



NATIONAL FIRE PROTECTION ASSOCIATION

The leading information and knowledge resource on fire, electrical and related hazards

AGENDA

NFPA Technical Committee on Assembly Occupancies (SAF-AXM) NFPA 102 First Draft Meeting (F2025)

February 28, 2024
2:00 p.m. – 4:00 p.m. (ET)

Microsoft Teams Remote Meeting
To join the meeting, please contact jyee@nfpa.org

- 1. Call to order.** J. Lambert.
- 2. Introductions.** See committee roster attached.
- 3. Chair report.** J. Lambert.
- 4. Staff liaison report.** G. Harrington.
- 5. Previous meeting minutes.** August 8, 2022, Microsoft Teams remote meeting. See attached.
- 6. NFPA 102 First Draft.**
 - a. **Public Inputs.** See attached.
 - b. **Staff-developed DRAFT First Revisions – reference publications and extract updates.** See attached.
- 7. Task group updates.**
 - a. **“Special assembly occupancies” task group.** F. Babson.
 - b. **Crowd manager task group.** (Task group chair vacant.)
 - c. **Festival seating task group.** H. Hansen.
- 8. Other business.**
- 9. Future meetings.** NFPA 101/5000 A2026 First Draft Meeting: July 16, 2024, location TBD.
- 10. Adjournment.**

Address List No Phone

02/22/2024
Gregory E. Harrington
SAF-AXM

Assembly Occupancies

Safety to Life

Josh Lambert	U 07/29/2013	Gregory E. Harrington	2/3/2016
Chair	SAF-AXM	Secretary (Staff-Nonvoting)	SAF-AXM
University of Texas at Austin 304 East 24th Street Suite 202AD Mail Code C2600 Austin, TX 78712		National Fire Protection Association One Batterymarch Park Quincy, MA 02169-7471	
Mohammed Alhajri	E 04/02/2020	Frederick Augustus Babson	IM 04/02/2020
Principal	SAF-AXM	Principal	SAF-AXM
Qatar Civil Defense 60 Alrayyan Street Doha, DOHA 97920 Qatar		Babson Industries LLC 10770 Cypress Avenue Hesperia, CA 92345	
Laura Bennett-Hourigan	U 08/11/2020	George D. Bushey	SE 04/05/2001
Principal	SAF-AXM	Principal	SAF-AXM
Walt Disney World Parks & Resorts 5608 Thomas Square Drive Winter Garden, FL 34787		Ewing Cole Federal Reserve Bank Building 100 N. 6th Street Philadelphia, PA 19106-1590	
Eric Center	E 08/09/2012	William Conner	SE 1/1/1987
Principal	SAF-AXM	Principal	SAF-AXM
Cedar Hammock Fire Rescue Fire Marshal 5200 26th Street West Bradenton, FL 34207 Florida Fire Marshals & Inspectors Association Alternate: Shawn M. Hanson		Bill Conner Associates LLC 15160 Valley Drive Clayton, NY 13624 American Society of Theater Consultants	
Michael Connor	M 04/14/2021	David Cook	SE 1/17/1997
Principal	SAF-AXM	Principal	SAF-AXM
Champion Fire Protection 825 Wheaton Street Savannah, GA 31401 Automatic Fire Alarm Association, Inc. Alternate: Ryan Sandler		Ralph Gerdes Consultants, LLC 5510 South East Street Suite E Indianapolis, IN 46227	
Peter S. Cutrer	SE 12/07/2022	Nicholas A. Dawe	E 08/23/2023
Principal	SAF-AXM	Principal	SAF-AXM
7Cs Consulting 238 Granny Kent Pond Road Shapleigh, ME 04076		Cobb County Fire Marshal's Office 1595 County Services Parkway Marietta, GA 30008 International Fire Marshals Association	
Nils Deacon	I 11/30/2016		
Principal	SAF-AXM		
Mutual Service Office, Inc. 1108 Morris Avenue Point Pleasant, NJ 08742			

Address List No Phone

02/22/2024
Gregory E. Harrington
SAF-AXM

Assembly Occupancies

Safety to Life

Joel Zachary Edwards	E 12/07/2022	Donald G. Goosman	SE 12/08/2015
Principal Reedy Creek Improvement District Emergency Services 651 Buena Vista Drive Lake Buena Vista, FL 32830	SAF-AXM	Principal Wiss, Janney, Elstner Associates, Inc. 330 Pfingsten Road Northbrook, IL 60062	SAF-AXM
Kevin Ryan Hall	IM 04/12/2022	Harold C. Hansen	SE 10/28/2008
Principal American Fire Sprinkler Association (AFSA) 3206 Fait Avenue Baltimore, MD 21224 Alternate: John August Denhardt	SAF-AXM	Principal Venue Management Consultants Group, LLC 7414 North Sheridan Road Chicago, IL 60626-2012	SAF-AXM
Stephen C Hesson	E 08/08/2019	David W. Hollinger	U 03/03/2014
Principal Gainesville Fire Rescue 1025 NE 13th Street Gainesville, FL 32608 International Fire Marshals Association	SAF-AXM	Principal Drexel University 3201 Arch Street, Suite 350 Philadelphia, PA 19104-2756	SAF-AXM
Kevin D. Morin	U 08/17/2018	Guillermo Antonio Oviedo Vela	U 08/24/2021
Principal Code Consultants, Inc. 215 West 40th Street, Floor 10 New York, NY 10018 National Association of Theatre Owners Alternate: Christopher Prueher	SAF-AXM	Principal The Church of Jesus Christ of Latter-Day Saints 150 E. North Temple Salt Lake City, UT 84150	SAF-AXM
Van Hoover Patterson	E 08/17/2017	Jake Pauls	SE 4/1/1993
Principal State Of Florida NE Region Jacksonville Office 921 North Davis Building B, Suite # 270 Jacksonville, FL 32209	SAF-AXM	Principal Jake Pauls Consulting Services 255 Glenlake Avenue Suite 2207 Toronto, ON M6P 1G2 Canada	SAF-AXM
Ryan Lee Peterson	M 08/17/2017	Mitchell Ramseur	SE 08/24/2021
Principal Wayne Automatic Fire Sprinklers, Inc. Branch Manager 4683 Laredo Avenue Fort Myers, FL 33905 National Fire Sprinkler Association Alternate: David Kurasz	SAF-AXM	Principal M. Ramseur & Associates, PLLC. 925B Peachtree Street NE Suite 2041 Atlanta, GA 30309	SAF-AXM
Ed Roether	SE 7/20/2000		
Principal Ed Roether Consulting LLC 25950 Mission Belleview Louisburg, KS 66053	SAF-AXM		

Address List No Phone

02/22/2024
Gregory E. Harrington
SAF-AXM

Assembly Occupancies

Safety to Life

Karl G. Ruling	U 4/5/2001	Charles J. Schweitzer	E 03/05/2012
Principal Entertainment Services & Technology Association 630 Ninth Avenue, Suite 609 New York, NY 10036 US Institute for Theatre Technology, Inc. Alternate: Jerrold S. Gorrell	SAF-AXM	Principal City of Lincoln Bureau of Fire Prevention 555 South 10th Street Lincoln, NE 68508 Alternate: Megan Talbott	SAF-AXM
Philip R. Sherman	SE 1/1/1989	Jeffrey Shirey	E 08/03/2016
Principal Philip R. Sherman, PE 444 Wilmot Center Road PO Box 216 Elkins, NH 03233-0216	SAF-AXM	Principal University of Maryland - Office of the Fire Marshal Office of Environmental Safety 2880 Chance Court Huntingtown, MD 20639	SAF-AXM
Stephen Patrick Stiller	M 08/10/2022	Elbert R. Thomas, Jr.	E 03/05/2012
Principal Siemens 3142 W. George Street Chicago, IL 60618 National Electrical Manufacturers Association Alternate: Michael Stone	SAF-AXM	Principal New Orleans Fire Department 317 Decatur Street New Orleans, LA 70130-1023 Alternate: Brad Everett	SAF-AXM
Toby J. White	SE 08/09/2012	John August Denhardt	IM 08/11/2020
Principal Arup 955 Massachusetts Avenue Suite 402 Cambridge, MA 02139-3180	SAF-AXM	Alternate American Fire Sprinkler Association (AFSA) 1410 East Renner Road Suite 150 Richardson, TX 75082 American Fire Sprinkler Association Principal: Kevin Ryan Hall	SAF-AXM
Brad Everett	E 08/24/2021	Jerrold S. Gorrell	U 4/3/2003
Alternate Louisiana State Fire Marshal 2230 S. MacArthur Drive Suite 6 Alexandria, LA 71301 Principal: Elbert R. Thomas, Jr.	SAF-AXM	Alternate Theatre Safety Programs 15514 East Bumblebee Lane Fountain Hills, AZ 85268 US Institute for Theatre Technology, Inc. Principal: Karl G. Ruling	SAF-AXM
Shawn M. Hanson	E 08/03/2016	David Kurasz	M 08/11/2014
Alternate Greater Naples Fire Rescue District 2700 Horseshoe Drive North Naples, FL 34104 Florida Fire Marshals & Inspectors Association Principal: Eric Center	SAF-AXM	Alternate New Jersey Fire Sprinkler Advisory Board 2 King Arthur Court, Suite #1 North Brunswick, NJ 08902-3381 National Fire Sprinkler Association Principal: Ryan Lee Peterson	SAF-AXM

Address List No Phone

02/22/2024

Gregory E. Harrington

SAF-AXM

Assembly Occupancies

Safety to Life

Christopher Prueher	U 08/24/2021	Ryan Sandler	M 08/24/2021
Alternate	SAF-AXM	Alternate	SAF-AXM
Code Consultants, Inc.		ADT Commercial LLC./Red Hawk Fire Security	
2301 Rosecrans Avenue		5318 Bella Vista Street	
Suite 2155		Santee, CA 92071	
El Segundo, CA 90245		Automatic Fire Alarm Association, Inc.	
National Association of Theatre Owners		Principal: Michael Connor	
Principal: Kevin D. Morin			
Michael Stone	M 08/23/2023	Megan Talbott	E 12/02/2020
Alternate	SAF-AXM	Alternate	SAF-AXM
Johnson Controls		City of Lincoln	
558 E. Deering Road		Bureau of Fire Prevention: Fire Plan Review Engineer	
Deering, NH 03244		555 South 10th Street	
National Electrical Manufacturers Association		Set 203	
Principal: Stephen Patrick Stiller		Lincoln, NE 68508	
		Principal: Charles J. Schweitzer	
Gregory E. Harrington	2/3/2016		
Staff Liaison	SAF-AXM		
National Fire Protection Association			
One Batterymarch Park			
Quincy, MA 02169-7471			



NATIONAL FIRE PROTECTION ASSOCIATION

The leading information and knowledge resource on fire, electrical and related hazards

MINUTES

NFPA Building Code/Safety to Life Technical Committee on Assembly Occupancies (BLD/SAF-AXM) NFPA 101/5000 Second Draft Meeting (A2023)

August 8, 2022

Microsoft Teams Meeting

1. **Call to order.** The meeting was called to order by Chair Josh Lambert at 11:01 a.m. (EDT) on August 8, 2022.
2. **Introductions.** Staff Liaison Gregory Harrington called the roll of committee members. See attached for attendance.
3. **Chair report.** The chair welcomed and thanked the committee for attending, indicated the primary purpose of the meeting was to prepare the second drafts of the 2024 editions of NFPA 101 and NFPA 5000, and reviewed the use of the “raise hand” feature in Teams to be recognized and for voting.
4. **Staff liaison report.** Staff added his welcome and thanks and delivered a presentation on the NFPA second draft meeting process.
5. **Previous meeting minutes.** The July 28, 2021 first draft meeting minutes were approved as submitted.
6. **Review Correlating Committee on Building Code previous meeting minutes.** The committee reviewed the BLD-AAC minutes, including the items directed to BLD-AXM and all technical committees.
 - a. NFPA 13, 13D, 13R references: No action required on NFPA 5000.
 - b. Damper terminology task group recommendations: No action required on NFPA 5000.
 - c. Use of “draftstop” versus “draft stop”: No action required on NFPA 5000.
 - d. Modular rooms/sleep pods: No action required on NFPA 5000.
7. **Review Correlating Committee on Safety to Life previous meeting minutes.** See attached, p. X.
 - a. NFPA 13, 13D, 13R references: No action required on NFPA 101.
 - b. Damper terminology task group recommendations: No action required on NFPA 101.
 - c. Use of “draftstop” versus “draft stop”: No action required on NFPA 101.
 - d. Modular rooms/sleep pods: See the second draft report for actions on related public comments.

- e. SAF-AXM is notified of potential revisions to egress requirements for assembly occupancies in mall structures via CI-6604 by SAF-MER: No action was taken by SAF-MER, so no action required by this committee on NFPA 101.

8. Task group reports.

- a. “Special assembly occupancies” task group – F. Babson. No report; the task group has been retained on the agenda.
- b. Crowd manager task group – V. Quintero. No report; the task group has been retained on the agenda.
- c. Festival seating task group – H. Hansen. The task group convened and developed a public comment on the appendix note to the definition of ‘festival seating’ in NFPA 101. See the Second Draft Report for the committee action. The task group has been retained on the agenda. The following committee members volunteered to be added to the task group: G. Bushey; W. Conner; B. Everett; G. Oviedo Vela.

9. NFPA 101 Second Draft.

- a. **Referenced publications.** The committee reviewed the reference publication updates by the TC on Fundamentals. No action.
- b. **Extracts.** No action required.
- c. **Public Comments.** The committee reviewed and acted on the NFPA 101 public comments. See the NFPA 101 Second Draft Report. The chair appointed a task group on carbon monoxide detection to further study the subject in PC-169 and develop recommendations for review at the committee’s first draft meeting for the 2027 edition of NFPA 101. Task group members: F. Babson, task group chair; L. Bennett-Hourigan; M. Connor; K. Hauschildt; G. Oviedo Vela; P. Sherman; J. Shirey.
- d. **Committee Inputs.** The committee reviewed the committee inputs. No action.

10. NFPA 5000 Second Draft.

- a. **Referenced publications.** The committee reviewed the reference publication updates by the TC on Fundamentals. No action.
- b. **Extracts.** The committee developed a second revision to update one extract citation. See the Second Draft Report for the committee action.
- c. **Public Comments.** No public comments on NFPA 5000 were submitted.
- d. **Committee Inputs.** The committee reviewed the committee input. No action.

11. Other business.

- a. A motion passed directing staff to create second revisions on NFPA 5000 to coordinate with revisions on NFPA 101 where appropriate.
- b. J. Pauls provided a brief overview of his proposed methodology to provide access to assembly seating from behind the seats, rather than from the front of the seats. A presentation with graphics will be forwarded to the committee for future consideration.

12. Future meetings. Staff reported the committee will next meet to prepare the first drafts of the 2027 editions of NFPA 101 and NFPA 5000 about two years from now (2024).

13. Adjournment. The meeting adjourned at 3:45 p.m. (EDT) on August 8, 2022.

Attendees:

Committee Members

X	Lambert, Josh	Chair	University of Texas at Austin
X	Harrington, Gregory	Secretary (Staff-	National Fire Protection Association
	Alhajri, Mohammed	Principal	Qatar Civil Defense
X	Babson, Frederick	Principal	Babson Industries LLC
X	Bennett-Hourigan, Laura	Principal	Walt Disney World Parks & Resorts
X	Bushey, George	Principal	Ewing Cole
X	Center, Eric	Principal	Florida Fire Marshals & Inspectors
X	Conner, William	Principal	American Society of Theater Consultants
X	Connor, Michael	Principal	Automatic Fire Alarm Association, Inc.
X	Cook, David	Principal	Ralph Gerdes Consultants, LLC
X	Deacon, Nils	Principal	Mutual Service Office, Inc.
X	Goosman, Donald	Principal	Wiss, Janney, Elstner Associates, Inc.
X	Hall, Kevin	Principal	American Fire Sprinkler Association
X	Hansen, Harold	Principal	Venue Management Consultants Group,
X	Hesson, Stephen	Principal	International Fire Marshals Association
X	Hollinger, David	Principal	Drexel University
X	Humble, Jonathan	Principal	American Iron and Steel Institute
X	Morin, Kevin	Principal	National Association of Theatre Owners
X	Oviedo Vela, Guillermo	Principal	The Church of Jesus Christ of Latter-Day
	Patterson, Van	Principal	State Of Florida NE Region Jacksonville
X	Pauls, Jake	Principal	Jake Pauls Consulting Services
X	Peterson, Ryan	Principal	National Fire Sprinkler Association
X	Quinterno, Vincent	Principal	Rhode Island State Fire Marshal's Office
X	Ramseur, Mitchell	Principal	M. Ramseur & Associates, PLLC.
X	Roether, Ed	Principal	Ed Roether Consulting LLC
	Ruling, Karl	Principal	US Institute for Theatre Technology, Inc.
X	Schweitzer, Charles	Principal	City of Lincoln

X	Sherman, Philip	Principal	Philip R. Sherman, PE
X	Shirey, Jeffrey	Principal	University of Maryland - Office of the Fire
	Thomas, Elbert	Principal	New Orleans Fire Department
	Tubbs, Jeffrey	Principal	Arup
	Denhardt, John	Alternate	American Fire Sprinkler Association
X	Everett, Brad	Alternate	Louisiana State Fire Marshal
X	Gorrell, Jerrold	Alternate	US Institute for Theatre Technology, Inc.
X	Hanson, Shawn	Alternate	Florida Fire Marshals & Inspectors
	Kurasz, David	Alternate	National Fire Sprinkler Association
X	Prueher, Christopher	Alternate	National Association of Theatre Owners
X	Sandler, Ryan	Alternate	Automatic Fire Alarm Association, Inc.
	Talbott, Megan	Alternate	City of Lincoln
X	Washburn, Janet	Alternate	International Fire Marshals Association
X	White, Toby	Alternate	Arup

GUESTS:

Kris Hauschildt – Jenkins Foundation
Kenneth Isman – University of Maryland
Deirdre Leclair – SSOE/Stevens & Wilkinson
Steven Scandaliato – SDG
Stephen Stiller – Siemens

Total number in attendance: 38



Public Input No. 5-NFPA 102-2024 [Section No. 2.2]

2.2 NFPA Publications.

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

NFPA 10, *Standard for Portable Fire Extinguishers*, 2018 [edition](#).

NFPA 13, *Standard for the Installation of Sprinkler Systems*, 2019 [edition](#).

NFPA 18A, *Standard on Water Additives for Fire Control and Vapor Mitigation*, 2022 [edition](#)

NFPA 30, *Flammable and Combustible Liquids Code*, 2021 [edition](#).

NFPA 31, *Standard for the Installation of Oil-Burning Equipment*, 2020 [edition](#).

NFPA 54, *National Fuel Gas Code*, 2021 [edition](#).

NFPA 55, *Compressed Gases and Cryogenic Fluids Code*, 2020 [edition](#).

NFPA 58, *Liquefied Petroleum Gas Code*, 2020 [edition](#).

NFPA 70[®], *National Electrical Code*[®], 2020 [edition](#).

NFPA 72[®], *National Fire Alarm and Signaling Code*[®], 2019 [edition](#).

NFPA 90A, *Standard for the Installation of Air-Conditioning and Ventilating Systems*, 2021 [edition](#).

NFPA 90B, *Standard for the Installation of Warm Air Heating and Air-Conditioning Systems*, 2021 [edition](#).

NFPA 91, *Standard for Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Noncombustible Particulate Solids*, 2020 [edition](#).

NFPA 101[®], *Life Safety Code*[®], 2021 [edition](#).

NFPA 160, *Standard for the Use of Flame Effects Before an Audience*, 2021 [edition](#).

NFPA 211, *Standard for Chimneys, Fireplaces, Vents, and Solid Fuel-Burning Appliances*, 2019 [edition](#).

NFPA 400, *Hazardous Materials Code*, 2019 [edition](#).

NFPA 495, *Explosive Materials Code*, 2018 [edition](#).

NFPA 701, *Standard Methods of Fire Tests for Flame Propagation of Textiles and Films*, 2019 [edition](#).

NFPA 1126, *Standard for the Use of Pyrotechnics Before a Proximate Audience*, 2021 [edition](#).

NFPA 5000[®], *Building Construction and Safety Code*[®], 2021 [edition](#).

Statement of Problem and Substantiation for Public Input

NFPA 18A is a new classification of agents for manual and fixed applications as defined within that Standard. Applications shown in NFPA 18A Standard are covered within this Standard therefore these NFPA 18A agents should be referenced and included as viable fire protection solutions within this Standard.

From NFPA 18A , Chapter 4 - Uses and Limitation

4.1 General.

Water additive concentrates used in preventing combustible and flammable liquid vapor explosions, removing the flammability of combustible and flammable liquid spills, or extinguishing fires shall be tested and approved, classified, labeled, or listed by a third-party independent testing/listing organization acceptable to the authority having jurisdiction.

Submitter Information Verification

Submitter Full Name: Craig Leadbetter

Organization: Hazard Control Technologies

Street Address:

City:

State:

Zip:

Submittal Date: Thu Jan 04 16:32:52 EST 2024

Committee: SAF-AXM



Public Input No. 2-NFPA 102-2023 [New Section after 3.3.3]

Automatically and Electrically Operated Monitor Systems

Monitor assemblies designed to activate remotely or automatically through the use of electric motors.

Automatic systems typically consist of a flame detector, a monitor equipped with electric motors & a fire scanner, and a central control unit.

Statement of Problem and Substantiation for Public Input

The definition is in line with FM standard 1421 Standard for Fire Protection Monitor Assemblies. The definition will be referenced in Chapter 9 as an alternative means of protection.

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
<u>Public Input No. 3-NFPA 102-2023 [Section No. 9.5.1]</u>	

Submitter Information Verification

Submitter Full Name: James Lynch

Organization: The Fire Solutions Group

Street Address:

City:

State:

Zip:

Submittal Date: Tue Feb 07 12:46:41 EST 2023

Committee: SAF-AXM



Public Input No. 3-NFPA 102-2023 [Section No. 9.5.1]

9.5.1

Enclosed stadiums, arenas, and similar structures shall be protected throughout by an approved, electrically supervised automatic sprinkler system in accordance with NFPA 13 or a automatically *and electrically operated monitor system* , unless otherwise permitted by the following:

- (1) Where the ceiling or roof, whichever is lower, of the playing/activity area is more than 55 ft (16.7 m) above the floor, sprinklers or monitors shall not be required above the playing/activity area where permitted by the authority having jurisdiction.
- (2) Sprinklers or monitors shall not be required above seating areas that view the playing/activity area.

[5000:32.3.5.2]

Statement of Problem and Substantiation for Public Input

This change in the text would allow users of the code to utilize fire monitors listed to FM 1421 standard for fire protection monitor assemblies for the purpose of fire protection in tents and membrane structures. Monitor assemblies are already used for protection in arenas. The systems can be designed to provide equivalent or greater design densities to meet or exceed the protection requirements. The inclusion of monitors would provide flexibility to the design engineers who may be faced with installation issues where bracing and attachment to the structure is limited. Further more a recent FM Technical report entitled Reducing Water Demands with Innovative Fire Protection Solutions demonstrated the automatic water cannons could reduce the water necessary for control and extinguishment, making them a viable alternative for fire protection in these assemblies.

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
<u>Public Input No. 2-NFPA 102-2023 [New Section after 3.3.3]</u>	definition

Submitter Information Verification

Submitter Full Name: James Lynch
Organization: The Fire Solutions Group
Street Address:
City:
State:
Zip:
Submittal Date: Tue Feb 07 12:53:26 EST 2023
Committee: SAF-AXM



Public Input No. 4-NFPA 102-2024 [Section No. 9.5.2]

9.5.2

Any enclosed area shall be protected by an approved sprinkler system in accordance with NFPA 13 and/or NFPA 18A, unless such an area is one of the following:

- (1) Enclosed stadiums, arenas, and similar structures
- (2) Press boxes of less than 1000 ft² (93 m²)
- (3) Storage facilities of less than 1000 ft² (93 m²) if enclosed with minimum 1-hour fire-resistance-rated construction
- (4) Enclosed areas underneath grandstands or bleachers that comply with the exemptions of 5.9(1) or 5.9(2)

[5000:32.3.5.3]

Statement of Problem and Substantiation for Public Input

NFPA 18A is a new classification of agents for manual and fixed applications as defined within that Standard. Applications shown in NFPA 18A Standard are covered within this Standard therefore these NFPA 18A agents should be referenced and included as viable fire protection solutions within this Standard.

From NFPA 18A , Chapter 4 - Uses and Limitation

4.1 General.

Water additive concentrates used in preventing combustible and flammable liquid vapor explosions, removing the flammability of combustible and flammable liquid spills, or extinguishing fires shall be tested and approved, classified, labeled, or listed by a third-party independent testing/listing organization acceptable to the authority having jurisdiction.

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
Public Input No. 5-NFPA 102-2024 [Section No. 2.2]	

Submitter Information Verification

Submitter Full Name: Craig Leadbetter
Organization: Hazard Control Technologies
Street Address:
City:
State:
Zip:
Submittal Date: Thu Jan 04 16:31:14 EST 2024
Committee: SAF-AXM



First Revision No. 1-NFPA 102-2024 [Section No. 2.3.2]

2.3.2 ASTM Publications.

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

ASTM A153/A153M, *Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware*, 2016a.

ASTM D2898, *Standard Test Methods for Accelerated Weathering of Fire-Retardant-Treated Wood for Fire Testing*, 2010 (2017).

ASTM G155, *Standard Practice for Operating Xenon Arc ~~Light~~ Lamp Apparatus for Exposure of Non-Metallic Materials*, 2013 2021.

Submitter Information Verification

Committee: SAF-AXM

Submittal Date: Wed Feb 21 17:18:51 EST 2024

Committee Statement

Committee Statement: Reference publication update. ***DRAFT FIRST REVISION***

Response Message: FR-1-NFPA 102-2024



First Revision No. 2-NFPA 102-2024 [Section No. 2.3.3]

2.3.3 IAPMO Publications.

International Association of Plumbing and Mechanical Officials, 4755 E. Philadelphia Street, Ontario, CA 91761.

UMC, *Uniform Mechanical Code*, 2018 2021 .

Submitter Information Verification

Committee: SAF-AXM

Submittal Date: Wed Feb 21 17:20:43 EST 2024

Committee Statement

Committee Statement: Reference publication update. ***DRAFT FIRST REVISION***

Response Message: FR-2-NFPA 102-2024



First Revision No. 3-NFPA 102-2024 [Section No. 2.3.4]

2.3.4 Other Publications.

Merriam-Webster's Collegiate Dictionary, 11th edition, Merriam-Webster, Inc., Springfield, MA, 2003 2020 .

Submitter Information Verification

Committee: SAF-AXM

Submittal Date: Wed Feb 21 17:22:16 EST 2024

Committee Statement

Committee Statement: Reference publication update. ***DRAFT FIRST REVISION***

Response Message: FR-3-NFPA 102-2024



First Revision No. 4-NFPA 102-2024 [Section No. 2.4]

2.4 References for Extracts in Mandatory Sections.

NFPA 101[®], *Life Safety Code*[®], 2024 _ 2024 _ edition.

NFPA 5000[®], *Building Construction and Safety Code*[®], 2024 _ 2024 _ edition.

Submitter Information Verification

Committee: SAF-AXM

Submittal Date: Wed Feb 21 17:23:18 EST 2024

Committee Statement

Committee Statement: Reference publication/extract update. ***DRAFT FIRST REVISION***

Response Message: FR-4-NFPA 102-2024



First Revision No. 5-NFPA 102-2024 [Section No. 3.3.21]

3.3.21 Weathered-Membrane Material.

Membrane material that has been subjected to a minimum of 3000 hours in a weatherometer in accordance with ASTM G155, *Standard Practice for Operating Xenon Arc ~~Light~~ Lamp Apparatus for Exposure of ~~Non-Metallic~~ Materials*, or approved equivalent.
[101,- 2024 _ 2024]

Submitter Information Verification

Committee: SAF-AXM

Submittal Date: Wed Feb 21 17:32:56 EST 2024

Committee Statement

Committee Statement: Extract update. ***DRAFT FIRST REVISION***

Response Message: FR-5-NFPA 102-2024



First Revision No. 6-NFPA 102-2024 [Section No. 5.3]

5.3 Minimum Construction Requirements.

[5000:32.7.3]

5.3.1 –

Grandstands and bleachers shall be constructed of any one of the following materials:

- (1) Wood
- (2) Fire-retardant-treated wood
- (3) Noncombustible materials
- (4) Materials that exhibit a flame spread index not exceeding 200 and a smoke developed index not exceeding 450 when tested in accordance with ASTM E84, *Standard Test Method for Surface Burning Characteristics of Building Materials*, or UL 723, *Test for Surface Burning Characteristics of Building Materials* . [5000: 32.7.3.1]

5.3.2 –

Grandstands and bleachers shall be permitted to be of unlimited area when of Type I or Type II construction. [5000:32.7.3.4 2]

5.3.2 – 3 –

Grandstands and bleachers shall be permitted to be of Type III, Type IV, or Type V construction when designed in accordance with Section 5.7. [5000:32.7.3.2 3]

Submitter Information Verification

Committee: SAF-AXM

Submittal Date: Thu Feb 22 09:10:13 EST 2024

Committee Statement

Committee Statement: Extract update. ***DRAFT FIRST REVISION***

Response Message: FR-6-NFPA 102-2024



First Revision No. 7-NFPA 102-2024 [Section No. 5.9]

5.9 Spaces Underneath Grandstands.

Spaces underneath a grandstand shall be kept free of flammable or combustible materials, unless protected by an approved, electrically supervised automatic sprinkler system in accordance with NFPA 13 unless otherwise permitted by one of the following:

- (1) This requirement shall not apply to accessory uses of 300 ft² (27.9 m²) or less, such as ticket booths, toilet facilities, or concession booths where constructed of noncombustible, limited-combustible, or fire-resistive construction, in otherwise nonsprinklered facilities.
- (2) This requirement shall not apply to rooms that are enclosed in not less than 1-hour fire-resistance-rated construction, and are less than 1000 ft² (93 m²), in otherwise nonsprinklered facilities.

[5000:16.4.9 10 .5]

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First Revision No. 8-NFPA 102-2024 [Section No. 7.2.4]

7.2.4 Flame Resistance.

[5000:32.2.2.3]

7.2.4.1

All membrane structure fabric shall meet the requirements of Test Method 2 contained in NFPA 701. [5000:32.2.2.3.1]

7.2.4.2

—

All membrane structure fabric shall comply with the requirements of Chapter 16 of NFPA 701. [5000: 32.2.2.3.2]

7.2.4.3

The requirement of 7.2.4.1 shall not apply to plastic less than 20 mil (0.51 mm) in thickness located less than 30 ft (9.1 m) above any floor in greenhouses where occupancy by the general public is prohibited. [5000:32.2.2.3.2 3]

7.2.4.3 – 4

The authority having jurisdiction shall require one of the following as evidence that membrane structure fabric materials have the required flame resistance:

- (1) Certificate or other evidence of acceptance by an organization acceptable to the authority having jurisdiction
- (2) Report of tests made by other inspection authorities or organizations acceptable to the authority having jurisdiction

[5000:32.2.2.3.3 4]

7.2.4.4 – 5

Where required by the authority having jurisdiction, confirmatory field tests shall be conducted using test specimens from the original material affixed at the time of manufacture to the exterior of the structure. [5000:32.2.2.3.4 5]

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8.3.3

All tent fabric shall comply with the requirements of Chapter 16 of NFPA 701. [5000: 32.3.3.3]

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First Revision No. 10-NFPA 102-2024 [Section No. 8.3.3]

8.3.3 – 4

Where required by the authority having jurisdiction, confirmatory field tests shall be conducted using test specimens from the original material affixed at the time of manufacture to the exterior of the tent. [5000:32.3.3.3 4]

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First Revision No. 14-NFPA 102-2024 [Section No. A.3.3.2]

A.3.3.2 Air-Supported Structure.

A cable-restrained air-supported structure is one in which the uplift is resisted by cables or webbing that is anchored by various methods to the membrane or that might be an integral part of the membrane. An air-supported structure is not a tensioned-membrane structure. [5000:A.3.3.633 643 .4]

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First Revision No. 11-NFPA 102-2024 [Section No. A.3.3.3]

A.3.3.3 Assembly Occupancy.

Assembly occupancies might include the following:

- (1) Armories
- (2) Assembly halls
- (3) Auditoriums
- (4) Bowling lanes
- (5) Club rooms
- (6) College and university classrooms, 50 persons and over
- (7) Conference rooms
- (8) Courtrooms
- (9) Dance halls
- (10) Drinking establishments
- (11) Exhibition halls
- (12) Gymnasiums
- (13) Libraries
- (14) Mortuary chapels
- (15) ~~Motion picture theaters~~
- (16) Museums
- (17) Nightclubs
- (18) Passenger stations and terminals of air, surface, underground, and marine public transportation facilities
- (19) Places of religious worship
- (20) Pool rooms
- (21) Recreation piers
- (22) Restaurants
- (23) Skating rinks
- (24) Special amusement buildings, regardless of occupant load
- (25) Theaters

[5000:A.3.3.445 453 .2]

Assembly occupancies are characterized by the presence or potential presence of crowds with attendant panic hazard in case of fire or other emergency. They are generally open or occasionally open to the public, and the occupants, who are present voluntarily, are not ordinarily subject to discipline or control. Such buildings are ordinarily ~~occupied by able-bodied persons and are~~ not used for

sleeping purposes. Special conference rooms, snack areas, and other areas incidental to, and under the control of, the management of other occupancies, such as offices, fall under the 50-person limitation. [**5000**:A.3.3.445 453 .2]

Restaurants and drinking establishments with an occupant load of fewer than 50 persons should be classified as mercantile occupancies. [**5000**:A.3.3.445 453 .2]

Occupancy of any room or space for assembly purposes by fewer than 50 persons in another occupancy, and incidental to such other occupancy, should be classified as part of the other occupancy and should be subject to the provisions applicable thereto. [**5000**: A.3.3.453.2]

For special amusement buildings, see 16.4.9 of NFPA 5000 . [**5000**: A.3.3.453.2]

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First Revision No. 13-NFPA 102-2024 [Section No. A.3.3.10]

A.3.3.10 Grandstand.

Where the term *grandstand* is preceded by an adjective denoting a material, it refers to a grandstand the essential members of which, exclusive of seating, are of the material designated. [5000:A.3.3.290 293]

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First Revision No. 15-NFPA 102-2024 [Section No. A.3.3.12]

A.3.3.12 Means of Egress.

A means of egress comprises the vertical and horizontal travel and includes intervening room spaces, doorways, hallways, corridors, passageways, balconies, ramps, stairs, elevators, enclosures, lobbies, escalators, horizontal exits, courts, and yards. [5000:A.3.3.412 418]

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First Revision No. 16-NFPA 102-2024 [Section No. A.3.3.20]

A.3.3.20 Tent.

A tent might also include a temporary tensioned-membrane structure. [5000:A.3.3.649 [659](#)]

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First Revision No. 17-NFPA 102-2024 [Section No. B.3]

B.3 References for Extracts in Informational Sections.

NFPA 101[®], *Life Safety Code*[®], 2021- 2024 edition.

NFPA 5000[®], *Building Construction and Safety Code*[®], 2021- 2024 edition.

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