Report of the Committee on Fire Tests

William E. Fitch, Chair

Omega Point Laboratories Incorporated, TX [RT]

Jesse J. Beitel, Hughes Associates, Incorporated, MD [SE]

April L. Berkol, Starwood Hotels & Resorts Worldwide, Incorporated, NY

Rep. American Hotel & Lodging Association

Robert G. Bill, Jr., FM Global, MA [I]

John A. Blair, The DuPont Company, DE [M]

Rep. Society of the Plastics Industry, Incorporated

Gordon H. Damant, Inter-City Testing & Consulting Corporation of California, CA [SE]

Thomas W. Fritz, Armstrong World Industries, Incorporated, PA [M]

Pravinray D. Gandhi, Underwriters Laboratories Incorporated, IL [RT] James R. Griffith, Southwest Research Institute, TX [RT]

Gordon E. Hartzell, Hartzell Consulting, Incorporated, TX [SE]

Marcelo M. Hirschler, GBH International, CA [SE]

Alfred J. Hogan, Reedy Creek Improvement District, FL [E]

Rep. International Fire Marshals Association

William E. Koffel, Koffel Associates, Incorporated, MD [SE]

James R. Lawson, US National Institute of Standards & Technology, MD

Rodney A. McPhee, Canadian Wood Council, Canada [M]

Frederick W. Mowrer, University of Maryland, MD [SE]

David T. Sheppard, US Department of Justice, MD [RT]

Kuma Sumathipala, American Forest & Paper Association, DC [M]

T. Hugh Talley, Hugh Talley Company, TN [M]

Rep. Upholstered Furniture Action Council

Rick Thornberry, The Code Consortium, Incorporated, CA [SE]

William A. Webb, Schirmer Engineering Corporation, IL [I]

Robert A. Wessel, Gypsum Association, DC [M]

Robert J. Wills, American Iron and Steel Institute, AL [M]

Peter J. Willse, GE Global Asset Protection Services, CT [I]

Alternates

Robert M. Berhinig, Underwriters Laboratories Incorporated, IL [RT] (Alt. to Pravinray D. Gandhi)

Delbert F. Boring, Jr., American Iron and Steel Institute, OH [M] (Alt. to Robert J. Wills)

Richard J. Davis, FM Global, MA [I]

(Alt. to Robert G. Bill)

Sam W. Francis, American Forest & Paper Association, PA [M] (Alt. to Kuma Sumathipala)

Richard G. Gann, US National Institute of Standards & Technology, MD

(Alt. to James R. Lawson)

Paul A. Hough, Armstrong World Industries, Incorporated, PA [M] (Alt. to Thomas W. Fritz)

Marc L. Janssens, Southwest Research Institute, TX [RT]

(Alt. to James R. Griffith)

James K. Lathrop, Koffel Associates, Incorporated, CT [SE]

(Alt. to William E. Koffel)

James A. Milke, University of Maryland, MD [SE]

(Alt. to Frederick W. Mowrer)

Arthur J. Parker, Hughes Associates, Incorporated, MD [SE]

(Alt. to Jesse J. Beitel)

Ronald A. Schulz, GE Global Asset Protection Services, MI [I] (Alt. to Peter J. Willse)

Ineke Van Zeeland, Canadian Wood Council, Canada [M]

(Alt. to Rodney A. McPhee)

Joe Ziolkowski, American Furniture Manufacturers Association, NC [M]

(Alt. to T. Hugh Talley)

Nonvoting

Tod L. Jilg, Hoechst Celanese Corporation, NC [M] Rep. American Fiber Manufacturers Association

Rohit Khanna, US Consumer Product Safety Commission, MD [C] Robert H. Barker, American Fiber Manufacturers Association, VA [M]

(Alt. to Tod L. Jilg)

Staff Liaison: Milosh T. Puchovsky

Committee Scope: This Committee shall have primary responsibility for documents on fire testing procedures, for reviewing existing fire test standards and recommending appropriate action to NFPA, for recommending the application of and advising on the interpretation of acceptable test standards for fire problems of concern to NFPA technical committees and members, and for acting in a liaison capacity between NFPA and the committees of other organizations writing fire test standards. This Committee does not cover fire tests that are used to evaluate extinguishing agents, devices, or systems.

This list represents the membership at the time the Committee was balloted on the text of this edition. Since that time, changes in the membership may have occurred. A key to classifications is found at the front of this book.

The Technical Committee on Fire Tests is presenting eight Reports for adoption, as follows:

Report I: The Committee proposes for adoption, a complete revision to NFPA 257, Standard on Fire Test for Window and Glass Block Assemblies, 2000 edition. NFPA 257-2000 is published in Volume 7 of the 2004/2005 National Fire Codes and in separate pamphlet form.

NFPA 257 has been submitted to letter ballot of the Technical Committee on Fire Tests, which consists of 24 voting members. The results of the balloting, after circulation of any negative votes, can be found in the report.

Report II: The Technical Committee proposes for adoption, a withdrawal to NFPA 258, Recommended Practice for Determining Smoke Generation of Solid Materials, 2001 edition. NFPA 258-2001 is published in Volume 13 of the 2004/2005 National Fire Codes and in separate pamphlet form.

NFPA 258 has been submitted to letter ballot of the Technical Committee n Tests, which consists of 24 voting members. The results of the balloting, after circulation of any negative votes, can be found in the report.

Report III: The Committee proposes for adoption, a reconfirmation to NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces, 2002 edition. NFPA 262-2002 is published in Volume 7 of the 2004/2005 National Fire Codes and in separate pamphlet form.

NFPA 262 has been submitted to letter ballot of the Technical Committee on Fire Tests, which consists of 24 voting members. The results of the balloting, after circulation of any negative votes, can be found in the report.

Report IV: The Committee proposes for adoption, amendments to NFPA 265, Standard Methods of Fire Tests for Evaluating Room Fire Growth Contribution of Textile Coverings on Full Height Panels and Walls, 2002 edition. NFPA 265-2002 is published in Volume 7 of the 2004/2005 National Fire Codes and in separate pamphlet form.

NFPA 265 has been submitted to letter ballot of the **Technical Committee** on Fire Tests, which consists of 24 voting members. The results of the balloting, after circulation of any negative votes, can be found in the report.

Report V: The Committee proposes for adoption, amendments to NFPA 268, Standard Test Method for Determining Ignitability of Exterior Wall Assemblies Using a Radiant Heat Energy Source, 2001 edition. NFPA 268-2001 is published in Volume 7 of the 2004/2005 National Fire Codes and in separate pamphlet form.

NFPA 268 has been submitted to letter ballot of the Technical Committee on Fire Tests, which consists of 24 voting members. The results of the balloting, after circulation of any negative votes, can be found in the report.

Report VI: The Committee proposes for adoption, a complete revision to NFPA 269, Standard Test Method for Developing Toxic Potency Data for Use in Fire Hazard Modeling, 2000 edition. NFPA 269-2000 is published in Volume 7 of the 2004/2005 National Fire Codes and in separate pamphlet form.

NFPA 269 has been submitted to letter ballot of the **Technical Committee on Fire Tests**, which consists of 24 voting members. The results of the balloting, after circulation of any negative votes, can be found in the report.

Report VII: The Committee proposes for adoption, a complete revision to NFPA 287, Standard Test Methods for Measurement of Flammability of Materials in Cleanrooms Using a Fire Propagation Apparatus (FPA), 2001 edition. NFPA 287-2001 is published in Volume 7 of the 2004/2005 National Fire Codes and in separate pamphlet form.

NFPA 287 has been submitted to letter ballot of the Technical Committee on Fire Tests, which consists of 24 voting members. The results of the balloting, after circulation of any negative votes, can be found in the report.

Report VIII: The Committee proposes for adoption, a reconfirmation to NFPA 288, Standard Methods of Fire Tests of Floor Fire Door Assemblies Installed Hoirzontally in Fire Resistance—Rated Floor Systems, 2001 edition. NFPA 288-2001 is published in Volume 7 of the 2004/2005 National Fire Codes and in separate pamphlet form.

NFPA 288 has been submitted to letter ballot of the Technical Committee on Fire Tests, which consists of 24 voting members. The results of the balloting, after circulation of any negative votes, can be found in the report.

258-1 Log #CP2

Final Action: Accept

(Entire Document)

SUBMITTER: Technical Committee on Fire Tests

RECOMMENDATION: The committee recommends the withdrawal of NFPA 258, Recommended Practice for Determining Smoke Generation of Solid Materials.

SUBSTANTIATION: In its current form NFPA 258 cannot be used as a mandatory reference. ASTM E662 is similar to NFPA 258 and is referenced in numerous regulator documents. NFPA 258 includes the caviat that it is for research purposes only and it is written as a Recommended Practice without enforceable language. In light of current harmonization efforts regarding fire test standards with ASTM and UL, the committee finds no compelling reason to revise NFPA 258 into a standard particularly when a similar test method

maintained by ASTM currently exits.

COMMITTEE MEETING ACTION: Accept

NUMBER ELIGIBLE TO VOTE: 24

BALLOT RESULTS: Affirmative: 20 Negative: 1

BALLOT NOT RETURNED: 3 GRIFFITH, SUMATHIPALA, WILLSE **EXPLANATION OF NEGATIVE:**

HIRSCHLER: I believe that the NFPA Technical Committee on Fire Tests should retain a voice in the process of fire test development. NFPA 258 is a fire test that is technically equivalent to ASTM E 662 and that test is widely used throughout the world. This document should have been revised to make it a standard as it has always been rather than withdrawing it. The rationale for identifying this test method as particularly flawed is flawed itself, as this test method is extensively used. Many of its flaws can also be assigned to other fire test methods.

258-2 Log #4

Final Action: Reject

(Entire Document)

SUBMITTER: Marcelo M. Hirschler, GBH International

RECOMMENDATION: Develop a complete revision of NFPA 258 that includes all necessary changes to update the document both technically and with regard to Manual of Style.

SUBSTANTIATION: This proposal should ensure that all sections of NFPA 258 are available for comments.

COMMITTEE MEETING ACTION: Reject

COMMITTEE STATEMENT: See Committee Proposal 258-1 (Log #CP2).

NUMBER ELIGIBLE TO VOTE: 24
BALLOT RESULTS: Affirmative: 20 Negative: 1

BALLOT NOT RETURNED: 3 GRIFFITH, SUMATHIPALA, WILLSE

EXPLANATION OF NEGATIVE:

HIRSCHLER: See my Explanation of Negative on 258-1.

258-3 Log #3

Final Action: Reject

SUBMITTER: Marcelo M. Hirschler, GBH International **RECOMMENDATION:** Revise text as follows:

2.1* General. The apparatus should be essentially as shown in Figures 2.1(a) and (b) Figure 2.1. It should include the components given in Sections 2.2 through $\overline{2.11}$.

Renumber Figure 2.1(b) as Figure 2.1 and delete Figure 2.1(a). **SUBSTANTIATION:** The photograph in Figure 2.1(a) is of a commercial apparatus and is not descriptive of all such equipment being sold now. For information purposes, a photograph of a commercial apparatus on the market in the year 2004 is shown below. It is best to eliminate all such photographs

COMMITTEE MEETING ACTION: Reject

COMMITTEE STATEMENT: See Committee Proposal 258-1 (Log #CP2).

NUMBER ELIGIBLE TO VOTE: 24

BALLOT RESULTS: Affirmative: 20 Negative: 1

BALLOT NOT RETURNED: 3 GRIFFITH, SUMATHIPALA, WILLSE

EXPLANATION OF NEGATIVE:

HIRSCHLER: See my Explanation of Negative on 258-1.

258-4 Log #2 (A.1.1 (New)) Final Action: Reject

Final Action: Reject

SUBMITTER: Marcelo M. Hirschler, GBH International **RECOMMENDATION:** Add new text to read as follows:

1.1* Scope

A.1.1 ASTM has developed a similar test apparatus and procedure, and its designation is ASTM E 662, Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials.

Add a reference to ASTM E 662 among referenced ASTM standards.

SUBSTANTIATION: This is just a simple clarification.

COMMITTEE MEETING ACTION: Reject

COMMITTEE STATEMENT: See Committee Proposal 258-1 (Log #CP2).

NUMBER ELIGIBLE TO VOTE: 24

BALLOT RESULTS: Affirmative: 20 Negative: 1

BALLOT NOT RETURNED: 3 GRIFFITH, SUMATHIPALA, WILLSE

EXPLANATION OF NEGATIVE:

HIRSCHLER: See my Explanation of Negative on 258-1.

258-5 Log #1 (A.1.1.2 (New))

SUBMITTER: Marcelo M. Hirschler, GBH International **RECOMMENDATION:** Add new text as follows:

1.1.2* Measurement is made of the attenuation of a light beam by the suspended solid or liquid particles - that is, smoke - that accumulate within a closed chamber. The smoke is due to either nonflaming, pyrolytic decomposition or flaming combustion of a relatively small sample of material. The radiant heat source is an electric furnace. NFPA 270, Standard Test Method for Measurement of Smoke Obscuration Using a Conical Radiant Source in a Single Closed Chamber, has subsequently been developed using an improved-design radiant heat source within the same closed chamber.

A.1.1.2 NFPA 270 is technically equivalent to ASTM E 1995, Standard Test Method for Measurement of Smoke Obscuration Using a Conical Radiant Source in a Single Closed Chamber, with the Test Specimen Oriented Horizontally, and to ISO 5659-2, .Determination of Specific Optical Density by a Single-Chamber Test

Add a reference to ASTM E 1995 among referenced ASTM standards and to ISO 5659-2 among ISO referenced standards.

SUBSTANTIATION: All three test methods, NFPA 270, ASTM E 1995 and ISO 5659-2, are referenced, but there is no explanation that they are equivalent.

COMMITTEE MEETING ACTION: Reject
COMMITTEE STATEMENT: See Committee Proposal 258-1 (Log #CP2). NUMBER ELIGIBLE TO VOTE: 24

BALLOT RESULTS: Affirmative: 20 Negative: 1

BALLOT NOT RETURNED: 3 GRIFFITH, SUMATHIPALA, WILLSE **EXPLANATION OF NEGATIVE:**

HIRSCHLER: See my Explanation of Negative on 258-1.

