 Huntington, TX 75949-3055	U 08/17/2015 MER-AAA	Peter C. Lauridsen Principal Passenger Vessel Association 1424 Ludlow Drive Virginia Beach, VA 23456	U 10/1/1994 MER-AAA

Address List No Phone

08/15/2016
Lawrence Russell
MER-AAA

Merchant Vessels

Patrick J. Maguire Principal Marsh Risk Consulting 8 Keith Drive Orinda, CA 94563-3667	I 08/11/2014 MER-AAA	Joseph P. McElhinney, Jr. Principal US Department of Transportation US Maritime Administration 1200 New Jersey Avenue SE Washington, DC 20590	U 12/08/2015 MER-AAA
James A. Neville Principal AIG Specialty/Global Marine 5114 West Anthony Road Ocala, FL 34475-1510	I 08/11/2014 MER-AAA	Daniel B. Sullivan Principal Kidde Fire Systems 19 Standish Avenue Scituate, MA 01721 Alternate: Lance D. Harry	M 8/2/2010 MER-AAA
Charles Taylor Principal US Coast Guard 2703 Martin Luther King Jr. Avenue Stop 7509 Washington, DC 20593	E 08/03/2016 MER-AAA	Timothy W. Bowe Alternate ABCO Peerless Sprinkler Company 50 Midland Avenue Hicksville, NY 11801-1510 National Fire Sprinkler Association Principal: Russell P. Fleming	M 04/08/2015 MER-AAA
Michael C. Donovan Alternate The Hiller Companies 3751 Joy Springs Drive Mobile, AL 36693-5134 Fire Suppression Systems Association Principal: Warren A. Chigoy, Jr.	M 03/03/2014 MER-AAA	Timothy Earl Alternate GBH International 6862 Shallowford Way Portage, MI 49024 Principal: Marcelo M. Hirschler	SE 8/9/2011 MER-AAA
Lance D. Harry Alternate Kidde Fire Systems 400 Main Street Ashland, MA 01721 Principal: Daniel B. Sullivan	M 08/09/2012 MER-AAA	Rossen E. Marinov Alternate UL LLC 333 Pfingsten Road Northbrook, IL 60062-2096 Principal: Kerry M. Bell	RT 3/2/2010 MER-AAA
David B. Satterfield Alternate JENSEN HUGHES 1444 Hunting Horn Lane Frederick, MD 21703-1383 Principal: Gerard G. Back	SE 03/07/2013 MER-AAA	Lawrence Russell Staff Liaison National Fire Protection Association 1 Batterymarch Park Quincy, MA 02169-7471	12/12/2003 MER-AAA

**Public Comment No. 1-NFPA 301-2016 [Section No. 2.3.4]****2.3.4 ASTM Publications.**

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

ASTM C411, *Standard Test Method for Hot-Surface Performance of High-Temperature Thermal Insulation*, 2011.

ASTM D2859, *Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials*, - 2006, (2011) 2016 .

ASTM E84, *Standard Test Method for Surface Burning Characteristics of Building Materials*, 2015a 2015b .

ASTM E119, *Standard Test Methods for Fire Tests of Building Construction and Materials*, 2014 2016 .

ASTM E136, *Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C*, 2012 2016 .

ASTM E648, *Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source*, 2014e 2015 e1 .

ASTM E814, *Standard Test Method for Fire Tests of Through-Penetration Firestops*, 2013a.

ASTM E1317, *Standard Test Method for Flammability of Marine Surface Finishes*, 2012.

ASTM E1354, *Standard Test Method for Heat and Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter*, 2015a 2016 .

ASTM E1537, *Standard Test Method for Fire Testing of Upholstered Furniture Items*, 2013 2015 .

ASTM E1590, *Standard Test Method for Fire Testing of Mattresses*, 2013.

ASTM E1591, *Standard Guide for Obtaining Data for Deterministic Fire Models*, 2013.

ASTM E1995, *Standard Test Method for Measurement of Smoke Obscuration Using a Conical Radiant Source in a Single-Closed Chamber, with the Specimen Oriented Horizontally*, 2012.

ASTM E2231, *Standard Practice for Specimen Preparation and Mounting of Pipe and Duct Insulation Materials to Assess Surface Burning Characteristics*, 2015.

ASTM E2257, *Standard Test Method Room Fire Test of Wall and Ceiling Materials and Assemblies*, 2013a 2016 .

ASTM E2652, *Standard Test Method for Behavior of Materials in a Tube Furnace with a Cone-shaped Airflow Stabilizer, at 750 Degrees C*, 2012 2016 .

ASTM F840, *Standard Specification for Ladders, Fixed, Vertical, Steel, Ship's*, 1983 (2003) (withdrawn).

ASTM F1384, *Standard Test Method for Fire Tests of Marine Joiner Doors*, 1993 (withdrawn).

ASTM F1626, *Standard Practice for Preparing Shipboard Fire Control Plans*, 1995 (2006) (withdrawn).

Statement of Problem and Substantiation for Public Comment

date updates

Related Item

First Revision No. 1-NFPA 301-2015 [Chapter 2]

Submitter Information Verification

Submitter Full Name: Marcelo Hirschler

Organization: GBH International

Street Address:

City:

State:

Zip:

Submittal Date: Tue May 03 18:23:21 EDT 2016



Public Comment No. 3-NFPA 301-2016 [Section No. 3.3.46.2]

3.3.46.2 * -- Noncombustible Material.

A material that satisfies any of the following: (1) the material meets the criteria of Part 12 of the IMO *Fire Test Procedures Code*; (2) the material meets the criteria of 46 CFR 164.009, "Noncombustible Materials for Merchant Vessels"; or (3) the material complies with any of the following criteria from NFPA 101: (a) a material that, in the form in which it is used and under conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors when subjected to fire or heat [- 101 : 4.6.13.1(1)]; (b) a material that is reported as passing ASTM E136, *Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C* [- 101: - 4.6.13.1(2)]; or (c) a material that is reported as complying with the pass/fail criteria of ASTM E136 when tested in accordance with the test method and procedure in ASTM E2652, *Standard Test Method for Behavior of Materials in a Tube Furnace with a Cone-shaped Airflow Stabilizer, at 750 Degrees C* [- 101 : 4.6.13.1(3)].

Statement of Problem and Substantiation for Public Comment

The committee stated on its action on PI 25 that this section was being deleted. Apparently the deletion did not occur.

Related Item

[Public Input No. 25-NFPA 301-2015 \[Section No. 3.3.42.2\]](#)

Submitter Information Verification

Submitter Full Name: Marcelo Hirschler
Organization: GBH International
Street Address:
City:
State:
Zip:
Submittal Date: Tue May 03 18:35:13 EDT 2016



Public Comment No. 5-NFPA 301-2016 [Section No. 3.3.46.2]

3.3.46.2* -- Noncombustible Material.

A material that satisfies any of the following: (1) the material meets the criteria of Part 12 of the IMO *Fire Test Procedures Code*; (2) the material meets the criteria of 46 CFR 164.009, "Noncombustible Materials for Merchant Vessels"; or (3) the material complies with any of the following criteria from NFPA 101: (a) a material that, in the form in which it is used and under conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors when subjected to fire or heat [- 101 : 4.6.13.1(1)]; (b) a material that is reported as passing ASTM E136, *Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C* [- 101: - 4.6.13.1(2)]; or (c) a material that is reported as complying with the pass/fail criteria of ASTM E136 when tested in accordance with the test method and procedure in ASTM E2652, *Standard Test Method for Behavior of Materials in a Tube Furnace with a Cone-shaped Airflow Stabilizer, at 750 Degrees C* [- 101 : 4.6.13.1(3)]. (see 8.2.2)

Statement of Problem and Substantiation for Public Comment

If the committee wishes to retain a reference to non combustible material in section 3, this action will be consistent with the statement on the action on PI 25.

Related Item

Public Input No. 25-NFPA 301-2015 [Section No. 3.3.42.2]

Submitter Information Verification

Submitter Full Name: Marcelo Hirschler
Organization: GBH International
Street Address:
City:
State:
Zip:
Submittal Date: Tue May 03 18:39:47 EDT 2016



Public Comment No. 4-NFPA 301-2016 [Section No. A.3.3.46.2]

A.3.3.46.2 – Noncombustible Material. –

For 3.3.42.2(3): The provisions of [3.3.46.2](#) do not require inherently noncombustible materials to be tested in order to be classified as noncombustible materials. [- ~~101~~, - 2015]

For 3.3.42.2(3)(a): Examples of such materials include steel, concrete, masonry, and glass. [- ~~101~~ - 2015]

Statement of Problem and Substantiation for Public Comment

The committee stated on its action on PI 25 that this section (and the annex note) were being deleted. Apparently the deletion did not occur.

Related Item

[Public Input No. 25-NFPA 301-2015 \[Section No. 3.3.42.2\]](#)

Submitter Information Verification

Submitter Full Name: Marcelo Hirschler

Organization: GBH International

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City:

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Submittal Date: Tue May 03 18:37:11 EDT 2016



Public Comment No. 2-NFPA 301-2016 [Section No. D.1.2.3]

D.1.2.3 ASTM Publications.

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

ASTM E84, *Standard Test Method for Surface Burning Characteristics of Building Materials*, 2015a 2015b .

ASTM E1354, *Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter*, 2015a 2016 .

ASTM E1355, *Standard Guide for Evaluating the Predictive Capability of Deterministic Fire Models*, 2012.

ASTM E1472, *Standard Guide for Documenting Computer Software for Fire Models*, 2007 (withdrawn).

ASTM E1537, *Standard Test Method for Fire Testing of Upholstered Furniture*, 2013 2015 .

ASTM E1590, *Standard Test Method for Fire Testing of Mattresses*, 2013.

ASTM E1822, *Standard Method for Fire Testing of Stacked Chairs*, 2013.

ASTM E2280, *Standard Guide for Fire Hazard Assessment of the Effect of Upholstered Seating Furniture Within Patient Rooms of Health Care Facilities*, 2013.

ASTM F1005, *Standard Practice for HVAC Duct Shapes; Identification and Description of Design Configurations*, 2013.

ASTM F1138, *Standard Specification for Spray Shields for Mechanical Joints*, 1998, 2014.

Statement of Problem and Substantiation for Public Comment

date updates

Related Item

First Revision No. 21-NFPA 301-2015 [Chapter D]

Submitter Information Verification

Submitter Full Name: Marcelo Hirschler

Organization: GBH International

Street Address:

City:

State:

Zip:

Submittal Date: Tue May 03 18:27:24 EDT 2016

MER-AAA Technical Committee on Merchant Vessels



Stern of vessel showing fire damage. (Photo by US Coast Guard)

Photo copied from *NTSB Safer Seas 2014*

Second Draft Teleconference Meeting
Thursday, 18 August 2016 (2:00 PM EDT)

Meeting Agenda

1. Second Draft meeting procedures.
2. NFPA 301 Public Comments.
3. Second Draft Balloting Information.
4. Other Business.
5. Adjourn.



Safari Spirit ablaze at Fisherman's Terminal in Seattle, Washington. (Photo by Joshua Lewis, KOMO News)

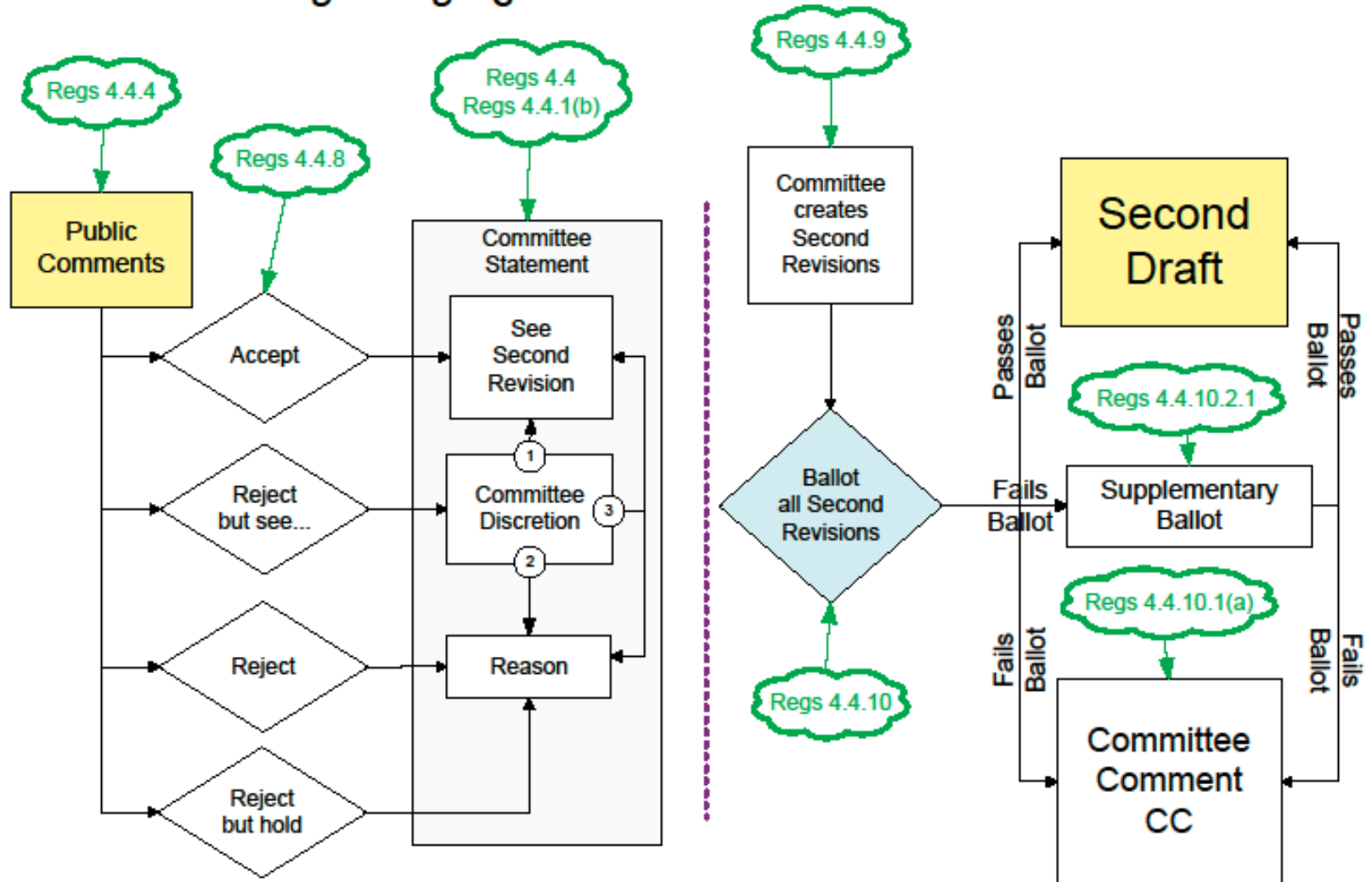
Photo copied from *NTSB Safer Seas 2013*

NFPA 301 Second Draft Meeting

A-17 Timeline

- Public Comment Closing Date was: 05/16/16
- Second Draft Teleconference Meeting **TODAY**
- Posting of Second Draft for Balloting Date: 12/12/16
- Second Draft Ballot Deadline: 01/02/17
- Recirculation Ballot Deadline: 01/09/17
- Second Draft Report Published: 01/16/17
- NITMAM Closing Date: 02/20/17
- CAM Posting/Consent Doc Notification Date: 04/17/17
- Issue of Consent Documents: 05/12/17 (edition date 2018)
- NFPA Annual Meeting: 06/04-07/17 in Boston, MA
- Appeal Closing Date: 06/27/17
- Issue of Documents with CAM: 08/10/17 (edition date 2018)

The NEW NFPA Standards Development Process – Comment Stage Regs §4.4



February 10, 2012

NFPA 303 Second Draft Meeting

- **Technical Committee Actions:**

(What you're doing today.)

- **Resolving Public Comments**

- Committee Action and Committee Statement

- **Creating Second Revisions**

Action Options for the Committee at the Second Draft Conference

- The following is taken from the Regulations Governing Committee Projects (§4.4.8.1).
- Action Options are:
 - Accept the Comment
 - Reject the Comment but See Related 2nd Revision
 - Reject the Comment
 - Reject but Hold the Comment

Accept the Comment

- **Action:** The Technical Committee takes this Action when it decides to accept the text proposed in the Public Comment exactly as submitted.
- **Result:** The Public Comment is marked as “**Accept**,” and the proposed text is incorporated into one or more Second Revisions.



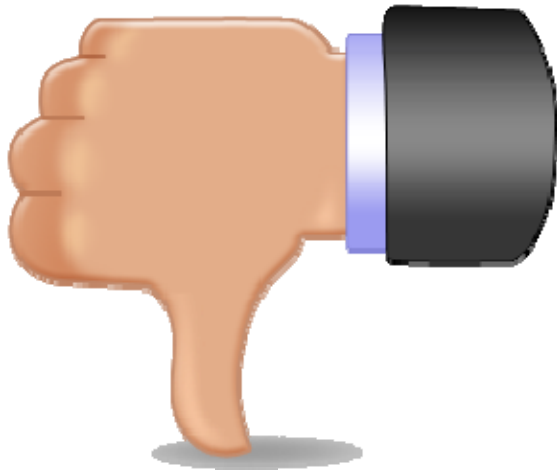
Reject the Comment, but See Related Second Revision.

Original comment is revised with additions and/or ~~deletions~~.



- **Action:** The Technical Committee takes this Action when it agrees with the concept of the Public Comment in whole or in part but has developed related text in one or more Second Revisions that is different from the text in the Public Comment.
- **Result:** The Public Comment is marked as “**Reject But See**” and, a reference is provided to the related Second Revision(s).

Reject the Comment.



- **Action:** The Technical Committee takes this Action when it disagrees with the proposed changes in the Public Comment.
- **Result:** The Public Comment is marked as “**Reject**,” and no Second Revision is developed.

Reject But Hold the Comment.

- **Action:** The Technical Committee takes this Action when it decides to reject the Public Comment, but hold it for processing as a Public Input for the next Revision Cycle in accordance with §4.4.8.3.
- **Result:** The Comment is marked as “**Reject But Hold,**” and no Second Revision is developed.



Criteria for Hold (§4.4.8.3.1)

- The Comment introduces a concept that has not had public review by being included in a related Input or First Revision as shown in the First Draft.
- The Comment changes the text from the First Draft to the point that the Technical Committee would have to restudy the text of the First Draft.
- The Comment proposes something that could not be properly handled within the timeframe for processing the Second Draft.

Basis for Reject But Hold (§4.4.8.3.2)

- The Committee may consider any relevant factors including but not limited to:
 - the extent to which the Public Comment proposes a change that is new or substantial,
 - the complexity of the issues raised, and
 - whether sufficient debate and public review has taken place.

Committee Statements on Comments

(§4.4.8.2)

- A Statement is required for all Actions on Comments.
- Statements supporting Committee Actions shall be technical in nature and shall be sufficiently detailed so as to convey the Committee's rationale for its Action.
- Statements may consist, in whole or in part, of a cross-reference to Statements on other Comments and Second Revisions.

NFPA 303 Second Draft Meeting

- **Create a Second Revision (SR)**
 - Committee wants to make a change (to add, delete or modify) the First Draft.
 - Committee develops a Committee Statement (CS) substantiating the change.
 - Each SR gets balloted

NFPA 303 Second Draft Meeting

- No “new material” after the Public Input Stage since it hasn’t had the benefit of public review.
- What constitutes new material is decided by the TC or Correlating Committee.
- Adding “new material” at this Comments stage could successfully be challenged through appeal to the NFPA Standards Council

NFPA Second Draft Meeting Balloting Information

- **Formal voting**

- Voting during meeting is used to establish a sense of agreement (simple majority)
- Secured by letter ballot (2/3 agreement)
- Only the results of the formal ballot determine the official position of the committee on the Second Draft

NFPA Second Draft Meeting Balloting Information

- **Ballots are on the Second Revisions (SR) ONLY**
 - Public Comments and Committee Statements not balloted
 - Reference materials are available -
 - Second Draft, Public Comments, First Draft Report
- **Ballot form allows you to vote:**
 - Affirmative on all SR
 - Affirmative on all SR with exceptions specifically noted
- **Ballot form provides a column for affirmative with comment**
 - Note: This box only needs to be checked if there is an accompanying comment.
- **Reject or abstain requires a reason.**

NFPA Second Draft Meeting Balloting Information

- Initial ballot
- Circulation of negatives and comments
- Members may change votes during circulation
- Second Revision that fails letter ballot shall be designated as a Committee Comment (in the 2nd Draft Report), marked as “Reject” and deleted from the Second Draft.

Electronic Balloting

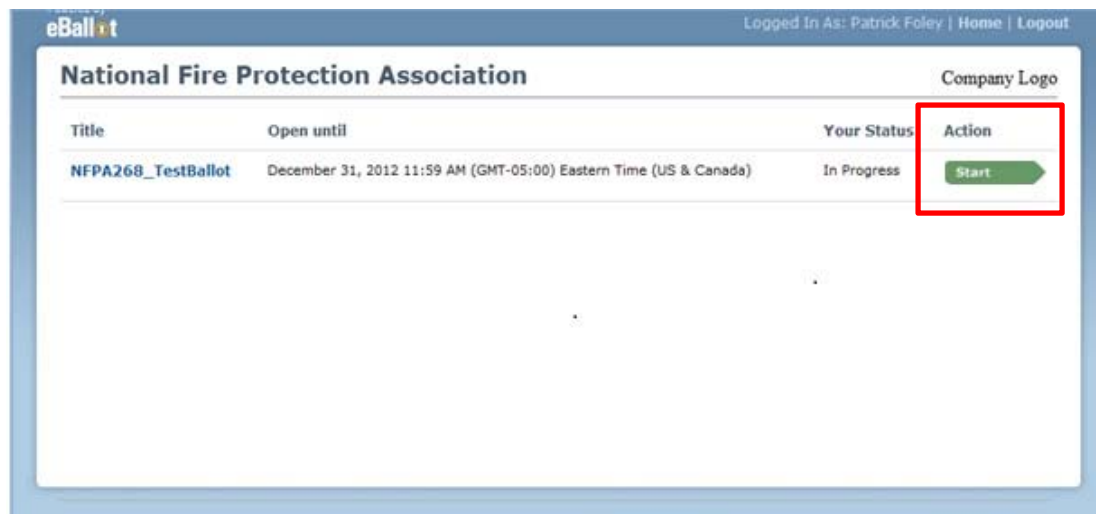
- Ballots will be an online format
- Alternates are strongly encouraged to return ballots



- Ballot session will time out after 90 minutes
- Use “submit” to save your work

Electronic Balloting

- Click link on the ballot email received
- Sign in with NFPA.org Committee Login and Password



Electronic Balloting

- Select either Affirmative on All or Affirmative with Exception(s)

The screenshot displays the eBallot interface for the National Fire Protection Association. The page title is "NFPA268_TestBallot" and it is open until November 09, 2012 1:00 AM (GMT-05:00) Eastern Time (US & Canada). The page is on "Page 1 of 2". The main content area is titled "Affirmative All Question" and contains two radio button options: "Affirmative All" and "Affirmative with Exception(s)". The "Affirmative All" option is highlighted with a red box. Below the options are "Back" and "Next" buttons. The right side of the page features a progress bar with three steps: "Select", "Review & Submit", and "Confirmation". Below the progress bar is an "Instructions" section with the following text: "NOTE: You must SUBMIT your ballot to SAVE your work.", "Please review the options on the left and respond appropriately.", "Reasons **must** accompany all Affirmative with Comment, Negative and Abstaining votes.", "Please do not vote negatively because of editorial errors.", and "Please contact your project administrator or staff liaison for assistance if necessary."

Electronic Balloting

Choosing AFFIRMATIVE ON ALL

- Use “See FR/SR - #” link to review all First/Second Revisions
- Use “Edit election” to change individual votes or to modify vote after submitting ballot.

National Fire Protection Association Company Logo

NFPA268_TestBallot Select Review & Submit Confirmation

Open Until November 09, 2012 1:00 AM (GMT-05:00) Eastern Time (US & Canada)

Review your selections below

FR-2, New Section after 2.3.2, [See FR-2](#)
Affirmative

FR-4, Chapter 10, [See FR-4](#)
Affirmative

FR-6, Section No. 11.4, [See FR-6](#)
Affirmative

[edit election](#)

Participant Consent

By checking this box, you are electronically signing this form and verifying that you are the Committee member listed above.

Submit

Electronic Balloting

Choosing AFFIRMATIVE WITH EXCEPTION(S)

- Make selection: Affirmative with Comment, Negative, or Abstain
- No selection made-defaults to affirmative
- Must include comment on each vote.

The screenshot shows a web browser window with the URL <https://eballot4.votenet.com/nfpa/ballot.cfm?CFID=2786078&CFTOKEN=...>. The page displays two ballot items:

- FR-4, Chapter 10, See FR-4**
 - Affirmative with Comment
 - Negative
 - Abstain
 - Add Comments
- FR-6, Section No. 11.4, See FR-6**
 - Affirmative with Comment
 - Negative
 - Abstain
 - Add Comments

On the right side, there is an **Instructions** panel with the following text:

NOTE! You must SUBMIT your ballot to SAVE your work.

Please review the options on the left and respond appropriately.

Reasons **must** accompany all Affirmative with Comment, Negative and Abstaining votes.

Please do not vote negatively because of editorial errors.

Please contact your project administrator or staff liaison for assistance if necessary.

At the bottom of the page, there is a navigation bar with a **Back** button and a **Next** button. The page number **2 of 2** is also visible.

Electronic Balloting

- To complete ballot click Participant Consent and Submit
- Return and edit any votes before ballot due date.



Participant Consent

By checking this box, you are electronically signing this form and verifying that you are the Committee member listed above.

Submit 

Without you, we could not do this.

THANK YOU!



Comparison of text from Chapters 3 and 8 of NFPA 301, 2013 edition

From Chapter 3 - Definitions	From Chapter 8 – Features of Fire Protection
<p>3.3.42.2* Noncombustible Material. A material that satisfies any of the following:</p> <p>(1) The material meets the criteria of Part 12 of the IMO <i>Fire Test Procedures Code</i>;</p> <p>(2) The material meets the criteria of 46 CFR 164.009, “Noncombustible Materials for Merchant Vessels”; or</p> <p>(3) The material complies with any of the following criteria from NFPA 101, <i>Life Safety Code</i>:</p> <p>(a) a material that, in the form in which it is used and under conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors when subjected to fire or heat [101:4.6.13.1(1)];</p> <p>(b) a material that is reported as passing ASTM E 136, <i>Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C</i> [101:4.6.13.1(2)]; or</p> <p>(c) a material that is reported as complying with the pass/fail criteria of ASTM E 136 when tested in accordance with the test method and procedure in ASTM E 2652, <i>Standard Test Method for Behavior of Materials in a Tube Furnace with a Cone-shaped Airflow Stabilizer, at 750 Degrees C</i> [101:4.6.13.1(3)].</p> <p>A.3.3.42.2 Noncombustible Material. For 3.3.42.2(3): The provisions of 3.3.42.2 do not require inherently noncombustible materials to be tested in order to be classified as noncombustible materials. [101, A.4.6.13]</p> <p>For 3.3.42.2(3)(a): Examples of such materials include steel, concrete, masonry, and glass. [101, A.4.6.13.1(1)]</p>	<p>8.2.2* Noncombustible Material. A material shall be considered noncombustible if the criteria in 8.2.2.1, 8.2.2.2, or 8.2.2.3 are satisfied.</p> <p>8.2.2.1 A material shall be considered noncombustible if it meets the criteria of Part 1 of the IMO <i>Fire Test Procedures Code</i>.</p> <p>8.2.2.2 A material shall be considered noncombustible if it meets the criteria of 46 CFR.</p> <p>8.2.2.3* A material that complies with any of the following shall be considered a noncombustible material [101:4.6.13.1]</p> <p>(1)*A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. [101:4.6.14.1(1)]</p> <p>(2) A material that is reported as passing ASTM E 136, <i>Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C</i>. [101:4.6.13.1(2)]</p> <p>(3) A material that is reported as complying with the pass/fail criteria of ASTM E 136 when tested in accordance with the test method and procedure in ASTM E 2652, <i>Standard Test Method for Behavior of Materials in a Tube Furnace with a Cone-shaped Airflow Stabilizer, at 750 Degrees C</i>. [101:4.6.13.1(3)]</p> <p>8.2.2.4 Noncombustible materials shall be listed.</p> <p>A.8.2.2 The following materials are considered inherently noncombustible and should not be required to be tested or listed for non-combustibility:</p> <p>(1) Sheet or block glass, clay, ceramics, or uncoated glass fiber</p> <p>(2) All metals except magnesium or magnesium alloys</p> <p>(3) Portland cement, gypsum, concrete with aggregates of only sand, gravel, vermiculite, silica, perlite, or pumice</p> <p>(4) Woven or knitted glass fabric containing no treatments other than 2.5 percent lubricant by mass</p> <p>A.8.2.2.3 The provisions of 8.2.2.3 do not require inherently noncombustible materials to be tested in order to be classified as noncombustible materials. [101: A.4.6.13]</p> <p>A.8.2.2.3(1) Examples of such materials include steel, concrete, masonry, and glass. [101: A.4.6.13.1(1)]</p>

Commented [RL1]: This is an incorrect reference. It needs to be changed to “Part 1” if this remains within the document.

Commented [RL2]: The full citation number is 46 CFR 164.009-3.

Commented [RL3]: This is an incorrect reference. The correct reference is: 101: 4.6.13.1(1). The TC needs to fix this.

NFPA Manual of Style Requirements for Definitions:

From Manual of Style for NFPA Technical Committee Documents (July 2004 Edition)

Note: Annex Notes are printed in red font below each appropriate section/sub-section.

2.3.2 Definitions.

2.3.2.1 A definition shall only describe the term being defined.

2.3.2.2 Definitions shall be in the format of a bold term followed by the definition phrase to form a single paragraph unit.

2.3.2.3 Definitions shall not contain requirements.

2.3.2.4* References to other documents or sections of a document, notes, lists, footnotes, cautions, warnings, or figures shall not be permitted in definitions.

A.2.3.2.4 Examples of inappropriate references in definitions are as follows:

- (1) Air Connector.** A conduit for transferring air between an air duct or plenum and an air terminal unit or an air inlet or an air outlet. *(For limitations on use of air connectors, see 5.3.2.1.)*
- (2) Fusion Temperature Ash.** The temperature at which a cone of coal or coke ash exhibits certain melting characteristics. *(See ASTM D1857, Standard Test Method for Fusibility of Coal and Coke Ash.)*

2.3.2.7* Existing general definitions contained in the NFPA *Glossary of Terms* shall be used where technically accurate and correct.

A.2.3.2.7 Prior to revising preferred definitions, the *Glossary of Terms* should be consulted to avoid the creation of additional secondary definitions. All secondary definitions should be reviewed and eliminated where possible by the following methods (in order of preference):

- (1) Adopt the preferred definition if suitable.
- (2) Modify the secondary term and definition to make it unique.
- (3) Request that the Standards Council determine responsibility for the term.
- (4) Request that the Standards Council authorize a secondary definition.

2.3.2.10* Where an existing preferred definition is taken from another document or from the *Glossary of Terms*, the source document and year of publication shall be referenced in brackets at the end of the definition to indicate that the definition has been extracted from that document, e.g., [58, 2004].

A.2.3.2.10 When adopting definitions with annex material, only the definition should be adopted unless the adopting committee wishes specifically to include the annex material. Many definitions presently contain references to the main text of the document. It is anticipated that these references will be moved to the annex of the document. This information should not constitute an additional definition in the *Glossary of Terms*.

A.2.3.2.10.1 An example of an appropriate extract reference is as follows:

3.3.9 Addition. An increase in building area, aggregate floor area, height, or number of stories of a structure. [ASCE 7:9.2.1.1]

2.3.2.11 Modifications to terms followed by an extract citation shall be submitted as a proposal to the committee responsible for the source document in accordance with the *Regulations Governing Committee Projects*.

Examples of definition of Noncombustible Material in other NFPA Standards:

Material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors when subjected to fire or heat. [122 (2015)]

A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors when subjected to fire or heat. [54 (2015)]

A material that, in the form in which it is used and under the conditions anticipated, will not ignite, support combustion, burn, or release flammable vapors when subjected to fire or heat. [654 (2013)]

A material that, in the form in which it is used and under the condition anticipated, will not ignite, burn, support combustion, or release flammable vapors when subjected to fire or heat. [921 (2014)]

Any material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors when subjected to fire or heat. [1144 (2013)]

Chapter 2 Revision is Needed for IMO Publication

2.3.8 IMO Publications. International Maritime Organization, 4 Albert Embankment, London, SE1 7SR.

Assembly Resolution A752(18), *Guidelines for the Evaluation, Testing, and Application of Low-Location Lighting on Passenger Ships*, 1993.

Assembly Resolution A757(18), *Standard for the Calculation of the Width of Stairways Forming Means of Escape on Passenger Ships*, 1993.

Assembly Resolution A760(18), *Symbols Related to Life-Saving Appliances and Arrangements*, 1993.

Fire Test Procedures Code: International Code for the Application of Fire Test Procedures (FTP Code), ~~1998~~ 2010.

IMO International Code of Safety for the High-Speed Craft (HSC Code), 2008.

IMO International Maritime Dangerous Goods (IMDG) Code, 2010.

International Convention for Safety of Life at Sea (SOLAS), Chapter II-2, 1974 as amended (consolidated edition 2009).

Maritime Safety Committee Circular (MSC/Circ.) 732, *Interim Guidelines on the Test Procedure for Demonstrating the Equivalence of Composite Materials to Steel Under the Provisions of the 1974 SOLAS Convention*, 2000.

Commented [RL4]: 2010 is the current edition of the FTP Code. The International Code for the Application of Fire Test Procedures (2010 FTP Code) was adopted when IMO's Maritime Safety Committee (MSC) met for its 88th session from 24 November to 3 December 2010. The FTP Code enforcement date was 01 July 2012.

NFPA Glossary of Terms

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Interpretations of NFPA Documents

A statement, written or oral, that is not processed in accordance with Section 6 of the Regulations Governing Committee Projects shall not be considered the official position of NFPA or any of its Committees and shall not be considered to be, nor relied upon as, a Formal Interpretation.

Term	Definition	Document (Edition)	Document Defining Same Term	Document Using Same Definition
Noncombustible Material	A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. Materials that are reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C, shall be considered noncombustible materials.	1124 (2006)	921 (2014), 301 (2013), 1124 (2006), 211 (2013), 285 (2012), 520 (2016), 13 (2016), 54 (2015), 96 (2014), 122 (2015), 801 (2014), 36 (2013), 51A (2012), 654 (2013), 33 (2016), 34 (2015), 51 (2013), 80A (2012), 88A (2015)	1124 (2006), 211 (2013), 285 (2012), 520 (2016)
Noncombustible Material	Material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors when subjected to fire or heat.	122 (2015)	921 (2014), 301 (2013), 1124 (2006), 211 (2013), 285 (2012), 520 (2016), 13 (2016), 54 (2015), 96 (2014), 122 (2015), 801 (2014), 36 (2013), 51A (2012), 654 (2013), 33 (2016), 34 (2015), 51 (2013), 80A (2012), 88A (2015)	122 (2015)

Term	Definition	Document (Edition)	Document Defining Same Term	Document Using Same Definition
Noncombustible Material	A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat; materials that are reported as passing ASTM E136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C, shall be considered noncombustible materials.	13 (2016)	921 (2014), 301 (2013), 1124 (2006), 211 (2013), 285 (2012), 520 (2016), 13 (2016), 54 (2015), 96 (2014), 122 (2015), 801 (2014), 36 (2013), 51A (2012), 654 (2013), 33 (2016), 34 (2015), 51 (2013), 80A (2012), 88A (2015)	13 (2016)
Noncombustible Material	A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. Materials that are reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C, shall be considered noncombustible materials.	211 (2013)	921 (2014), 301 (2013), 1124 (2006), 211 (2013), 285 (2012), 520 (2016), 13 (2016), 54 (2015), 96 (2014), 122 (2015), 801 (2014), 36 (2013), 51A (2012), 654 (2013), 33 (2016), 34 (2015), 51 (2013), 80A (2012), 88A (2015)	1124 (2006), 211 (2013), 285 (2012), 520 (2016)

Term	Definition	Document (Edition)	Document Defining Same Term	Document Using Same Definition
Noncombustible Material	A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. Materials that are reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C, shall be considered noncombustible materials.	285 (2012)	921 (2014), 301 (2013), 1124 (2006), 211 (2013), 285 (2012), 520 (2016), 13 (2016), 54 (2015), 96 (2014), 122 (2015), 801 (2014), 36 (2013), 51A (2012), 654 (2013), 33 (2016), 34 (2015), 51 (2013), 80A (2012), 88A (2015)	1124 (2006), 211 (2013), 285 (2012), 520 (2016)
Noncombustible Material	A material that satisfies any of the following: (1) the material meets the criteria of Part 12 of the IMO Fire Test Procedures Code; (2) the material meets the criteria of 46 CFR 164.009, “Noncombustible Materials for Merchant Vessels”; or (3) the material complies with any of the following criteria from NFPA 101, Life Safety Code: (a) a material that, in the form in which it is used and under conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors when subjected to fire or heat ; (b) a material that is reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C ; or (c) a material that is reported as complying with the pass/fail criteria of ASTM E 136 when tested in accordance with the test method and procedure in ASTM E 2652, Standard Test Method for Behavior of Materials in a Tube Furnace with a Cone-shaped Airflow Stabilizer, at 750 Degrees C .	301 (2013)	921 (2014), 301 (2013), 1124 (2006), 211 (2013), 285 (2012), 520 (2016), 13 (2016), 54 (2015), 96 (2014), 122 (2015), 801 (2014), 36 (2013), 51A (2012), 654 (2013), 33 (2016), 34 (2015), 51 (2013), 80A (2012), 88A (2015)	301 (2013)

Term	Definition	Document (Edition)	Document Defining Same Term	Document Using Same Definition
Noncombustible Material	A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors when subjected to fire or heat. Materials that are reported as passing ASTM E136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C, are considered noncombustible materials.	33 (2016)	921 (2014), 301 (2013), 1124 (2006), 211 (2013), 285 (2012), 520 (2016), 13 (2016), 54 (2015), 96 (2014), 122 (2015), 801 (2014), 36 (2013), 51A (2012), 654 (2013), 33 (2016), 34 (2015), 51 (2013), 80A (2012), 88A (2015)	33 (2016), 34 (2015)
Noncombustible Material	A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors when subjected to fire or heat. Materials that are reported as passing ASTM E136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C, are considered noncombustible materials.	34 (2015)	921 (2014), 301 (2013), 1124 (2006), 211 (2013), 285 (2012), 520 (2016), 13 (2016), 54 (2015), 96 (2014), 122 (2015), 801 (2014), 36 (2013), 51A (2012), 654 (2013), 33 (2016), 34 (2015), 51 (2013), 80A (2012), 88A (2015)	33 (2016), 34 (2015)

Term	Definition	Document (Edition)	Document Defining Same Term	Document Using Same Definition
Noncombustible Material	A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors when subjected to fire or heat. Materials that are reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C, are considered noncombustible materials.	36 (2013)	921 (2014), 301 (2013), 1124 (2006), 211 (2013), 285 (2012), 520 (2016), 13 (2016), 54 (2015), 96 (2014), 122 (2015), 801 (2014), 36 (2013), 51A (2012), 654 (2013), 33 (2016), 34 (2015), 51 (2013), 80A (2012), 88A (2015)	36 (2013), 51A (2012)
Noncombustible Material	A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. Materials that are reported as passing ASTM E 136 are considered noncombustible materials.	51 (2013)	921 (2014), 301 (2013), 1124 (2006), 211 (2013), 285 (2012), 520 (2016), 13 (2016), 54 (2015), 96 (2014), 122 (2015), 801 (2014), 36 (2013), 51A (2012), 654 (2013), 33 (2016), 34 (2015), 51 (2013), 80A (2012), 88A (2015)	51 (2013), 80A (2012), 88A (2015)

Term	Definition	Document (Edition)	Document Defining Same Term	Document Using Same Definition
Noncombustible Material	A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors when subjected to fire or heat. Materials that are reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C, are considered noncombustible materials.	51A (2012)	921 (2014), 301 (2013), 1124 (2006), 211 (2013), 285 (2012), 520 (2016), 13 (2016), 54 (2015), 96 (2014), 122 (2015), 801 (2014), 36 (2013), 51A (2012), 654 (2013), 33 (2016), 34 (2015), 51 (2013), 80A (2012), 88A (2015)	36 (2013), 51A (2012)
Noncombustible Material	A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. Materials that are reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C, shall be considered noncombustible materials.	520 (2016)	921 (2014), 301 (2013), 1124 (2006), 211 (2013), 285 (2012), 520 (2016), 13 (2016), 54 (2015), 96 (2014), 122 (2015), 801 (2014), 36 (2013), 51A (2012), 654 (2013), 33 (2016), 34 (2015), 51 (2013), 80A (2012), 88A (2015)	1124 (2006), 211 (2013), 285 (2012), 520 (2016)

Term	Definition	Document (Edition)	Document Defining Same Term	Document Using Same Definition
Noncombustible Material	A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors when subjected to fire or heat.	54 (2015)	921 (2014), 301 (2013), 1124 (2006), 211 (2013), 285 (2012), 520 (2016), 13 (2016), 54 (2015), 96 (2014), 122 (2015), 801 (2014), 36 (2013), 51A (2012), 654 (2013), 33 (2016), 34 (2015), 51 (2013), 80A (2012), 88A (2015)	54 (2015)
Noncombustible Material	A material that, in the form in which it is used and under the conditions anticipated, will not ignite, support combustion, burn, or release flammable vapors when subjected to fire or heat.	654 (2013)	921 (2014), 301 (2013), 1124 (2006), 211 (2013), 285 (2012), 520 (2016), 13 (2016), 54 (2015), 96 (2014), 122 (2015), 801 (2014), 36 (2013), 51A (2012), 654 (2013), 33 (2016), 34 (2015), 51 (2013), 80A (2012), 88A (2015)	654 (2013)

Term	Definition	Document (Edition)	Document Defining Same Term	Document Using Same Definition
Noncombustible Material	In facilities handling radioactive materials, a material not capable of igniting and burning when subjected to fire conditions as defined in an approved fire test.	801 (2014)	921 (2014), 301 (2013), 1124 (2006), 211 (2013), 285 (2012), 520 (2016), 13 (2016), 54 (2015), 96 (2014), 122 (2015), 801 (2014), 36 (2013), 51A (2012), 654 (2013), 33 (2016), 34 (2015), 51 (2013), 80A (2012), 88A (2015)	801 (2014)
Noncombustible Material	A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. Materials that are reported as passing ASTM E 136 are considered noncombustible materials.	80A (2012)	921 (2014), 301 (2013), 1124 (2006), 211 (2013), 285 (2012), 520 (2016), 13 (2016), 54 (2015), 96 (2014), 122 (2015), 801 (2014), 36 (2013), 51A (2012), 654 (2013), 33 (2016), 34 (2015), 51 (2013), 80A (2012), 88A (2015)	51 (2013), 80A (2012), 88A (2015)

Term	Definition	Document (Edition)	Document Defining Same Term	Document Using Same Definition
Noncombustible Material	A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. Materials that are reported as passing ASTM E 136 are considered noncombustible materials.	88A (2015)	921 (2014), 301 (2013), 1124 (2006), 211 (2013), 285 (2012), 520 (2016), 13 (2016), 54 (2015), 96 (2014), 122 (2015), 801 (2014), 36 (2013), 51A (2012), 654 (2013), 33 (2016), 34 (2015), 51 (2013), 80A (2012), 88A (2015)	51 (2013), 80A (2012), 88A (2015)
Noncombustible Material	A material that, in the form in which it is used and under the condition anticipated, will not ignite, burn, support combustion, or release flammable vapors when subjected to fire or heat.	921 (2014)	921 (2014), 301 (2013), 1124 (2006), 211 (2013), 285 (2012), 520 (2016), 13 (2016), 54 (2015), 96 (2014), 122 (2015), 801 (2014), 36 (2013), 51A (2012), 654 (2013), 33 (2016), 34 (2015), 51 (2013), 80A (2012), 88A (2015)	921 (2014)

Term	Definition	Document (Edition)	Document Defining Same Term	Document Using Same Definition
Noncombustible Material	A substance that will not ignite and burn under the conditions anticipated when subjected to a fire. (See 4.8.1.)	96 (2014)	921 (2014), 301 (2013), 1124 (2006), 211 (2013), 285 (2012), 520 (2016), 13 (2016), 54 (2015), 96 (2014), 122 (2015), 801 (2014), 36 (2013), 51A (2012), 654 (2013), 33 (2016), 34 (2015), 51 (2013), 80A (2012), 88A (2015)	96 (2014)
Noncombustible Particulate Solid	Any noncombustible solid material composed of distinct particles or pieces, regardless of size, shape, or chemical composition.	91 (2015)	91 (2015)	91 (2015)
Noncombustible	Not capable of igniting and burning when subjected to a fire.	1141 (2012)	1141 (2012), 115 (2016), 2 (2016), 214 (2011), 80 (2016), 851 (2010), 853 (2015), 1144 (2013), 120 (2015), 75 (2013), 850 (2015), 484 (2015), 318 (2015)	1141 (2012), 115 (2016), 2 (2016), 214 (2011), 80 (2016), 851 (2010), 853 (2015)
Noncombustible	Any material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors when subjected to fire or heat.	1144 (2013)	1141 (2012), 115 (2016), 2 (2016), 214 (2011), 80 (2016), 851 (2010), 853 (2015), 1144 (2013), 120 (2015), 75 (2013), 850 (2015), 484 (2015), 318 (2015)	1144 (2013)