NFPA

Guide on Methods for Evaluating Potential for Room Flashover

2021



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NFPA® 555

Guide on

Methods for Evaluating Potential for Room Flashover

2021 Edition

This edition of NFPA 555, *Guide on Methods for Evaluating Potential for Room Flashover*, was prepared by the Technical Committee on Hazard and Risk of Contents and Furnishings. It was issued by the Standards Council on October 5, 2020, with an effective date of October 25, 2020, and supersedes all previous editions.

This edition of NFPA 555 was approved as an American National Standard on October 25, 2020.

Origin and Development of NFPA 555

This guide was the first document prepared by the Technical Committee on Hazard and Risk of Contents and Furnishings. The 1996 edition was the first edition, developed in recognition that life safety and property protection can be enhanced by preventing the occurrence of flashover or, at least, by decreasing its probability.

The 2000 edition represented a reconfirmation of the 1996 edition.

The 2009 edition contained a small addition to Chapter 9 for individual fuel packages and minor revisions throughout the document. Annex B was completely revised to provide more up-to-date information on room fire models.

The 2013 edition added references in Chapter 9 to NFPA 289, Standard Method of Fire Test for Individual Fuel Packages, and to NFPA 556, Guide on Methods for Evaluating Fire Hazard to Occupants of Passenger Road Vehicles, for use in estimating heat release rates.

The 2017 edition adds new language to Chapter 9 regarding the heat release rates of electrical and optical fiber cables, which were obtained from vertical cable tray tests and cone calorimeter test methods. Additional language in Chapter 9 references new studies on determining the typical heat release curve for residential fires.

The 2021 edition includes the addition of a test method required for materials of low heat release. Additional fire scenarios to be considered for tightly closed compartments have been provided. New definitions were added to clarify concepts and provide further considerations for hazards including identification of additional fire spread mechanisms and fuel loads that contribute to the fire.

Technical Committee on Hazard and Risk of Contents and Furnishings

Steven D. Wolin, Chair
Reliable Automatic Sprinkler Company, Inc., SC [M]

Farid Alfawakhiri, American Iron and Steel Institute, IL [M]

Craig L. Beyler, JENSEN HUGHES, MD [SE]

Rep. JENSEN HUGHES

David A. Boverman, NSW Rural Fire Service, Australia [E]

Elizabeth C. Buc, Fire and Materials Research Laboratory, LLC, MI [RT]

David G. Bueche, Hoover Treated Wood Products, CO [M]

Michael T. Burr, Safety Engineering Laboratories, Inc., MI [RT]

Cam Cope, Auto Fire and Safety Consultants, TX [SE]

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

Jason Daniels, Code Consultants, Inc., MO [SE]

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

Rep. FM Global

Jonathan Hernandez, Boston Fire Department, MA [U]

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

William Jeffrey Ivans, Verisk/Insurance Services Office, NJ [I]

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

Sergei V. Levchik, Israel Chemicals Ltd. (ICL-IP), NY [M]

James R. Richardson, Lisle Woodridge Fire District, IL [E]

Jeffrey Santrock, General Motors Company, MI [M]

Rep. Alliance of Automobile Manufacturers

Dwayne E. Sloan, UL LLC, NC [RT]

Peter J. Willse, AXA XL/Global Asset Protection Services, LLC, CT [I]

Alternates

Timothy Earl, GBH International, MI [SE]

(Alt. to Marcelo M. Hirschler)

William Randall Edwards, Alliance of Automobile Manufacturers, MI [M]

(Alt. to Jeffrey Santrock)

John A. Frank, Global Asset Protection Services, LLC, GA [I] (Alt. to Peter J. Willse)

Xianxu (Sherri) Hu, Verisk Analytics/Insurance Services Office, Inc., NJ [I]

(Alt. to William Jeffrey Ivans)

Nestor R. Iwankiw, JENSEN HUGHES, IL [SE]

(Alt. to Craig L. Beyler)

Joel E. Sipe, Exponent, Inc., CA [SE] (Voting Alt.)

Jerry W. Wallace, Safety Engineering Laboratories, Inc., MI [RT] (Alt. to Michael T. Burr)

Shaohua Xia, Fire and Rescue New South Wales, Australia [E] (Alt. to David A. Boverman)

Baran Ozden, NFPA Staff Liaison

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

NOTE: Membership on a committee shall not in and of itself constitute an endorsement of the Association or any document developed by the committee on which the member serves.

Committee Scope: This committee shall have primary responsibility for documents on fire hazard calculation procedures for use by other committees in writing provisions to control the fire hazards of contents and furnishings. This committee shall also provide guidance and recommendations to committees in assessing the fire hazard of contents and furnishings. It shall establish classification and rating systems, request the development and standardization of appropriate fire tests, and identify and encourage necessary research as it relates to the fire hazards of contents and furnishings. It shall act in a liaison capacity between NFPA and the committees of other organizations with respect to the hazard of contents and furnishings.

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