



## MEMORANDUM

**TO:** NFPA Technical Committee on Fire Tests (FIZ-AAA)  
**FROM:** Tracy Golinveaux, Staff Liaison  
**DATE:** September 9, 2010  
**SUBJECT:** NFPA 275 ROP TC Letter Ballot (F2011)

---

The ROP letter ballot for NFPA 275 is attached. The ballot is for formally voting on whether or not you concur with the committee's actions on the proposals. Reasons must accompany all negative and abstention ballots.

**Please do not vote negatively because of editorial errors. However, please bring such errors to my attention for action.**

The submittable PDF ballot form offers you the opportunity to submit your completed ballot electronically. If you are interested, please print out the attached Ballot Submittal Instructions for further information. These instructions provide information on how to download the files and submit the ballot.

Please complete and return your ballot as soon as possible but no later than **Wednesday, September 29, 2010**. As noted on the ballot form, please return the ballot to Jill McGovern either via e-mail to [jmcgovern@nfpa.org](mailto:jmcgovern@nfpa.org) or via fax to 617-984-7110. You may also mail your ballot to the attention of Jill McGovern at NFPA, 1 Batterymarch Park, Quincy, MA 02169.

The return of ballots is required by the Regulations Governing Committee Projects.

**Attachments: Proposals  
Letter Ballot**

275-1 Log #CP1  
(Entire Document)

Final Action: Accept

---

Submitter: Technical Committee on Fire Tests,

Recommendation: Review entire document to:

- 1) Update any extracted material by preparing separate proposals to do so, and
- 2) review and update references to other organizations documents, by preparing proposal(s) as required.

Substantiation: To conform to the NFPA Regulations Governing Committee Projects.

Committee Meeting Action: **Accept**

Committee Statement: See 275-6 (Log #CP3) for the committee action.

275-2 Log #9 Final Action: Accept in Principle  
(Title, 1.1, 1.2, 1.3, 3.3.2 Metal Composite Material (MCM), 3.3.3 Thermal Barrier, 5.1.6.1, and A.1.1.1, )

Submitter: Rick Thornberry, The Code Consortium, Inc. / Rep. 3A Composites USA, Inc.

Recommendation: Revise text to read as follows:

Standard Method of Fire Tests for the Evaluation of Thermal Barriers ~~Used Over Foam Plastic Insulation~~

1.1 Scope.

1.1.1\* This method of fire tests for qualifying a thermal barrier for protecting foam plastic insulation or metal composite materials (MCM) ( herein referred to as a thermal barrier) is applicable to building construction materials, products, or assemblies intended to be used to protect foam plastic insulation or MCM from direct fire exposure.

1.1.2 The performance of the thermal barrier is evaluated by its ability to limit the temperature rise on its unexposed surface and by the ability of the thermal barrier to remain in tact in order to provide protection from ignition of the foam plastic insulation or MCM during a standard fire exposure.

1.2.2 Part II evaluates the ability of the thermal barrier to remain intact in order to provide protection from ignition of the foam plastic insulation or MCM by conducting a test of the thermal barrier and foam plastic insulation or MCM assembly in accordance with a standard room/corner fire test method.

1.3.1 This method of fire tests evaluates the ability of the thermal barrier to prevent ignition of foam plastic insulation or MCM from a standard fire exposure for a period of 15 minutes.

1.3.2 This method of fire tests also evaluates the ability of the thermal barrier to remain in place and prevent ignition of foam plastic insulation or MCM for a period of 15 minutes during a standard room/corner fire exposure.

3.3.2 Metal Composite Material (MCM). A factory-manufactured panel consisting of metal skins bonded to both faces of a core made of any plastic other than a foam plastic insulation as defined in 3.3.1. [5000, 2009]

3.3.3 Thermal Barrier for ~~Foam Plastic Insulation (Thermal Barrier)~~. A material, product, or assembly that prevents or delays ignition of foam plastic insulation or MCM by limiting the temperature rise on the surface of the foam plastic insulation or MCM and by acting as a flame exposure barrier to the foam plastic insulation or MCM for a 15-minute time period.

5.1 Test Method. The thermal barrier and foam plastic insulation or MCM shall be tested in accordance with NFPA 286, *Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth*, FM 4880, UL 1040, or UL 1715.

5.1.1 The specific type of foam plastic insulation or MCM to be protected by the thermal barrier shall be installed on a substrate and shall form the interior surface of the test walls and ceiling.

5.1.2 The thermal barrier shall be installed over the interior face of the foam plastic insulation or MCM in the manner for which recognition is desired; ~~except as indicated in 5.1.3.~~

5.1.3 ~~If the thermal barrier is intended to be used over metal composite materials (MCM);~~ The foam plastic insulation or the MCM shall be tested at the maximum thickness intended for use.

5.1.4 The assemblage of foam plastic insulation or MCM and applied thermal barrier described in 5.1.2 ~~or 5.1.3, as applicable;~~ shall be considered the test assembly.

6.1 Test Report

(8) Density, thickness, and type of foam plastic insulation or MCM used in the Part II test

A.1.1.1 Model building codes require foam plastic insulation and, in some installations, metal composite materials (MCM) to be covered by, or separated from the interior of the building by, a thermal barrier to reduce the possibility of ignition or delay its occurrence. The typical time specified is 15 minutes based on a fire exposure similar to that in NFPA 251, *Standard Methods of Tests of Fire Resistance of Building Construction and Materials*, ASTM E119, or UL 263. The fire exposure conditions in these test methods are similar.

Substantiation: This test method also applies to Metal Composite Materials (MCM). See Section 5.1.3.

Committee Meeting Action: Accept in Principle

Accept all changes except for section 3.3.2 and 3.3.3 revised below:

3.3.2 Metal Composite Material (MCM). A factory-manufactured panel consisting of metal skins bonded to both faces of a core made of any plastic other than a foam plastic insulation. [5000, 2009]

3.3.3. Thermal barrier: A material, product, or assembly that prevents or delays ignition of an unexposed surface by limiting the temperature rise and by acting as a flame exposure barrier for a 15-minute time period

---

275-3 Log #10  
(1.2, 1.3, 1.3.3 and 1.3.4)

**Final Action: Accept**

---

**Submitter:** Rick Thornberry, The Code Consortium, Inc. / Rep. 3A Composites USA, Inc.

**Recommendation:** Revise text to read as follows:

Re-number and redesignate Section 1.2 Purpose as Section 1.3 Application and re-number and redesignate Section 1.3 Application as Section 1.2 Purpose and relocate accordingly. Re-number Sections 1.3.3 and 1.3.4 as Sections 1.1.3 and 1.1.4, respectively, and relocate to Section 1.1 Scope. Also revise current Sections 1.3.1 and 1.3.2 as follows:

1.3.1 The purpose of this method of fire tests is to evaluates the ability of the thermal barrier to prevent ignition of foam plastic insulation from a standard fire exposure for a period of 15 minutes.

1.3.2 The purpose of this method of fire tests is to also evaluates the ability of the thermal barrier to remain in place and prevent ignition of foam plastic insulation for a period of 15 minutes during a standard room/corner fire exposure.

**Substantiation:** These revisions make the standard more consistent with the NFPA Manual of Style.

**Committee Meeting Action: Accept**

---

275-4 Log #1  
(1.2.1)

**Final Action: Accept**

---

**Submitter:** Bob Eugene, Underwriters Laboratories Inc.

**Recommendation:** Revise text to read as follows:

1.2.1 Part I measures the temperature rise on the unexposed face of the thermal barrier when it is subjected to a standard fire exposure specified in NFPA 251, *Standard Methods of Tests of Fire Resistance of Building Construction and Materials*, ASTM E 119, or ANSI/UL 263.

**Substantiation:** Add ANSI approval designation to ANSI/UL 263.

**Committee Meeting Action: Accept**

---

275-5 Log #11  
(1.2.1, 2.2, 4.6.2.2, 6.1(4), A.1.1.1, and B.1.1)

**Final Action: Accept**

---

**Submitter:** Rick Thornberry, The Code Consortium, Inc. / Rep. 3A Composites USA, Inc.

**Recommendation:** Delete text to read as follows:

Delete the reference to NFPA 252 in the following Sections:

1.2.1, 2.2, 4.6.2.2, 6.1(4), A.1.1.1, and B.1.1

**Substantiation:** NFPA 251, *Standard Methods of Tests of Fire Resistance of Building Construction and Materials*, is in the process of being deleted as an NFPA standard .

**Committee Meeting Action: Accept**

---

275-6 Log #CP3  
(Chapter 2)

Final Action: Accept

---

Submitter: Technical Committee on Fire Tests,  
Recommendation: Revise Chapter 2 as follows:

2.1 General.

The documents or portions thereof listed in this chapter are referenced within this standard and shall be considered part of the requirements of this document.

2.2 NFPA Publications.

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

~~NFPA 251, Standard Methods of Tests of Fire Resistance of Building Construction and Materials, 2006 edition.~~

NFPA 286, Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth, 2006 edition.

2.3 Other Publications.

2.3.1 ASTM Publications.

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

ASTM E 119, Standard Test Methods for Fire Tests of Building Construction and Materials, ~~2000~~. 2010a

2.3.2 FMGR Publications.

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

FM 4880, Approval Standard for Class I Insulated Wall or Wall and Roof/Ceiling Panels; Plastic Interior Finish Materials; Plastic Exterior Building Panels; Wall/Ceiling Coating Systems; Interior or Exterior Finish Systems, ~~1994~~. 2007

2.3.3 UL Publications.

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

ANSI/UL 263, Standard for Fire Tests of Building Construction and Materials, 2003, reaffirmed 2007.

ANSI/UL 1040, Standard for Fire Test of Insulated Wall Construction, 1996, including revisions through September, 2007.

ANSI/UL 1715, Standard for Fire Test of Interior Finish Material, 1997, including revisions through April 8, 2008

2.3.4 Other Publications.

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

2.4 References for Extracts in Mandatory Sections.

NFPA 5000®, Building Construction and Safety Code®, 2009 edition.

Substantiation: To conform to the NFPA Regulations Governing Committee Projects.

Committee Meeting Action: Accept

---

275-7 Log #2  
(2.3.3)

Final Action: Accept

---

Submitter: Bob Eugene, Underwriters Laboratories Inc.

Recommendation: Revise text to read as follows:

2.3.3 UL Publications.

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

ANSI/UL 263, Standard for Fire Tests of Building Construction and Materials, 2003, reaffirmed 2007.

ANSI/UL 1040, Standard for Fire Test of Insulated Wall Construction, 1996, including revisions through September 17, 2007.

ANSI/UL 1715, Standard for Fire Test of Interior Finish Material, 1997, including revisions through April 8, 2008.

Substantiation: Add ANSI approval designation as applicable. Update referenced standard to include most recent revisions.

Committee Meeting Action: Accept

---

---

275-8 Log #3 Final Action: Accept  
(4.5.3)

---

Submitter: Bob Eugene, Underwriters Laboratories Inc.

Recommendation: Revise text to read as follows:

4.5.3 The test furnace shall be gas fired and shall be capable of generating and containing a fire exposure controlled to the time-temperature curve as specified in NFPA 251, *Standard Methods of Tests of Fire Resistance of Building Construction and Materials*, ASTM E 119, or ANSI/UL 263 for a period of 15 minutes.

Substantiation: Add ANSI approval designation to ANSI/UL 263.

Committee Meeting Action: Accept

---

275-9 Log #4 Final Action: Accept  
(4.6.2.2)

---

Submitter: Bob Eugene, Underwriters Laboratories Inc.

Recommendation: Revise text to read as follows:

4.6.2.2 The furnace thermocouples shall be as described in NFPA 251, *Standard Methods of Tests of Fire Resistance of Building Construction and Materials*, ASTM E 119, or ANSI/UL 263.

Substantiation: Add ANSI approval designation to ANSI/UL 263.

Committee Meeting Action: Accept

---

275-10 Log #5 Final Action: Accept  
(5.1)

---

Submitter: Bob Eugene, Underwriters Laboratories Inc.

Recommendation: Revise text to read as follows:

5.1 Test Method.

The thermal barrier and foam plastic insulation shall be tested in accordance with NFPA 286, *Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth*, FM 4880, ANSI/UL 1040, or ANSI/UL 1715.

Substantiation: Add ANSI approval designation to ANSI/UL 1040 and ANSI/UL 1715.

Committee Meeting Action: Accept

---

275-11 Log #6 Final Action: Accept  
(5.2.1)

---

Submitter: Bob Eugene, Underwriters Laboratories Inc.

Recommendation: Revise text to read as follows:

5.2.1 The conditions of acceptance for fire tests conducted in accordance with FM 4880, ANSI/UL 1040, or ANSI/UL 1715 shall be as specified in the fire test standard used.

Substantiation: Add ANSI approval designation to ANSI/UL 1040 and ANSI/UL 1715.

Committee Meeting Action: Accept

---

275-12 Log #CP2  
(5.2.3)

Final Action: Reject

---

Submitter: Technical Committee on Fire Tests,

Recommendation: Add new section 5.2.3:

5.2.3 When the fire performance of the thermal barrier does not meet the acceptance criteria described in 5.2.1 or 5.2.2, the thermal barrier shall be acceptable for use if it remains in place and prevents the foam plastic insulation from contributing to the fire growth for the test period conducted through visual inspection of the foam.

A.5.2.3 This alternate acceptance criterion recognizes that for some materials, they can meet the Temperature Transmission test but may fail the acceptance criteria in the Integrity Fire test. Even though the thermal barrier protects the foam plastic insulation, its own nature may cause excessive flame-spread or flashover to occur, prior to any involvement of the foam plastic insulation. One example of this type of material is 19 mm (0.75 inch) thick plywood.

Substantiation: Some materials can be used as a thermal barrier even though they may not meet the test requirements of section 5.2.1.

Committee Meeting Action: Reject

Committee Statement: Accepting this proposal will be equivalent to removing the acceptance criteria.

---

275-13 Log #7  
(A.1.1.1)

Final Action: Accept

---

Submitter: Bob Eugene, Underwriters Laboratories Inc.

Recommendation: Revise text to read as follows:

A.1.1.1 Model building codes require foam plastic insulation to be covered by a thermal barrier to reduce the possibility of ignition or delay its occurrence. The typical time specified is 15 minutes based on a fire exposure similar to that in NFPA 251, *Standard Methods of Tests of Fire Resistance of Building Construction and Materials*, ASTM E 119, or ANSI/UL 263. The fire exposure conditions in these test methods are similar.

Substantiation: Add ANSI approval designation to ANSI/UL 263.

Committee Meeting Action: Accept

---

275-14 Log #8  
(B.1.2.2)

Final Action: Accept

---

Submitter: Bob Eugene, Underwriters Laboratories Inc.

Recommendation: Revise text to read as follows:

B.1.2.2 UL Publications. Underwriters Laboratories Inc., 333 Pflugsten Road, Northbrook, IL 60062-2096.

ANSI/UL 263, Standard for Fire Tests of Building Construction and Materials, 2003, reaffirmed 2007.

Substantiation: Add ANSI approval designation as applicable. Update referenced standard to include most recent revisions.

Committee Meeting Action: Accept