



NATIONAL FIRE PROTECTION ASSOCIATION

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

AGENDA

NFPA Building Code/Safety to Life Technical Committee on Building Service and Fire Protection Equipment (BLD/SAF-BSF) NFPA 101 and NFPA 5000 First Draft Meeting (A2023)

July 15 & 16, 2021
11:00 a.m. – 5:00 p.m. (ET)

Microsoft Teams Web Conference
To join the meeting, please contact kcarey@nfpa.org

- 1. Call to order.** Chair Raymond A. Grill.
- 2. Introductions.** See page 2.
- 3. Chair report.** Raymond A. Grill
- 4. Staff liaison report.** Baran Ozden
 - a. Presentation on first draft meeting process. See page 6.
 - b. Reference publication update process.
- 5. Previous meeting minutes.** See page 24.
- 6. Correlating committee direction for 2024 editions.**
 - a. Correlating committee meeting minutes. See page 27.
 - i. CC Minute Item a: TC scope review
 - ii. CC Minute Item b: Integrated system testing
- 7. Task group reports.**
 - a. **Sprinkler Supervision.** Jeff Hugo
- 8. Public Input (PI) review.**
 - a. NFPA 101 PIs. See page 36.
 - b. NFPA 5000 PIs. See page 93.
- 9. Other business.**
- 10. Future meetings.**
- 11. Adjournment.**

Address List No Phone

06/10/2021
Baran Ozden
BLD-BSF

Building Service and Fire Protection Equipment

Building Code

Raymond A. Grill	SE 03/02/2010	Baran Ozden	8/12/2020
Chair Ray Grill Consulting PLLC 13002 Graphite Court Clifton, VA 20124 Alternate: Kelly Finzel	BLD-BSF	Secretary (Staff-Nonvoting) National Fire Protection Association One Batterymarch Park Quincy, MA 02169-7471	BLD-BSF
Harry L. Bradley	E 1/1/1991	Kevin L. Brinkman	M 08/17/2015
Principal Maryland State Fire Marshals Office 5 West Riding Drive Bel-Air, MD 21014 International Fire Marshals Association	BLD-BSF	Principal National Elevator Industry, Inc. 925 West Center Street Eureka, IL 61530-9505 National Elevator Industry Inc. Alternate: Marc Mueller	BLD-BSF
Flora F. Chen	E 10/20/2010	Stephen E. Dale	I 08/09/2012
Principal Hayward Fire Department, California 777 B Street Hayward, CA 94541	BLD-BSF	Principal Cincinnati Insurance Company 6200 South Gilmore Road Fairfield, OH 45014-5141 Alternate: Justin Yates	BLD-BSF
Soph R. Davenberry	L 04/14/2021	Paul M. Donga	E 7/20/2000
Principal National Energy Management Institute Committee (NEMIC) 3180 Fairview Park Drive Suite 400 Falls Church, VA 22042	BLD-BSF	Principal Boston Fire Department 115 Southampton Street Boston, MA 02118	BLD-BSF
Jeffrey M. Hugo	M 7/26/2007	Joseph M. Jardin	C 1/1/1991
Principal National Fire Sprinkler Association, Inc. 1088 West Borton Road Essexville, MI 48732-1541	BLD-BSF	Principal Fire Department City of New York (FDNY) 16 Dexter Court Hauppauge, NY 11788 NFPA Fire Service Section Alternate: Greg Gottlieb	BLD-BSF
Michael Kellett	E 7/26/2007	David A. Killian	U 8/2/2010
Principal State of Connecticut Office of the State Fire Marshal 450 Columbus Boulevard Hartford, CT 06103 Connecticut State Fire Marshal/Connecticut Fire Marshals Association Alternate: Ignatius Kapalczynski	BLD-BSF	Principal Walt Disney Parks & Resorts MAPO Building 1401 Flower Street Glendale, CA 91201	BLD-BSF

Address List No Phone

06/10/2021
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BLD-BSF

Building Service and Fire Protection Equipment

Building Code

Richard L. Klinker	SE 1/1/1981	Peter A. Larrimer	U 4/1/1994
Principal Klinker & Associates, Inc. 2355 Davidsonville Road Gambrills, MD 21054 Alternate: Claudia Hagood	BLD-BSF	Principal US Department of Veterans Affairs 1805 Constitution Boulevard Valencia, PA 16059 Alternate: Peter Leszczak	BLD-BSF
Mark Larson	U 04/02/2020	Jeffrey Lascar	IM 08/11/2020
Principal Mark Larson and Associates LLC 1574 N. Ellington Way Eagle, ID 83616 National Disability Rights Network	BLD-BSF	Principal Comcast 20 Little Brook Court Rock Tavern, NY 12575-5102 Electronic Security Association	BLD-BSF
Daniel J. Lazarz	SE 8/9/2011	Scott E. Panowitz	M 03/05/2012
Principal EYP Architecture & Engineering 470 Atlantic Avenue, 7th Floor Boston, MA 02210-2228	BLD-BSF	Principal BFPE International 7512 Connelley Drive Hanover, MD 21076 Fire Suppression Systems Association	BLD-BSF
David Pursel	IM 12/06/2019	Ray F. Reed	L 04/11/2018
Principal Berkshire Systems Group Inc. 411 Greenhedge Drive Lancaster, PA 17603	BLD-BSF	Principal Highrise Fire Consultants 3271 Katy Court East Midlothian, TX 76065 International Association of Fire Fighters	BLD-BSF
Rodger Reiswig	M 1/10/2008	Pamela Reno	M 12/02/2020
Principal Johnson Controls Fellow & VP, Industry Relations 409 Blackhawk Circle Sun City Center, FL 33573 Alternate: Terry L. Victor	BLD-BSF	Principal Telgian Fire Protection Consultant 1623 Mapleview Court Streetsboro, OH 44241 Automatic Fire Alarm Association, Inc.	BLD-BSF
Richard Jay Roberts	M 10/20/2010	Kurt A. Ruchala	SE 3/1/2011
Principal Honeywell Fire Safety 624 Hammer Lane North Aurora, IL 60542-9155 National Electrical Manufacturers Association Alternate: Daniel P. Finnegan	BLD-BSF	Principal JENSEN HUGHES 100 Quannapewitt Parkway Suite 401 Wakefield, MA 01880 Alternate: Joseph J. Watson	BLD-BSF
Michael R. Szmanda	IM 8/9/2011		
Principal Certification & Training Corporation M-R-J Security LLC 1641 Island Court Waconia, MN 55387	BLD-BSF		

Address List No Phone

06/10/2021
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BLD-BSF

Building Service and Fire Protection Equipment

Building Code

Todd W. Warner	M 07/29/2013	David M. Wyatt	U 3/2/2010
Principal Brooks Equipment Company, Inc. 1719 Midfield Street Bozeman, MT 59715 Fire Equipment Manufacturers' Association Alternate: Roy C. Kimball	BLD-BSF	Principal Pacific Northwest National Laboratory-Battelle 2201 South Cleveland Street Kennewick, WA 99338	BLD-BSF
Bryan Lawrence Hoskins	SE 10/29/2012	Daniel P. Finnegan	M 10/20/2010
Voting Alternate Oklahoma State University 499 Cordell South Stillwater, OK 74078	BLD-BSF	Alternate Siemens Smart Infrastructure 2953 Exeter Court West Dundee, IL 60118-1724 National Electrical Manufacturers Association Principal: Richard Jay Roberts	BLD-BSF
Kelly Finzel	SE 12/8/2015	Greg Gottlieb	C 4/1/1993
Alternate Arup 77 Water Street, 6th Floor New York, NY 10005 Principal: Raymond A. Grill	BLD-BSF	Alternate Hauppauge Fire District 855 Wheeler Road Hauppauge, NY 11788 NFPA Fire Service Section Principal: Joseph M. Jardin	BLD-BSF
Claudia Hagood	SE 7/1/1993	Ignatius Kapalczynski	E 10/6/2000
Alternate Klinker and Associates, Inc. 2455 Symphony Lane Gambrills, MD 21054 Principal: Richard L. Klinker	BLD-BSF	Alternate Simsbury Fire District Deputy Fire Marshal 139 Selden Hill Drive West Hartford, CT 06107 Connecticut State Fire Marshal/Connecticut Fire Marshals Association Principal: Michael Kellett	BLD-BSF
Roy C. Kimball	M 4/15/2004	Peter Leszczak	U 11/2/2006
Alternate Brooks Equipment Company, LLC. 10926 David Taylor Drive Suite 100 Charlotte, NC 28262 Fire Equipment Manufacturers' Association Principal: Todd W. Warner	BLD-BSF	Alternate US Department of Veterans Affairs 950 Campbell Avenue West Haven, CT 06516 Principal: Peter A. Larrimer	BLD-BSF
Marc Mueller	M 12/07/2018	Terry L. Victor	M 08/11/2020
Alternate Thyssenkrupp Elevator 9280 Crestwyn Hills Drive Memphis, TN 38125 National Elevator Industry Inc. Principal: Kevin L. Brinkman	BLD-BSF	Alternate Johnson Controls 3621 Carrollton Road Upperco, MD 21155 Principal: Rodger Reiswig	BLD-BSF

Address List No Phone

06/10/2021
Baran Ozden
BLD-BSF

Building Service and Fire Protection Equipment

Building Code

Joseph J. Watson	SE 12/06/2017	Justin Yates	I 08/03/2016
Alternate JENSEN HUGHES 117 Metro Center Boulevard Suite 1002 Warwick, RI 02886 Principal: Kurt A. Ruchala	BLD-BSF	Alternate Cincinnati Insurance Company 8300 Sapphire Drive Alexander, AR 72002-9288 Principal: Stephen E. Dale	BLD-BSF
Baran Ozden	8/12/2020		
Staff Liaison National Fire Protection Association One Batterymarch Park Quincy, MA 02169-7471	BLD-BSF		



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NFPA Virtual Meeting

- Please use the “hand raise” function to speak

A screenshot of the Microsoft Teams interface. The bottom toolbar is visible, with the hand raise icon circled in red. To the right, the 'People' pane shows a list of participants: Sisco, Jennifer (Organizer), Member #2 (Guest), Member #5 (Guest), Member #1 (Guest), Member #3 (Guest), and Member #4 (Guest). Each participant has a mute icon and a hand raise icon.

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NFPA First Draft Meeting

Web Conference Tips

- Use “raise hand” function to be recognized
- State name before speaking
- Mute your microphone/phone when not speaking (*6 on phone) – staff can mute you but CAN’T unmute you
- Shut off video if you have a slow connection



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NFPA First Draft Meeting

Members

- Please verify your contact information on roster at www.nfpa.org/101tc or www.nfpa.org/5000tc and email any changes to kcarey@nfpa.org
- Use of audio recorders or other means capable of reproducing verbatim transcriptions of this or any NFPA meeting is not permitted



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NFPA First Draft Meeting

Guests

- Sign in and identify affiliations
- Participation
 - Requested 7 days prior to the meeting or;
 - At the discretion of the Chair
- Equal opportunity granted to opposing views



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NFPA First Draft Meeting

Members categorized in ANY interest category who have been retained to represent the interests of ANOTHER interest category (with respect to a specific issue or issues that are to be addressed by a TC/CC) shall declare those interests to the committee and refrain from voting on any Public Input, Comment, or other matter relating to those issues throughout the process.



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Annual 2023 Revision Cycle – Key Dates

- Public Input Stage (First Draft):
 - First Draft Meeting: **July 8 – August 11, 2021**
 - Posting of First Draft for Balloting Date: **November 2, 2021**
 - Posting of First Draft for Public Comment: **March 22, 2022**
- Comment Stage (Second Draft):
 - Public Comment Closing Date: **May 31, 2022**
 - Second Draft Meeting Period: **NLT August 23, 2022**
 - Posting of Second Draft for Balloting Date: **October 4, 2022**
 - Posting of Second Draft for NITMAM: **February 28, 2023**
- Tech Session Preparation:
 - NITMAM Closing Date: **March 28, 2023**
 - NFPA Technical Meeting: **June 2023**
- Standards Council Issuance:
 - Documents with CAMs: **August 2023**



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NFPA First Draft Meeting

Voting During the First Draft Meeting:

- Either Principal or Alternate can vote, not both.
- All Principals are encouraged to have an Alternate.
- Voting (simple majority) during meeting is used to create proposed First Revisions.
- Voting (simple majority) during meeting is also used to establish Public Input resolution responses and to create Committee Inputs.



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NFPA First Draft Meeting

General Procedures:

- Follow Robert's Rules of Order
- Discussion requires a motion



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NFPA First Draft Meeting

Committee Member Actions:

- Member addresses the chair
- Receives recognition from the chair
- Member introduces the motion
- Another member seconds the motion



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NFPA First Draft Meeting

Committee Chair Actions:

- Restates the motion
- Calls for discussion
- Ensures all issues have been heard
- Calls for a vote
- Announces the vote result



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NFPA First Draft Meeting

Motion to End Debate, Previous Question, or to “Call the Question”

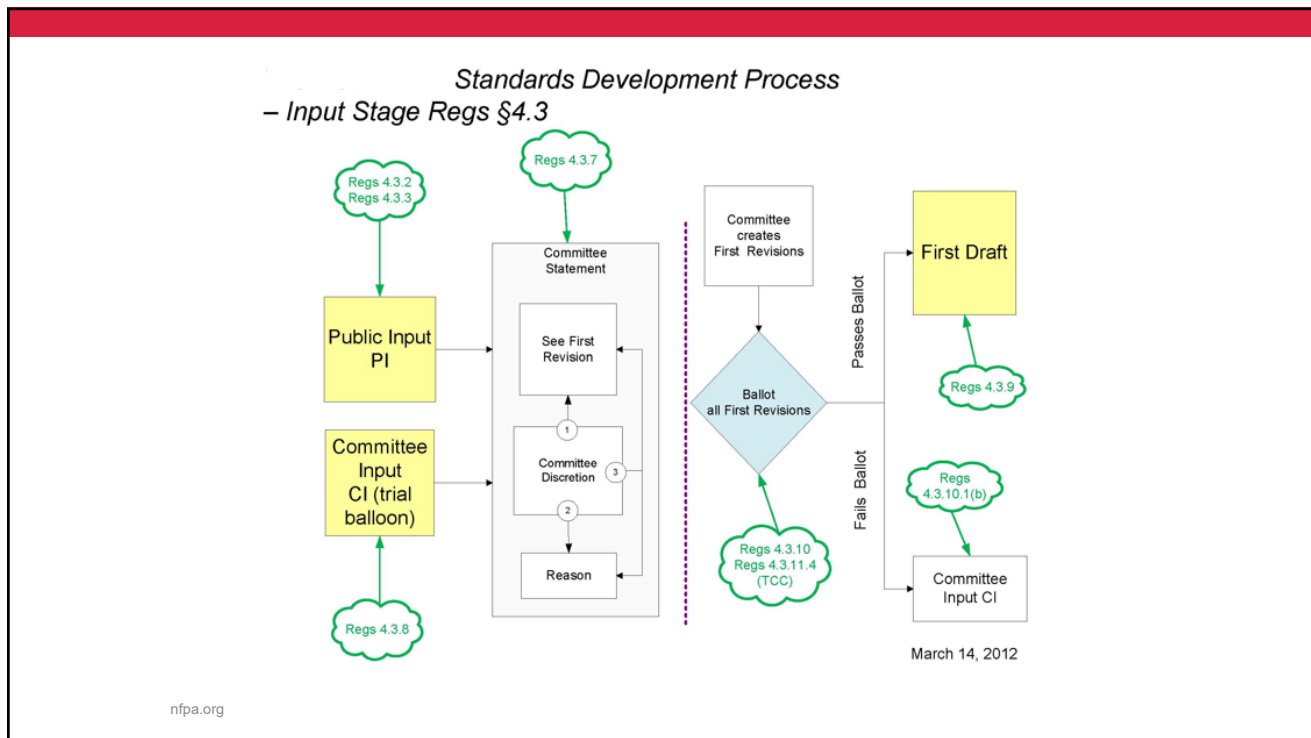
- Not in order when another member has the floor
- Requires a second
- Not debatable and DOES NOT automatically stop debate
- 2/3 affirmative vote immediately closes debate, returns to the original motion
- Less than 2/3 allows debate to continue



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NFPA First Draft Meeting

Committee Actions and Motions:

- Resolve Public Input (PI)
- Create a First Revision (FR)
- Create a Committee Input (CI) – a placeholder used to solicit Public Comments and permit further work at Second Draft stage



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NFPA First Draft Meeting

Resolve a Public Input (PI):

- Committee develops a committee statement to respond to (i.e., resolve) a Public Input.
- Committee indicates in statement its reasons for not accepting the recommendation and/or points to a relevant First Revision.
- PI response does not get balloted.



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NFPA First Draft Meeting

Create a First Revision (FR):

- FR is created to change current text or add new text.
- Committee statement is developed to substantiate the change.
- Associated PIs get a committee response, often simply referring to the relevant FR.
- Each FR gets balloted.



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NFPA First Draft Meeting

Create a Committee Input (CI):

- Committee is not ready to incorporate a change into the First Draft but wants to receive Public Comment on a topic that can be revisited at Second Draft stage.
- Committee statement is developed to explain committee's intent.
- CI is not balloted.



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NFPA First Draft Meeting

Committee Statements:

- All Public Input must receive a Committee Statement.
- A valid technical reason must be provided.
- Vague references to “intent” should not be used.
- Reasons for why the submitter's substantiation is inadequate should be provided.
- A First Revision should be referenced if it addresses the intent of the submitter's Public Input.



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NFPA First Draft Meeting

Formal Voting on First Revisions

- In-meeting votes establish a base committee position on the development of First Revisions (FRs).
- FRs are secured by electronic balloting ($\geq 2/3$ of completed ballots affirmative, and affirmative by $\geq 1/2$ voting members).
- Only the results of the electronic ballot determine the official position of the committee on the First Draft.



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NFPA First Draft Meeting

Ballots:

- Only First Revisions (FR) are balloted.
 - Public Inputs and Committee Statements are not balloted.
 - Reference materials are available.
 - First Draft, PI, CI, and CS
- Voting options:
 - Affirmative on all FRs
 - Affirmative on all FRs with exceptions specifically noted
- Ballot provides option to vote affirmative with comment.
- Vote to reject or abstain requires a reason.



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NFPA First Draft Meeting

Electronic Balloting:

- Ballot system is web-based.
- Alternates are encouraged to complete ballots.
- Ballot session will time out after 90 minutes.
- Use “submit” to save your work – ballots can be revised until the balloting period is closed.



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NFPA First Draft Meeting

- Click link provided in ballot email.
- Sign in with NFPA.org username and password.



National Fire Protection Association		National Fire Protection Association The authority on fire, electrical, and building safety	
Title	Open until	Your Status	Action
70_A2016_NEC-P10_FDballot	April 01, 2015 11:59 PM (GMT-05:00) Eastern Time (US & Canada)	New	Start
70_NEC-P13_FD_Ballot_A16	April 01, 2015 11:59 PM (GMT-05:00) Eastern Time (US & Canada)	New	Start



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NFPA First Draft Meeting

- Select either 'Affirmative All' or 'Affirmative with Exception(s)'.

The screenshot shows the 'National Fire Protection Association' ballot interface. At the top, it says 'NFPA268_TestBallot' and 'Open until November 09, 2012 1:00 AM (GMT-05:00 Eastern Time (US & Canada))'. Below this, it says 'Page 1 of 2'. The main section is titled 'Affirmative All Question' and contains two radio button options: 'Affirmative All' and 'Affirmative with Exception(s)'. At the bottom of this section are 'Back' and 'Next' buttons. To the right, there is an 'Instructions' box with a 'NOTE' and several paragraphs of text. At the top right, there is a 'Company Logo' placeholder and a progress bar with steps: 'Select', 'Review & Submit', and 'Confirmation'.



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NFPA First Draft Meeting

- Use "See FR- #" link to review all First Revisions.
- Use "edit election" to change individual votes or to modify vote after submitting ballot.

The screenshot shows the 'National Fire Protection Association' ballot interface. At the top, it says 'NFPA268_TestBallot' and 'Open until November 09, 2012 1:00 AM (GMT-05:00 Eastern Time (US & Canada))'. Below this, it says 'Review your selections below'. There is a list of first revisions: 'FR-2, New Section after 2.3.2, See FR-2', 'FR-4, Chapter 10, See FR-4', and 'FR-6, Section No. 11.4, See FR-6'. Each item has a radio button and the word 'Affirmative'. At the bottom right of this section is an 'edit election' link. Below this is a 'Participant Consent' section with a checkbox and a 'Submit' button. At the top right, there is a 'Company Logo' placeholder and a progress bar with steps: 'Select', 'Review & Submit', and 'Confirmation'.



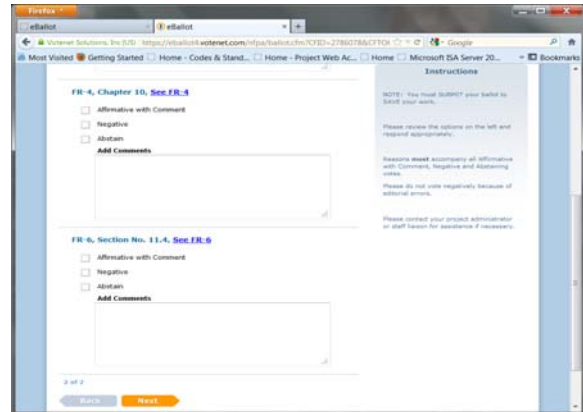
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NFPA First Draft Meeting

- Make selection:
Affirmative with Comment,
Negative, or Abstain
- No selection defaults to
affirmative
- Must include comment
(reason) on each vote
other than Affirmative



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NFPA First Draft Meeting

- To complete ballot, click 'Participant
Consent and Submit'.
- Return to edit any votes by ballot due date.



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NFPA First Draft Meeting

Balloting:

- Initial ballot
- Circulation of negatives and comments – electronic balloting re-opened to permit members to change votes
- Any First Revision that fails ballot becomes a Committee Input (CI)



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Legal

Antitrust Matters:

- Must comply with state and federal antitrust laws
- Participants are to conduct themselves in strict accordance with these laws
- Read and understand NFPA's Antitrust Policy which can be accessed at nfpa.org/regs



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Legal

Antitrust Matters (cont'd):

- Participants must avoid any conduct, conversation or agreement that would constitute an unreasonable restraint of trade
- Conversation topics that are off limits include:
 - Profit, margin, or cost data
 - Prices, rates, or fees
 - Selection, division or allocation of sales territories, markets or customers
 - Refusal to deal with a specific business entity



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Legal

Antitrust Matters (cont'd):

- NFPA's standards development activities are based on openness, honesty, fairness and balance
- Participants must adhere to the *Regulations Governing the Development of NFPA Standards* and the *Guide for the Conduct of Participants in the NFPA Standards Development Process* which can be accessed at nfpa.org/regs
- Follow guidance and direction from your employer or other organization you may represent



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Legal

Antitrust Matters (cont'd):

- Manner in which standards development activity is conducted can be important
- The *Guide of Conduct* requires standards development activity to be conducted with openness, honesty and in good faith
- Participants are not entitled to speak on behalf of NFPA
- Participants must take appropriate steps to ensure their statements whether written or oral and regardless of the setting, are portrayed as personal opinions, not the position of NFPA
- Be sure to ask questions if you have them



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Legal

Patents:

- Disclosures of essential patent claims should be made by the patent holder
- Patent disclosures should be made early in the process
- Others may also notify NFPA if they believe that a proposed or existing NFPA standard includes an essential patent claim
- NFPA has adopted and follows ANSI's Patent Policy
- It is the obligation of each participant to read and understand NFPA's Patent Policy which can be accessed at nfpa.org/regs



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NFPA 101/5000 Reference Publication Updates

First Draft

- FUN to create CIs to update all reference publication editions at SD
- Each TC to notify FUN if they have a technical reason for not updating reference publication within their scope.
 - Public comment
 - Note to CC via meeting minutes

Second Draft

- Staff to draft SRs with all reference publication updates (Ch. 2 & annexes)
- FUN to act on draft SRs
- TCs provided with draft SRs for information
- Title changes to be updated editorially in code body by staff

NOTES:

- FUN will not update documents that are withdrawn, merged, or otherwise unclear. Responsible TC to provide new reference document via SR.
- Newly referenced documents in code body will be added editorially to Ch. 2.
- TC responsible for providing all information required by Chapter 2 for newly referenced publications.
- Correlating Committee to resolve any conflicts or correlation issues between committees.



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THE FIRE PROTECTION RESEARCH FOUNDATION

TC Struggles with an Issue

- TC needs data on a new technology or emerging issue
- Two opposing views on an issue with no real data
- Data presented is not trusted by committee

Code Fund Lends a Hand

- TC rep and/or staff liaison submits a Code Fund Request
- Requests are reviewed by a Panel and chosen based on need / feasibility

Research Project Carried Out

- Funding for project is provided by the Code Fund and/or industry sponsors
- Project is completed and data is available to TC

www.nfpa.org/research



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Document Information Pages

About	Current and Previous Editions	Next Edition	Technical Committee
• Document scope • Table of contents • Articles • Research and statistical reports • Latest codes and standards news on NFPA Today blog feed • Free access	• Issued TIAs, Fls, Errata • Archived revision information such as meeting and ballot information, First Draft Reports (previously ROPs), Second Draft Reports (previously ROCs), and Standards Council and NITMAM information	• Revision cycle schedule • Posting & closing dates • Submit public input/comments via electronic submission system. • Meeting and ballot information • First Draft Report and Second Draft Report • NITMAM information • Standard Council Decisions • Private TC info (*red asterisk) • Ballot circulations, informational ballots and other committee info	• Committee name and staff liaison • Committee scope and responsibility • Committee list with private information • Committee documents (codes & standards) in PDF format • Committees seeking members • Online committee membership application



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Questions?

NFPA 101 & NFPA 5000 Document Information Pages:

- www.nfpa.org/101
- www.nfpa.org/5000



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NATIONAL FIRE PROTECTION ASSOCIATION

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

MINUTES

NFPA Technical Committee on Building Service and Fire Protection Equipment (SAF-BSF/BLD-BSF)

NFPA 101 and NFPA 5000 A2020 Second Draft Meeting

Thursday-Friday June 13-14, 2019

Indianapolis Marriott Downtown, Indianapolis, IN

1. **Call to order.** The meeting was called to order by Chair R. Grill at 8:00 a.m. on June 13, 2019.
2. **Introduction of committee members and guests.** Self-introductions were made by committee members and guests.

The following technical committee members were in attendance.

TECHNICAL COMMITTEE MEMBERS PRESENT

NAME	COMPANY
Raymond Grill, Chair	Arup
Jodi Balido, Principal	Dominion Energy Services Inc.
Kevin Brinkman, Principal	National Elevator Industry, Inc.
Pat Brock, Principal	Oklahoma State University
Stephen Dale, Principal	Cincinnati Insurance Company
Bryan Dempsey, Principal	Vivint Rep.: Electronic Security Association
Jeffrey Hugo, Principal	National Fire Sprinkler Association, Inc.
Claude Hutton, Principal	Virginia State Fire Marshal's Office
Michael Kellett, Principal	State of Connecticut Office of the State Fire Marshal Rep.: Connecticut Fire Marshals Association
Peter Larrimer, Principal	US Department of Veterans Affairs
Daniel Lazarz, Principal	EYP Architecture & Engineering
Scott Panowitz, Principal	BFPE International Rep.: Suppression Systems Association
Ray Reed, Principal	Highrise Fire Consultants Rep.: International Association of Fire Fighters
Rodger Reiswig, Principal	Johnson Controls
Richard Roberts, Principal	Honeywell Fire Safety Rep.: National Electrical Manufacturers Association
Lawrence Shudak, Principal	UL LLC
Todd Warner, Principal	Brooks Equipment Company, Inc. Rep.: Fire Equipment Manufacturers' Association
David Wyatt, Principal	Pacific Northwest National Laboratory-Battelle
Daniel Finnegan, Alternate to Richard Roberts	Siemens Industry, Inc. Rep.: National Electrical Manufacturers Association
Joseph Watson, Alternate to K. Ruchala	JENSEN HUGHES
Valerie Ziavras, Staff Liaison	NFPA

TECHNICAL COMMITTEE PRINCIPAL MEMBERS NOT PRESENT (NOT LISTED WHERE ALTERNATE ATTENDED)

NAME	COMPANY
Harry Bradley, Principal	Maryland State Fire Marshals Office Rep.: International Fire Marshals Association
Flora Chen, Principal	Hayward Fire Department California
Paul Donga, Principal	Boston Fire Department
Joseph Jardin, Principal	Fire Department City of New York Rep.: NFPA Fire Service Section
David Killian, Principal	Walt Disney Parks & Resorts
Richard Klinker, Principal	Klinker & Associates, Inc.
Michael Szmanda, Principal	Certification & Training Corporation/M-R-J Security LLC
Carl Wren, Principal	City of Austin
Kristian White, Voting Alternate	Space Age Electronics, Inc. Rep.: Automatic Fire Alarm Association, Inc.

GUESTS PRESENT

NAME	COMPANY
Robert Solomon	NFPA

3. **Approval of minutes.** The July 25, 2018 second draft meeting minutes were approved as submitted.
4. **The process – staff PowerPoint presentation.** V. Ziavras presented a staff PowerPoint presentation explaining the process of the second draft meeting.
5. **Correlating Committee Notes.** The correlating committee notes for BSF were discussed and second revisions were prepared as necessary.
6. **NFPA 101 Second Draft preparation.** All public comments were addressed and second revisions were prepared as necessary.
7. **NFPA 5000 Second Draft preparation.** All public comments were addressed and second revisions were prepared as necessary.
8. **Committee Input review.** The NFPA 101 and 5000 First Draft Committee Inputs were addressed and second revisions were prepared as necessary.
9. **Mass Notification Task Group.** Task group chair D. Finnegan reported on the recommendations from the mass notification task group and second revisions were prepared as necessary.
10. **Energy Storage Systems Task Group.** There was nothing to report for the energy storage systems task group.
11. **Other business.** The Committee requested that the Correlating Committee appoint a joint task group with representation from BSF and the occupancy chapters to review the supervision requirements in both NFPA 101 and NFPA 5000.

12. Future meetings. The next meeting of the Committee will be the First Draft meeting for the 2025 code cycle. Exact date and location will be determined at a later date.

13. Adjournment. The meeting was adjourned by Chair R. Grill at 4:00 pm on Thursday, June 13, 2019.

Meeting Minutes Prepared By:

Valerie Ziavras, NFPA Staff Liaison



NATIONAL FIRE PROTECTION ASSOCIATION

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

MINUTES

NFPA Correlating Committee on Building Code (BLD-AAC)

NFPA Correlating Committee on Safety to Life (SAF-AAC)

NFPA 101 & NFPA 5000 Pre-First Draft Joint Teleconference/Microsoft Teams Meeting

March 25, 2021

- 1. Call to order.** The meeting was called to order by BLD-AAC Chair Peter Willse on behalf of himself and SAF-AAC Chair Wayne “Chip” Carson at 1:00 p.m. (EDT).
- 2. Attendance roll-call.** Staff called the roll of BLD-AAC and SAF-AAC and recorded the members who responded as being present.

The following members were in attendance:

NAME	REPRESENTING	BLD-AAC	SAF-AAC
Peter Willse	AXA XL/Global Asset Protection Services, LLC	Chair	NA
Wayne “Chip” Carson	Carson Associates, Inc.	NA	Chair
Tracey Bellamy	Telgian Corp., rep. AFSA	Principal	NA
Andrew Bevis	National Fire Sprinkler Association	Alt to J. Hugo	Alt to J. Hugo
Kenneth Bush	Maryland State Fire Marshal’s Office	NA	Principal
Shane Clary	Bay Alarm Company, rep. Signaling Systems Correlating Committee	NA	Non-Voting Alternate

Paul Coats	American Wood Council	Principal	NA
David Collins	The Preview Group, rep. TC on Means of Egress	Non-Voting	Non-Voting
Nicholas Dawe	Cobb County Fire Marshal's Office, rep. TC on Interior Finish and Contents	Non-Voting	Non-Voting
John Devlin	Jensen Hughes, rep. TC on Fire Protection Features	Non-Voting	Non-Voting
Jeffrey Hugo	National Fire Sprinkler Association	Principal	Principal
Jonathan Humble	American Iron and Steel Institute	Principal	NA
Chris Jelenewicz	Society of Fire Protection Engineers, rep. TC on Fundamentals	Non-Voting	Non-Voting
Gerald Jones	Rep. NIBS/BSSC	Principal	NA
Moriel Kaplan	Jensen Hughes, rep. TC on Structures, Construction, and Materials	Non-Voting	NA
William Koffel	Koffel Associates, Inc., rep. TC on Health Care Occupancies	Non-Voting	Non-Voting
Josh Lambert	University of Texas at Austin, rep. TC on Assembly Occupancies	Non-Voting	Non-Voting
Scott Laramée	AON Property Risk, rep. American Hotel & Lodging Association	Alt to D. O'Connor	NA
James Lathrop	Koffel Associates, Inc., rep. TC on Residential Occupancies	Non-Voting	Non-Voting
Jeffrey Lucas	Fort Lauderdale Fire Rescue, rep. IFMA	NA	Principal
Dale Lyman	Greeley Fire Dept., rep. IAFC	NA	Principal
Maria Marks	Siemens Industry, Inc., rep. National Electrical Manufacturers Association	NA	Alt to R. Reiswig
Amy Murdock	Code Consultants, Inc., rep. TC on Mercantile and Business Occupancies	Non-Voting	Non-Voting
James Quiter	Retired – Arup	Principal	Principal
John Rickard	P3 Consulting, rep. TC on Board and Care Facilities	Non-Voting	Non-Voting
Faimeen Shah	Vortex Fire Engineering Consultancy	Principal	NA

Leon Vinci	Health Promotion Consultants, rep. American Public Health Association	Principal	NA
Jerry Wooldridge	Reedy Creek Improvement District	Secretary	NA
Gregory Harrington	NFPA	NA	Staff Liaison/Non- Voting Secretary
Tracy Vecchiarelli	NFPA	Staff Liaison	NA

The following members were not in attendance (noted only where Alternate was not in attendance):

NAME	REPRESENTING	BLD-AAC	SAF-AAC
David Frable	US General Services Administration	Principal	NA
Sharon Gilyeat	Koffel Associates, Inc.	NA	Principal
Joshua Greene	Simpson Gumpertz & Heger, rep. TC on Building Systems	Non-Voting	NA
Raymond Hansen	US Dept. of the Air Force	Principal	NA
Stanley Harbuck	School of Building Inspection, rep. American Public Health Association	NA	Principal
Howard Hopper	UL LLC	Principal	Principal
Matthew Mertens	North Shore Fire Dept., rep. TC on Educational and Day Care Occupancies	Non-Voting	Non-Voting
Richard Roberts	Honeywell Fire Safety, rep. NEMA	Principal	NA
Eric Rosenbaum	Jensen Hughes, rep. American Health Care Association	NA	Principal
Jon Taluba	Greenwood Sales	NA	Principal

The following guests were in attendance:

NAME	REPRESENTING
Chris Butts	Sompo International
Kevin Carr	NFPA
Richard Davis	FM Global

Stephen Ganoë	NFPA
Randy Gaw	DET-CORR Fire Safety Consulting (Acting Chair, TC on Detention and Correctional Occupancies)
Ray Grill	Ray Grill Consulting PLLC (Acting Chair, TC on Building Service and Fire Protection Equipment)
Lorraine Horner	Dupont
Reginald Jackson	U.S. Dept. of Labor-OSHA
Camille Levy	NFPA
Brian Olsen	Phillips 66
Baran Ozden	NFPA
Henry Paszczuk	Connecticut Dept. of Public Safety
Steve Sheldon	Fisher Engineering, Inc.
Jennifer Sisco	NFPA
Sheryl Tricocci	Johnson Controls
Nate Wittasek	Simpson Gumpertz & Heger (SGH)

3. Previous meeting minutes.

- a. The minutes of the November 21, 2019 Correlating Committee on Building Code – NFPA 5000 Second Draft Meeting were approved by the BLD-AAC membership as submitted.
- b. The minutes of the November 20, 2019 Correlating Committee on Safety to Life – NFPA 101 Second Draft Meeting were approved by the SAF-AAC membership as submitted.

4. Liaison reports.

- a. Sprinkler project – Bill Koffel. NFPA 13, 13D, and 13R are in the Annual 2021 revision cycle and currently awaiting the disposition of any certified amending motions (CAMs). There are no correlation issues to report between NFPA 13/13D/13R and NFPA 101 or NFPA 5000.
- b. Fire alarm project – Shane Clary. Wayne Moore has retired from Jensen Hughes, which leaves Shane as the non-voting alternate to the vacant Correlating Committee on Signaling Systems non-voting representative (to be filled). NFPA 72 is in the Annual 2021 revision cycle and currently awaiting the disposition of any certified amending motions (CAMs). There are no correlation issues to

report between NFPA 72 and NFPA 101 or NFPA 5000. Several significant changes to NFPA 72 were noted: a proposed new chapter on cybersecurity has been relocated as a nonmandatory annex; Ch. 29 on household fire warning systems has maintained mandatory cybersecurity provisions in the body of the code; changes to survivability requirements yielded provisions for 1-hour rated cables, however, no such listed cables are currently available; a color coding scheme related to inspections, testing, and maintenance has been added as nonmandatory annex language.

5. TC activity/plans updates from TC chairs.

- a. TC on Assembly Occupancies - Josh Lambert: The TC will review the FPRF report on sightline constrained handrails and determine if any revisions are needed.
- b. TC on Board and Care Facilities – John Rickard: No task groups were held over from the previous cycle. The TC will address at least one held public comment.
- c. TC on Building Construction: Staff reported the only item held over from the previous cycle is the exterior wall task group (see Item 6.a).
- d. TC on Building Service and Fire Protection Equipment – Ray Grill: No items were held over from the previous cycle.
- e. TC on Building Systems: Staff reported the committee will be reviewing NFPA 900, *Building Energy Code*, to determine if it should be maintained as a standalone document or be incorporated into NFPA 5000.
- f. TC on Detention and Correctional Occupancies – Randy Gaw: The committee has an interest in the floor area terminology task group (Item 6.c) and will review its recommendations for any needed revisions to the D&C chapters.
- g. TC on Educational and Day Care Occupancies: Staff and Maria Marks reported a task group will be continuing to review the security provisions of NFPA 5000 as they relate to educational and day care occupancies.
- h. TC on Fire Protection Features – John Devlin: The committee will be reviewing its scope as per the CC's previous direction (Item 7.a); discussion is underway in conjunction with NFPA 30 re. the adequacy of the current ABHR provisions given the widespread use of quantities in excess of the code limits during the pandemic.

- i. TC on Fundamentals – Chris Jelenewicz: No task groups were held over from the previous cycle; working with staff on a plan for updating referenced publications to ensure the affected technical committees have a mechanism to weigh in on the publications referenced in their chapters.
- j. TC on Health Care Occupancies – Bill Koffel: Task groups carried over from the previous cycle include temporary construction barriers; nurses’ stations, which may or may not be continuously staffed; dental facility occupancy classification. As new subject that may warrant discussion is alternative care sites (e.g., convention centers becoming hospitals as seen during the pandemic); might require coordination with Fundamentals re. change of occupancy classification.
- k. TC on Industrial, Storage, and Miscellaneous Occupancies: Staff reported there are no items held over from the previous cycle.
- l. TC on Interior Finish, Contents, and Furnishings – Nick Dawe: The committee will need to review The Safer Occupancy Furniture Flammability Act (SOFFA) passed by Congress in December 2020 which requires adoption of California’s TB 117-2013 as a federal flammability standard for residential upholstered furniture and any impact this may have on the code.
- m. TC on Means of Egress – Dave Collins: A task group on the use of special purpose horizontal sliding doors (e.g., Won Doors) has been carried over from the previous cycle.
- n. TC on Mercantile and Business Occupancies – Amy Murdock: No task groups were held over from the previous cycle; the committee scope has been reviewed per the CC’s previous direction and no changes are recommended (Item 7.a).
- o. TC on Residential Occupancies – Jim Lathrop: the FPRF report on carbon monoxide detection requirements (see Item 7.c) will be significant not only for the RES committee but other occupancy TCs as well; a task group on means of escape as it applies to grab bars and other items (e.g., kids’ rides and carousels in a mall) was carried over from the previous cycle (Item 6.b); the committee may explore combining the current residential chapters into broader small and large residential occupancy chapters (possibly a long-term goal if not this cycle).
- p. TC on Structures, Construction, and Materials – Moriel Kaplan: The committee will be involved in the exterior wall task group (Item 6.a).

6. Correlating committee task groups held over from previous cycle.

- a. Exterior walls task group (NFPA 5000): The task group will be meeting in April to discuss exterior wall requirements and is seeking additional members. The task group is assigned with reviewing requirements for exterior walls between the BLC and SCM chapters.
- b. Means of escape (grab bars): TG Chair Chip Carson reports the group will be meeting on April 7th. The scope of the group has been expanded to evaluate means of escape/egress provisions from common areas such as kids' rides and carousels in a mall that do not meet the prescriptive requirements.
- c. Floor area terminology: Randy Gaw has stepped down as task group chair but will continue to assist. No meeting date has been set.
- d. Sprinkler system supervision: TG Chair Jeff Hugo will be kicking off activity and will be contacting TC chairs for representatives.

7. Subject areas for TC focus during 2024 edition revision cycle.

- a. TC scopes: SAF-AAC Chair Chip Carson directed any TCs that have not yet reviewed their scopes per the SAF-AAC November 2019 direction, as indicated in the agenda, to do so prior to the Fall 2021 correlating committee meetings. Subject is to be included on TC first draft meeting agendas.
- b. Integrated system testing: SAF-AAC Chair Chip Carson directed TC to review their integrated system testing requirements in NFPA 101 to ensure the intended level of protection is being mandated. Staff indicated a question about this arose but it appears the current provisions are ok; TCs should look at them regardless and make any revisions if needed. Subject is to be included on TC first draft meeting agendas.
- c. Carbon monoxide detection/alarms: Occupancy TCs are asked to review the new FPRF CO report, identify any gaps in the current requirements, and make any needed revisions. The report is available to download at the FPRF website: [*Carbon Monoxide Detection and Alarm Requirements: Literature Review*](#). Subject is to be included on TC first draft meeting agendas.
- d. NFPA 1144 reference (ERRS consolidation): BLD-FUN is directed to update its reference from NFPA 1144 to NFPA 1140 if applicable in 4.5.7 of NFPA 5000 due to the consolidation of the NFPA emergency responder standards.

- e. Coordinate occupant load factor tables: Occupancy TCs are directed to review the occupant load factor tables in NFPA 101 and 5000 to ensure they are consistent and make any needed revisions to their factors. Subject is to be included on TC first draft meeting agendas.
- f. Valet trash: Staff reported the Standards Council has directed valet trash requirements, if any, are within the scope of NFPA 101 and can be extracted into NFPA 1 if so desired (item [20-12-25](#) in the Dec 2020 Standards Council Minutes). SAF-RES and any other affected TCs are directed to act on any public inputs accordingly.
- g. Flammable and combustible liquid terminology (now 'ignitable (flammable or combustible) liquids'): SAF-AAC Chair Chip Carson directed all TCs to review terminology for consistency with NFPA 30. Subject is to be included on TC first draft meeting agendas.
- h. Disability terminology: Staff reported that the DARAC committee will be submitting PIs to clean up outdated terminology. Affected TCs are directed to act on any public inputs accordingly.

8. Other business.

- a. Staff reminded the attendees at the public input closing date for NFPA 101 and NFPA 5000 is June 1, 2021.
- b. Bill Koffel raised the question of occupancy classification for dwellings used as vacation rentals by owners (VRBOs, e.g., Airbnb), and whether such use constitutes a change of occupancy classification. No action taken.
- c. Jonathan Humble inquired whether NFPA has made a decision as to when in-person meetings will resume. No decision has been made to date and all upcoming technical committee meeting are being planned to be held online.
- d. Tracy Vecchiarelli introduced staff liaisons who are newly assigned to NFPA 101/5000 technical committees: Stephen Ganoë (BLD/SAF-RES), Camille Levy (BLD/SAF-BCF and -END), and Baran Ozden (BLD/SAF-BSF).
- e. Jeff Hugo inquired on dates for the 2021 virtual tech session. Details were not available as of this date. The most current information is posted and will be regularly updated at: <https://www.nfpa.org/technical-meeting>

- f. Jim Lathrop inquired on the TC meeting schedules. They are posted on the document information pages at www.nfpa.org/101next and www.nfpa.org/5000next. Meeting notices will be posted within the next week.
- 9. **Next meeting.** The NFPA 101 and NFPA 5000 correlating committee first draft meetings will be held in Q4-2021 (dates and location TBD).
- 10. **Adjournment.** The meeting adjourned at 2:20 p.m. (EDT).



Public Input No. 390-NFPA 101-2021 [Global Input]

7.14.2.3 The absence of sprinklers in the normally unoccupied building service equipment support area, as permitted by an exemption of ~~NFPA-13 9.7.1.1(1)~~, shall not cause a building to be classified as nonsprinklered for purposes of applying the provisions of 7.14.2.2.

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7.14.5.3 The absence of sprinklers in the normally unoccupied building service equipment support area, as permitted by an exemption of ~~NFPA-13 9.7.1.1(1)~~, shall not cause a building to be classified as nonsprinklered for purposes of applying the provisions of 7.14.5.2.

8.6.9.2 Where permitted by Chapters 11 through 43, unenclosed vertical openings created by convenience stairways shall comply with all of the following:

- (1) The convenience stair openings shall not serve as required means of egress.
- (2) The building shall be protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7.
- (3) The convenience stair openings shall be protected ~~in accordance~~ with the method detailed for the protection of vertical openings in ~~NFPA-13 in accordance with 9.7.1.1(1)~~.
- (4) In new construction, the area of the floor opening shall not exceed twice the horizontal projected area of the stairway.
- (5) For new construction, such openings shall not connect more than four contiguous stories, unless otherwise permitted by Chapters 11 through 43.

8.6.9.7 Any escalators and moving walks not constituting an exit shall have their floor openings enclosed or protected as required for other vertical openings, unless otherwise permitted by one of the following:

- (1) The requirement of 8.6.9.7 shall not apply to escalators in large open areas, such as atriums and enclosed shopping malls.
- (2) In existing buildings protected throughout by an approved automatic sprinkler system in accordance with Section 9.7, escalator and moving walk openings shall be permitted to be protected ~~in accordance~~ with the method detailed in ~~NFPA-13 in accordance with 9.7.1.1(1)~~ or in accordance with a method approved by the authority having jurisdiction.
- (3) In new buildings protected throughout by an approved automatic sprinkler system in accordance with Section 9.7, escalator and moving walk openings shall be permitted to be protected ~~in accordance~~ with the method detailed in ~~NFPA-13 in accordance with 9.7.1.1(1)~~ or in accordance with a method approved by the authority having jurisdiction, and the opening shall not connect more than four contiguous stories unless otherwise permitted by Chapters 11 through 43.
- (4) In buildings protected throughout by an approved automatic sprinkler system in accordance with Section 9.7, escalator and moving walk openings shall be permitted to be protected by rolling steel shutters appropriate for the fire resistance rating of the vertical opening and complying with all of the following:

- (1) The shutters shall close automatically and independently of each other upon smoke detection

and sprinkler operation.

- (2) A manual means of operating and testing the operation of the shutters shall be provided.
- (3) The shutters shall be operated not less than once a week to ensure that they remain in proper operating condition.
- (4) The shutters shall operate at a speed not to exceed 30 ft/min (0.15 m/s) and shall be equipped with a sensitive leading edge.
- (5) The leading edge shall arrest the progress of a moving shutter and cause it to retract a distance of approximately 6 in. (150 mm) upon the application of a force not exceeding 20 lbf (90 N) applied to the surface of the leading edge.
- (6) The shutter, following the retraction specified in 8.6.9.7(4)(e), shall continue to close.
- (7) The operating mechanism for the rolling shutter shall be provided with standby power complying with the provisions of NFPA 70.

9.7.1.3 Sprinkler piping serving hazardous areas as described in 9.7.1.2 shall be provided with an indicating shutoff valve, supervised in accordance with 9.7.2 or ~~NFPA 13~~ 9.7.1.1(1), and installed in an accessible, visible location between the sprinklers and the connection to the domestic water supply.

9.10.2 Where standpipe and hose systems are installed in combination with automatic sprinkler systems, installation shall be in accordance with the appropriate provisions established by ~~NFPA 13~~ 9.7.1.1(1) and NFPA 14.

12.4.7.7.1 Where required by 12.4.7.6, the proscenium opening shall be protected by a listed, minimum 20-minute opening protective assembly, a fire curtain complying with NFPA 80 or an approved water curtain complying with ~~NFPA 13~~ 9.7.1.1(1).

12.7.5.3.7.1 The requirements of 12.7.5.3.7 shall not apply where otherwise permitted by the following:

- (1) Ceilings that are constructed of open grate design or listed dropout ceilings in accordance with ~~NFPA 13~~ 9.7.1.1(1) shall not be considered ceilings within the context of 12.7.5.3.7.
- (2) Vehicles, boats, and similar exhibited products having over 100 ft² (9.3 m²) of roofed area shall be provided with smoke detectors acceptable to the authority having jurisdiction.
- (3) The requirement of 12.7.5.3.7(2) shall not apply where fire protection of multilevel exhibit booths is consistent with the criteria developed through a life safety evaluation of the exhibition hall in accordance with 12.4.2, subject to approval of the authority having jurisdiction.

13.7.5.3.7.1 The requirements of 13.7.5.3.7 shall not apply where otherwise permitted by the following:

- (1) Ceilings that are constructed of open grate design or listed dropout ceilings in accordance with ~~NFPA 13~~ 9.7.1.1(1) shall not be considered ceilings within the context of 13.7.5.3.7.
- (2) Vehicles, boats, and similar exhibited products having over 100 ft² (9.3 m²) of roofed area shall be provided with smoke detectors acceptable to the authority having jurisdiction.
- (3) The requirement of 13.7.5.3.7(2) shall not apply where fire protection of multilevel exhibit booths is consistent with the criteria developed through a life safety evaluation of the exhibition hall in accordance with 13.4.2, subject to approval of the authority having jurisdiction.

18.3.5.10 Sprinklers shall not be required in clothes closets of patient sleeping rooms in hospitals where the area of the closet does not exceed 6 ft² (0.55 m²), provided that the distance from the sprinkler in the patient sleeping room to the back wall of the closet does not exceed the maximum distance permitted by ~~NFPA 13~~ 9.7.1.1(1).

18.3.5.11 Sprinklers in areas where cubicle curtains are installed shall be in accordance with ~~NFPA 13~~ 9.7.1.1(1).

19.3.5.10 Sprinklers shall not be required in clothes closets of patient sleeping rooms in hospitals where the area of the closet does not exceed 6 ft² (0.55 m²), provided that the distance from the sprinkler in the patient sleeping room to the back wall of the closet does not exceed the maximum distance permitted by ~~NFPA 13~~ 9.7.1.1(1).

19.3.5.11 Newly introduced cubicle curtains in sprinklered areas shall be installed in accordance with ~~NFPA 13~~ 9.7.1.1(1).

24.3.5.3 Automatic sprinkler systems in accordance with ~~NFPA 13~~ 9.7.1.1(1), ~~NFPA 13D~~ 9.7.1.1(2), or ~~NFPA 13R~~ 9.7.1.1(3) shall be permitted.

26.3.6.2.2 In buildings four or fewer stories in height and not exceeding 60 ft (18.3 m) in height above grade plane, systems in accordance with ~~NFPA 13R~~ 9.7.1.1(3) shall be permitted.

26.3.6.2.3 Systems in accordance with ~~NFPA 13D~~ 9.7.1.1(2) shall be permitted where all of the following requirements are met:

- (1) The lodging or rooming house shall not be part of a mixed occupancy.
- (2) Entrance foyers shall be sprinklered.
- (3) Lodging or rooming houses with sleeping accommodations for more than eight occupants shall be treated as two-family dwellings with regard to the water supply.

26.3.6.2.4 In buildings sprinklered in accordance with ~~NFPA 13~~ 9.7.1.1(1) closets less than 12 ft² (1.1 m²) in area in individual dwelling units shall not be required to be sprinklered.

26.3.6.2.5 In buildings sprinklered in accordance with ~~NFPA 13~~ 9.7.1.1(1) closets that contain equipment such as washers, dryers, furnaces, or water heaters shall be sprinklered, regardless of size.

28.1.5.2 For the design of automatic sprinkler systems, the classification of contents in accordance with ~~NFPA 13~~ 9.7.1.1(1) shall apply.

28.3.5.3 Where an automatic sprinkler system is installed, either for total or partial building coverage, the system shall be in accordance with Section 9.7, as modified by 28.3.5.4. In hotel or dormitory occupancies up to and including four stories in height that are located in buildings not exceeding 60 ft (18.3 m) in height above grade plane, systems in accordance with ~~NFPA 13R~~ 9.7.1.1(3) shall be permitted.

28.3.5.4 The provisions for draft stops and closely spaced sprinklers in accordance with ~~NFPA 13~~ 9.7.1.1(1) shall not be required for openings complying with 8.6.9.1 where the opening is within the guest room or guest suite.

29.1.5.2 For the design of automatic sprinkler systems, the classification of contents in accordance with ~~NFPA 13~~ 9.7.1.1(1) shall apply.

29.3.5.3 Where an automatic sprinkler system is installed, either for total or partial building coverage, the system shall be in accordance with Section 9.7, as modified by 29.3.5.4 and 29.3.5.5. In buildings four or fewer stories in height and not exceeding 60 ft (18.3 m) in height above grade plane, systems in accordance with ~~NFPA 13R~~ 9.7.1.1(3) shall be permitted.

29.3.5.4 The provisions for draft stops and closely spaced sprinklers in accordance with ~~NFPA 13~~ 9.7.1.1(1) shall not be required for openings complying with 8.6.9.1 where the opening is within the guest room or guest suite.

30.3.5.1.2 In apartment buildings up to and including four stories in height, that are located in buildings not exceeding 60 ft (18.3 m) in height above grade plane, systems in accordance with ~~NFPA~~

~~13R 9.7.1.1(3)~~ shall be permitted.

30.3.5.3 Closets. In buildings sprinklered in accordance with ~~NEPA-13 9.7.1.1(1)~~, closets shall meet the following requirements:

- (1) Closets of less than 12 ft² (1.1 m²) in individual dwelling units shall not be required to be sprinklered.
- (2) Closets that contain equipment such as washers, dryers, furnaces, or water heaters shall be sprinklered, regardless of size.

30.3.5.4 Convenience Openings. The draft stop and closely spaced sprinkler requirements of ~~NEPA-13 9.7.1.1(1)~~ shall not be required for convenience openings complying with 8.6.9.1 where the convenience opening is within the dwelling unit.

31.3.5.2 Where an automatic sprinkler system is installed, either for total or partial building coverage, the system shall be installed in accordance with Section 9.7, as modified by 31.3.5.3 and 31.3.5.4. In buildings four or fewer stories in height and not exceeding 60 ft (18.3 m) in height above grade plane, systems in accordance with ~~NEPA-13R 9.7.1.1(3)~~ shall be permitted.

31.3.5.4 In buildings sprinklered in accordance with ~~NEPA-13 9.7.1.1(1)~~ bathrooms not greater than 55 ft² (5.1 m²) in individual dwelling units shall not be required to be sprinklered.

31.3.5.5 The provisions for draft stops and closely spaced sprinklers requirements of in accordance with ~~NEPA-13 9.7.1.1(1)~~ shall not be required for convenience openings complying with 8.6.9.1 where the convenience opening is within the dwelling unit.

31.3.5.6.4 Where Option 3 is being used to permit the use of 1 3/4 in. (44 mm) thick, solid-bonded wood-core doors in accordance with 31.2.2.1.3, sprinklers shall be provided within the exit enclosures in accordance with ~~NEPA-13 9.7.1.1(1)~~.

32.2.3.5.3 Where an automatic sprinkler system is installed, for either total or partial building coverage, all of the following requirements shall be met:

- (1) The system shall be in accordance with ~~NEPA-13 9.7.1.1(1)~~ and shall initiate the fire alarm system in accordance with 32.2.3.4.1.
- (2) The adequacy of the water supply shall be documented to the authority having jurisdiction.

32.2.3.5.3.1 In buildings four or fewer stories in height and not exceeding 60 ft (18.3 m) in height above grade plane, systems in accordance with ~~NEPA-13R 9.7.1.1(3)~~ shall be permitted. All habitable areas, closets, roofed porches, roofed decks, and roofed balconies shall be sprinklered.

32.2.3.5.3.2 An automatic sprinkler system with a 30-minute water supply, and complying with all of the following requirements and with ~~NEPA-13D 9.7.1.1(2)~~ shall be permitted:

- (1) All habitable areas, closets, roofed porches, roofed decks, and roofed balconies shall be sprinklered.
- (2) Facilities with more than eight residents shall be treated as two-family dwellings with regard to water supply.

32.2.3.5.4 Automatic sprinkler systems installed in accordance with ~~NEPA-13 9.7.1.1(1)~~ and ~~NEPA-13R 9.7.1.1(3)~~ shall be provided with electrical supervision in accordance with 9.7.2.

32.2.3.5.5 Automatic sprinkler systems installed in accordance with ~~NEPA-13D 9.7.1.1(2)~~ shall be provided with valve supervision by one of the following methods:

- (1) Single listed control valve that shuts off both domestic and sprinkler systems and separate shutoff for the domestic system only

(2) Electrical supervision in accordance with 9.7.2

(3) Valve closure that causes the sounding of an audible signal in the facility

32.2.3.5.8 Systems installed in accordance with ~~NFPA 13D~~ 9.7.1.1(2) shall be inspected, tested, and maintained in accordance with 32.2.3.5.8.1 through 32.2.3.5.8.15, which reference specific sections of NFPA 25. The frequency of the inspection, test, or maintenance shall be in accordance with this Code, whereas the purpose and procedure shall be from NFPA 25.

33.2.3.5.3.1 In prompt evacuation capability facilities, all of the following shall apply:

(1) An automatic sprinkler system in accordance with ~~NFPA 13D~~ 9.7.1.1(2) shall be permitted.

(2) Automatic sprinklers shall not be required in closets not exceeding 24 ft² (2.2 m²) and in bathrooms not exceeding 55 ft² (5.1 m²), provided that such spaces are finished with lath and plaster or materials providing a 15-minute thermal barrier.

33.2.3.5.3.2 In slow and impractical evacuation capability facilities, all of the following shall apply:

(1) An automatic sprinkler system in accordance with ~~NFPA 13D~~ 9.7.1.1(2) with a 30-minute water supply, shall be permitted.

(2) All habitable areas and closets shall be sprinklered.

(3) Automatic sprinklers shall not be required in bathrooms not exceeding 55 ft² (5.1 m²), provided that such spaces are finished with lath and plaster or materials providing a 15-minute thermal barrier.

33.2.3.5.3.3 In prompt and slow evacuation capability facilities, where an automatic sprinkler system is in accordance with ~~NFPA 13~~ 9.7.1.1(1) sprinklers shall not be required in closets not exceeding 24 ft² (2.2 m²) and in bathrooms not exceeding 55 ft² (5.1 m²), provided that such spaces are finished with lath and plaster or materials providing a 15-minute thermal barrier.

33.2.3.5.3.4 In prompt and slow evacuation capability facilities in buildings four or fewer stories above grade plane, systems in accordance with ~~NFPA 13R~~ 9.7.1.1(3) shall be permitted.

33.2.3.5.3.5 In impractical evacuation capability facilities in buildings four or fewer stories above grade plane, systems in accordance with ~~NFPA 13R~~ 9.7.1.1(3) shall be permitted. All habitable areas and closets shall be sprinklered. Automatic sprinklers shall not be required in bathrooms not exceeding 55 ft² (5.1 m²), provided that such spaces are finished with lath and plaster or materials providing a 15-minute thermal barrier.

33.2.3.5.8 Systems installed in accordance with ~~NFPA 13D~~ 9.7.1.1(2) shall be inspected, tested, and maintained in accordance with 33.2.3.5.8.1 through 33.2.3.5.8.15, which reference specific sections of NFPA 25. The frequency of the inspection, test, or maintenance shall be in accordance with this Code, whereas the purpose and procedure shall be from NFPA 25.

33.3.3.5.1.1 In buildings four or fewer stories above grade plane, systems in accordance with ~~NFPA 13R~~ 9.7.1.1(3) shall be permitted.

36.3.1 Protection of Vertical Openings. Any vertical opening shall be protected in accordance with Section 8.6, except under any of the following conditions:

(1) In Class A or Class B mercantile occupancies protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1), unprotected vertical openings shall be permitted at one of the following locations:

(1) Between any two floors

(2) Among the street floor, the first adjacent floor below, and the adjacent floor (or mezzanine) above

- (1) In Class C mercantile occupancies, unprotected openings shall be permitted between the street floor and the mezzanine.
- (2) The provisions for draft stops and closely spaced sprinklers ~~requirements of~~ in accordance with ~~NEPA-13~~ 9.7.1.1(1) shall not be required for unenclosed vertical openings permitted in 36.3.1(1) and 36.3.1(2).
- (3) Unenclosed vertical openings in accordance with 8.6.9.2 shall be permitted and the provision of 8.6.9.2(5) shall not apply.
- (4) Unenclosed vertical openings in accordance with 8.6.9.7 shall be permitted and the number of contiguous stories shall not be limited.

36.4.4.9.2 Rooms housing building service equipment, janitor closets, and service elevators shall be permitted to open directly onto exit passageways, provided that all of the following criteria are met:

- (1) The required fire resistance rating between such rooms or areas and the exit passageway shall be maintained in accordance with 7.1.3.2.
- (2) Such rooms or areas shall be protected by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1), but the exceptions in accordance with ~~NEPA-13~~ 9.7.1.1(1) allowing the omission of sprinklers from such rooms shall not be permitted.
- (3) Service elevators opening into the exit passageway shall not open into areas other than exit passageways.
- (4) Where exit stair enclosures discharge into the exit passageway, the provisions of 7.2.1.5.7 shall apply, regardless of the number of stories served.

37.3.1 Protection of Vertical Openings. Any vertical opening shall be protected in accordance with Section 8.6, except under any of the following conditions:

- (1) In Class A or Class B mercantile occupancies protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1, unprotected vertical openings shall be permitted at one of the following locations:
 - (1) Between any two floors
 - (2) Among the street floor, the first adjacent floor below, and the adjacent floor (or mezzanine) above
- (1) In Class C mercantile occupancies, unprotected openings shall be permitted between the street floor and the mezzanine.
- (2) The provisions for draft stops and closely spaced sprinklers ~~requirements of~~ in accordance with ~~NEPA-13~~ 9.7.1.1(1) shall not be required for unenclosed vertical openings permitted in 36.3.1(1) and 37.3.1(2).
- (3) Unenclosed vertical openings in accordance with 8.6.9.2 shall be permitted.

37.4.4.9.2 Rooms housing building service equipment, janitor closets, and service elevators shall be permitted to open directly onto exit passageways, provided that all of the following criteria are met:

- (1) The required fire resistance rating between such rooms or areas and the exit passageway shall be maintained in accordance with 7.1.3.2.
- (2) Such rooms or areas shall be protected by an approved automatic sprinkler system in accordance with 9.7.1.1(1), but the exceptions in accordance with ~~NEPA-13~~ 9.7.1.1(1) allowing the omission of sprinklers from such rooms shall not be permitted.
- (3) Service elevators opening into the exit passageway shall not open into areas other than exit passageways.

- (4) Where exit stair enclosures discharge into the exit passageway, the provisions of 7.2.1.5.7 shall apply, regardless of the number of stories served.

40.2.6.2 Power-Generation Buildings. Buildings of noncombustible construction used exclusively for the enclosure of steam generators, steam turbines, gas turbines, heat recovery generators, and flue gas treatment equipment shall be permitted to have a maximum travel distance of 400 ft (122 m), where all special hazards are protected by approved automatic suppression systems in accordance with one or more of the following standards, as applicable:

- (1) NFPA 11
- (2) NFPA 12
- (3) ~~NFPA 13~~ 9.7.1.1(1)
- (4) NFPA 15
- (5) NFPA 16
- (6) NFPA 17
- (7) NFPA 750
- (8) NFPA 2001

Additional Proposed Changes

<u>File Name</u>	<u>Description</u>	<u>Approved</u>
CD075_-_101_Sprinkler_Reference_Correction.docx	Full text language	

Statement of Problem and Substantiation for Public Input

Across the model codes, as it relates to automatic fire sprinkler systems, the proper code section that stipulates the use and installation of a particular fire protection system is provided. The proper code language is to reference that section and not the system type. This ensures that all the proper charging language is being applied. Not referencing the proper section could possibly cause misinterpretation and vital requirements being left out.

Submitter Information Verification

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Street Address:
City:
State:
Zip:
Submittal Date: Tue Jun 01 13:28:57 EDT 2021
Committee: SAF-BSF

CD075: Sprinkler Reference Correction

2021 NFPA 101

Revise as follows:

7.14.2.3 The absence of sprinklers in the normally unoccupied building service equipment support area, as permitted by an exemption of ~~NFPA-13 9.7.1.1(1)~~, shall not cause a building to be classified as nonsprinklered for purposes of applying the provisions of 7.14.2.2.

7.14.3.3 The absence of sprinklers in the normally unoccupied building service equipment support area, as permitted by an exemption of ~~NFPA-13 9.7.1.1(1)~~, shall not cause a building to be classified as nonsprinklered for purposes of applying the provisions of 7.14.3.2.

7.14.5.3 The absence of sprinklers in the normally unoccupied building service equipment support area, as permitted by an exemption of ~~NFPA-13 9.7.1.1(1)~~, shall not cause a building to be classified as nonsprinklered for purposes of applying the provisions of 7.14.5.2.

8.6.9.2 Where permitted by Chapters 11 through 43, unenclosed vertical openings created by convenience stairways shall comply with all of the following:

- (1) The convenience stair openings shall not serve as required means of egress.
- (2) The building shall be protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7.
- (3) The convenience stair openings shall be protected ~~in accordance~~ with the method detailed for the protection of vertical openings in ~~NFPA-13~~ in accordance with 9.7.1.1(1).
- (4) In new construction, the area of the floor opening shall not exceed twice the horizontal projected area of the stairway.
- (5) For new construction, such openings shall not connect more than four contiguous stories, unless otherwise permitted by Chapters 11 through 43.

8.6.9.7 Any escalators and moving walks not constituting an exit shall have their floor openings enclosed or protected as required for other vertical openings, unless otherwise permitted by one of the following:

- (1) The requirement of 8.6.9.7 shall not apply to escalators in large open areas, such as atriums and enclosed shopping malls.
- (2) In existing buildings protected throughout by an approved automatic sprinkler system in accordance with Section 9.7, escalator and moving walk openings shall be permitted to be protected ~~in accordance~~ with the method detailed in ~~NFPA-13~~ in accordance with 9.7.1.1(1) or in accordance with a method approved by the authority having jurisdiction.
- (3) In new buildings protected throughout by an approved automatic sprinkler system in accordance with Section 9.7, escalator and moving walk openings shall be permitted to be protected ~~in accordance~~ with the method detailed in ~~NFPA-13~~ in accordance with 9.7.1.1(1) or in accordance with a method approved by the authority having jurisdiction, and the opening shall not connect more than four contiguous stories unless otherwise permitted by Chapters 11 through 43.

- (4) In buildings protected throughout by an approved automatic sprinkler system in accordance with Section 9.7, escalator and moving walk openings shall be permitted to be protected by rolling steel shutters appropriate for the fire resistance rating of the vertical opening and complying with all of the following:
- (a) The shutters shall close automatically and independently of each other upon smoke detection and sprinkler operation.
 - (b) A manual means of operating and testing the operation of the shutters shall be provided.
 - (c) The shutters shall be operated not less than once a week to ensure that they remain in proper operating condition.
 - (d) The shutters shall operate at a speed not to exceed 30 ft/min (0.15 m/s) and shall be equipped with a sensitive leading edge.
 - (e) The leading edge shall arrest the progress of a moving shutter and cause it to retract a distance of approximately 6 in. (150 mm) upon the application of a force not exceeding 20 lbf (90 N) applied to the surface of the leading edge.
 - (f) The shutter, following the retraction specified in 8.6.9.7(4)(e), shall continue to close.
 - (g) The operating mechanism for the rolling shutter shall be provided with standby power complying with the provisions of NFPA 70.

9.7.1.3 Sprinkler piping serving hazardous areas as described in 9.7.1.2 shall be provided with an indicating shutoff valve, supervised in accordance with 9.7.2 or ~~NFPA 13~~ 9.7.1.1(1), and installed in an accessible, visible location between the sprinklers and the connection to the domestic water supply.

9.10.2 Where standpipe and hose systems are installed in combination with automatic sprinkler systems, installation shall be in accordance with the appropriate provisions established by ~~NFPA 13~~ 9.7.1.1(1) and NFPA 14.

12.4.7.7.1 Where required by 12.4.7.6, the proscenium opening shall be protected by a listed, minimum 20-minute opening protective assembly, a fire curtain complying with NFPA 80 or an approved water curtain complying with ~~NFPA 13~~ 9.7.1.1(1).

12.7.5.3.7.1 The requirements of 12.7.5.3.7 shall not apply where otherwise permitted by the following:

- (1) Ceilings that are constructed of open grate design or listed dropout ceilings in accordance with ~~NFPA 13~~ 9.7.1.1(1) shall not be considered ceilings within the context of 12.7.5.3.7.
- (2) Vehicles, boats, and similar exhibited products having over 100 ft² (9.3 m²) of roofed area shall be provided with smoke detectors acceptable to the authority having jurisdiction.
- (3) The requirement of 12.7.5.3.7(2) shall not apply where fire protection of multilevel exhibit booths is consistent with the criteria developed through a life safety evaluation of the exhibition hall in accordance with 12.4.2, subject to approval of the authority having jurisdiction.

13.7.5.3.7.1 The requirements of 13.7.5.3.7 shall not apply where otherwise permitted by the following:

- (1) Ceilings that are constructed of open grate design or listed dropout ceilings in accordance with ~~NFPA-13~~ 9.7.1.1(1) shall not be considered ceilings within the context of 13.7.5.3.7.
- (2) Vehicles, boats, and similar exhibited products having over 100 ft² (9.3 m²) of roofed area shall be provided with smoke detectors acceptable to the authority having jurisdiction.
- (3) The requirement of 13.7.5.3.7(2) shall not apply where fire protection of multilevel exhibit booths is consistent with the criteria developed through a life safety evaluation of the exhibition hall in accordance with 13.4.2, subject to approval of the authority having jurisdiction.

18.3.5.10 Sprinklers shall not be required in clothes closets of patient sleeping rooms in hospitals where the area of the closet does not exceed 6 ft² (0.55 m²), provided that the distance from the sprinkler in the patient sleeping room to the back wall of the closet does not exceed the maximum distance permitted by ~~NFPA-13~~ 9.7.1.1(1).

18.3.5.11 Sprinklers in areas where cubicle curtains are installed shall be in accordance with ~~NFPA-13~~ 9.7.1.1(1).

19.3.5.10 Sprinklers shall not be required in clothes closets of patient sleeping rooms in hospitals where the area of the closet does not exceed 6 ft² (0.55 m²), provided that the distance from the sprinkler in the patient sleeping room to the back wall of the closet does not exceed the maximum distance permitted by ~~NFPA-13~~ 9.7.1.1(1).

19.3.5.11 Newly introduced cubicle curtains in sprinklered areas shall be installed in accordance with ~~NFPA-13~~ 9.7.1.1(1).

24.3.5.3 Automatic sprinkler systems in accordance with ~~NFPA-13~~ 9.7.1.1(1), ~~NFPA-13D~~ 9.7.1.1(2), or ~~NFPA-13R~~ 9.7.1.1(3) shall be permitted.

26.3.6.2.2 In buildings four or fewer stories in height and not exceeding 60 ft (18.3 m) in height above grade plane, systems in accordance with ~~NFPA-13R~~ 9.7.1.1(3) shall be permitted.

26.3.6.2.3 Systems in accordance with ~~NFPA-13D~~ 9.7.1.1(2) shall be permitted where all of the following requirements are met:

- (1) The lodging or rooming house shall not be part of a mixed occupancy.
- (2) Entrance foyers shall be sprinklered.
- (3) Lodging or rooming houses with sleeping accommodations for more than eight occupants shall be treated as two-family dwellings with regard to the water supply.

26.3.6.2.4 In buildings sprinklered in accordance with ~~NFPA-13~~ 9.7.1.1(1) closets less than 12 ft² (1.1 m²) in area in individual dwelling units shall not be required to be sprinklered.

26.3.6.2.5 In buildings sprinklered in accordance with ~~NFPA-13~~ 9.7.1.1(1) closets that contain equipment such as washers, dryers, furnaces, or water heaters shall be sprinklered, regardless of size.

28.1.5.2 For the design of automatic sprinkler systems, the classification of contents in accordance with ~~NFPA-13~~ 9.7.1.1(1) shall apply.

28.3.5.3 Where an automatic sprinkler system is installed, either for total or partial building coverage, the system shall be in accordance with Section 9.7, as modified by 28.3.5.4. In hotel or dormitory occupancies up to and including four stories in height that are located in buildings not exceeding 60 ft (18.3 m) in height above grade plane, systems in accordance with ~~NFPA 13R~~ 9.7.1.1(3) shall be permitted.

28.3.5.4 The provisions for draft stops and closely spaced sprinklers in accordance with NFPA 13 9.7.1.1(1) shall not be required for openings complying with 8.6.9.1 where the opening is within the guest room or guest suite.

29.1.5.2 For the design of automatic sprinkler systems, the classification of contents in accordance with NFPA 13 9.7.1.1(1) shall apply.

29.3.5.3 Where an automatic sprinkler system is installed, either for total or partial building coverage, the system shall be in accordance with Section 9.7, as modified by 29.3.5.4 and 29.3.5.5. In buildings four or fewer stories in height and not exceeding 60 ft (18.3 m) in height above grade plane, systems in accordance with ~~NFPA 13R~~ 9.7.1.1(3) shall be permitted.

29.3.5.4 The provisions for draft stops and closely spaced sprinklers in accordance with NFPA 13 9.7.1.1(1) shall not be required for openings complying with 8.6.9.1 where the opening is within the guest room or guest suite.

30.3.5.1.2 In apartment buildings up to and including four stories in height, that are located in buildings not exceeding 60 ft (18.3 m) in height above grade plane, systems in accordance with ~~NFPA 13R~~ 9.7.1.1(3) shall be permitted.

30.3.5.3 Closets. In buildings sprinklered in accordance with ~~NFPA 13~~ 9.7.1.1(1), closets shall meet the following requirements:

- (1) Closets of less than 12 ft² (1.1 m²) in individual dwelling units shall not be required to be sprinklered.
- (2) Closets that contain equipment such as washers, dryers, furnaces, or water heaters shall be sprinklered, regardless of size.

30.3.5.4 Convenience Openings. The draft stop and closely spaced sprinkler requirements of ~~NFPA 13 9.7.1.1(1)~~ shall not be required for convenience openings complying with 8.6.9.1 where the convenience opening is within the dwelling unit.

31.3.5.2 Where an automatic sprinkler system is installed, either for total or partial building coverage, the system shall be installed in accordance with Section 9.7, as modified by 31.3.5.3 and 31.3.5.4. In buildings four or fewer stories in height and not exceeding 60 ft (18.3 m) in height above grade plane, systems in accordance with ~~NFPA 13R~~ 9.7.1.1(3) shall be permitted.

31.3.5.4 In buildings sprinklered in accordance with ~~NFPA 13~~ 9.7.1.1(1) bathrooms not greater than 55 ft² (5.1 m²) in individual dwelling units shall not be required to be sprinklered.

31.3.5.5 The provisions for draft stops and closely spaced sprinklers ~~requirements of~~ in accordance with NFPA 13 9.7.1.1(1) shall not be required for convenience openings complying with 8.6.9.1 where the convenience opening is within the dwelling unit.

31.3.5.6.4 Where Option 3 is being used to permit the use of 1 3/4 in. (44 mm) thick, solid-bonded wood-core doors in accordance with 31.2.2.1.3, sprinklers shall be provided within the exit enclosures in accordance with ~~NFPA-13~~ 9.7.1.1(1).

32.2.3.5.3 Where an automatic sprinkler system is installed, for either total or partial building coverage, all of the following requirements shall be met:

- (1) The system shall be in accordance with ~~NFPA-13~~ 9.7.1.1(1) and shall initiate the fire alarm system in accordance with 32.2.3.4.1.
- (2) The adequacy of the water supply shall be documented to the authority having jurisdiction.

32.2.3.5.3.1 In buildings four or fewer stories in height and not exceeding 60 ft (18.3 m) in height above grade plane, systems in accordance with ~~NFPA-13R~~ 9.7.1.1(3) shall be permitted. All habitable areas, closets, roofed porches, roofed decks, and roofed balconies shall be sprinklered.

32.2.3.5.3.2 An automatic sprinkler system with a 30-minute water supply, and complying with all of the following requirements and with ~~NFPA-13D~~ 9.7.1.1(2) shall be permitted:

- (1) All habitable areas, closets, roofed porches, roofed decks, and roofed balconies shall be sprinklered.
- (2) Facilities with more than eight residents shall be treated as two-family dwellings with regard to water supply.

32.2.3.5.4 Automatic sprinkler systems installed in accordance with ~~NFPA-13~~ 9.7.1.1(1) and ~~NFPA-13R~~ 9.7.1.1(3) shall be provided with electrical supervision in accordance with 9.7.2.

32.2.3.5.5 Automatic sprinkler systems installed in accordance with ~~NFPA-13D~~ 9.7.1.1(2) shall be provided with valve supervision by one of the following methods:

- (1) Single listed control valve that shuts off both domestic and sprinkler systems and separate shutoff for the domestic system only
- (2) Electrical supervision in accordance with 9.7.2
- (3) Valve closure that causes the sounding of an audible signal in the facility

32.2.3.5.8 Systems installed in accordance with ~~NFPA-13D~~ 9.7.1.1(2) shall be inspected, tested, and maintained in accordance with 32.2.3.5.8.1 through 32.2.3.5.8.15, which reference specific sections of NFPA 25. The frequency of the inspection, test, or maintenance shall be in accordance with this Code, whereas the purpose and procedure shall be from NFPA 25.

33.2.3.5.3.1 In prompt evacuation capability facilities, all of the following shall apply:

- (1) An automatic sprinkler system in accordance with ~~NFPA-13D~~ 9.7.1.1(1) shall be permitted.
- (2) Automatic sprinklers shall not be required in closets not exceeding 24 ft² (2.2 m²) and in bathrooms not exceeding 55 ft² (5.1 m²), provided that such spaces are finished with lath and plaster or materials providing a 15-minute thermal barrier.

33.2.3.5.3.2 In slow and impractical evacuation capability facilities, all of the following shall apply:

- (1) An automatic sprinkler system in accordance with ~~NFPA 13D~~ 9.7.1.1(2) with a 30-minute water supply, shall be permitted.
- (2) All habitable areas and closets shall be sprinklered.
- (3) Automatic sprinklers shall not be required in bathrooms not exceeding 55 ft² (5.1 m²), provided that such spaces are finished with lath and plaster or materials providing a 15-minute thermal barrier.

33.2.3.5.3.3 In prompt and slow evacuation capability facilities, where an automatic sprinkler system is in accordance with ~~NFPA 13~~ 9.7.1.1(1) sprinklers shall not be required in closets not exceeding 24 ft² (2.2 m²) and in bathrooms not exceeding 55 ft² (5.1 m²), provided that such spaces are finished with lath and plaster or materials providing a 15-minute thermal barrier.

33.2.3.5.3.4 In prompt and slow evacuation capability facilities in buildings four or fewer stories above grade plane, systems in accordance with ~~NFPA 13R~~ 9.7.1.1(3) shall be permitted.

33.2.3.5.3.5 In impractical evacuation capability facilities in buildings four or fewer stories above grade plane, systems in accordance with ~~NFPA 13R~~ 9.7.1.1(3) shall be permitted. All habitable areas and closets shall be sprinklered. Automatic sprinklers shall not be required in bathrooms not exceeding 55 ft² (5.1 m²), provided that such spaces are finished with lath and plaster or materials providing a 15-minute thermal barrier.

33.2.3.5.8 Systems installed in accordance with ~~NFPA 13D~~ 9.7.1.1(2) shall be inspected, tested, and maintained in accordance with 33.2.3.5.8.1 through 33.2.3.5.8.15, which reference specific sections of NFPA 25. The frequency of the inspection, test, or maintenance shall be in accordance with this Code, whereas the purpose and procedure shall be from NFPA 25.

33.3.3.5.1.1 In buildings four or fewer stories above grade plane, systems in accordance with ~~NFPA 13R~~ 9.7.1.1(3) shall be permitted.

36.3.1 Protection of Vertical Openings. Any vertical opening shall be protected in accordance with Section 8.6, except under any of the following conditions:

- (1) In Class A or Class B mercantile occupancies protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1), unprotected vertical openings shall be permitted at one of the following locations:
 - (a) Between any two floors
 - (b) Among the street floor, the first adjacent floor below, and the adjacent floor (or mezzanine) above
- (2) In Class C mercantile occupancies, unprotected openings shall be permitted between the street floor and the mezzanine.
- (3) The provisions for draft stops and closely spaced sprinklers ~~requirements of in accordance with NFPA 13 9.7.1.1(1)~~ shall not be required for unenclosed vertical openings permitted in 36.3.1(1) and 36.3.1(2).
- (4) Unenclosed vertical openings in accordance with 8.6.9.2 shall be permitted and the provision of 8.6.9.2(5) shall not apply.
- (5) Unenclosed vertical openings in accordance with 8.6.9.7 shall be permitted and the number of contiguous stories shall not be limited.

36.4.4.9.2 Rooms housing building service equipment, janitor closets, and service elevators shall be permitted to open directly onto exit passageways, provided that all of the following criteria are met:

- (1) The required fire resistance rating between such rooms or areas and the exit passageway shall be maintained in accordance with 7.1.3.2.
- (2) Such rooms or areas shall be protected by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1), but the exceptions in accordance with NFPA 13 9.7.1.1(1) allowing the omission of sprinklers from such rooms shall not be permitted.
- (3) Service elevators opening into the exit passageway shall not open into areas other than exit passageways.
- (4) Where exit stair enclosures discharge into the exit passageway, the provisions of 7.2.1.5.7 shall apply, regardless of the number of stories served.

37.3.1 Protection of Vertical Openings. Any vertical opening shall be protected in accordance with Section 8.6, except under any of the following conditions:

- (1) In Class A or Class B mercantile occupancies protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1), unprotected vertical openings shall be permitted at one of the following locations:
 - (a) Between any two floors
 - (b) Among the street floor, the first adjacent floor below, and the adjacent floor (or mezzanine) above
- (2) In Class C mercantile occupancies, unprotected openings shall be permitted between the street floor and the mezzanine.
- (3) The provisions for draft stops and closely spaced sprinklers ~~requirements of in accordance with NFPA 13 9.7.1.1(1)~~ shall not be required for unenclosed vertical openings permitted in 36.3.1(1) and 37.3.1(2).
- (4) Unenclosed vertical openings in accordance with 8.6.9.2 shall be permitted.

37.4.4.9.2 Rooms housing building service equipment, janitor closets, and service elevators shall be permitted to open directly onto exit passageways, provided that all of the following criteria are met:

- (1) The required fire resistance rating between such rooms or areas and the exit passageway shall be maintained in accordance with 7.1.3.2.
- (2) Such rooms or areas shall be protected by an approved automatic sprinkler system in accordance with 9.7.1.1(1), but the exceptions in accordance with NFPA 13 9.7.1.1(1) allowing the omission of sprinklers from such rooms shall not be permitted.
- (3) Service elevators opening into the exit passageway shall not open into areas other than exit passageways.
- (4) Where exit stair enclosures discharge into the exit passageway, the provisions of 7.2.1.5.7 shall apply, regardless of the number of stories served.

40.2.6.2 Power-Generation Buildings. Buildings of noncombustible construction used exclusively for the enclosure of steam generators, steam turbines, gas turbines, heat recovery generators, and flue gas treatment equipment shall be permitted to have a maximum travel distance of 400 ft (122 m), where all special hazards are protected by approved automatic suppression systems in accordance with one or more of the following standards, as applicable:

- (1) NFPA 11
- (2) NFPA 12
- (3) ~~NFPA 13~~ 9.7.1.1(1)
- (4) NFPA 15
- (5) NFPA 16
- (6) NFPA 17
- (7) NFPA 750
- (8) NFPA 2001

Reason: Across the model codes, as it relates to automatic fire sprinkler systems, the proper code section that stipulates the use and installation of a particular fire protection system is provided. The proper code language is to reference that section and not the system type. This ensures that all the proper charging language is being applied. Not referencing the proper section could possibly cause misinterpretation and vital requirements being left out.



Public Input No. 183-NFPA 101-2021 [New Section after 3.3.14]

3.3.14.3 Initiating Device.

A system component that originates transmission of a change-of-state condition, such as in a smoke detector, manual fire alarm box, or supervisory switch.

Statement of Problem and Substantiation for Public Input

This definition is an extract from NFPA 72, Section 3.3.141 to correlate with NFPA 101 PI 182.

This PI is on behalf of FCC-AAC task group on sprinkler supervision.

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
<u>Public Input No. 182-NFPA 101-2021 [Section No. 9.7.2.1.1]</u>	
<u>Public Input No. 182-NFPA 101-2021 [Section No. 9.7.2.1.1]</u>	

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Submittal Date: Fri May 21 10:26:59 EDT 2021

Committee: SAF-BSF



Public Input No. 338-NFPA 101-2021 [New Section after 3.3.273]

Sprinkler system

A system, commonly activated by heat from a fire and discharges water over the fire area, that consists of an integrated network of piping designed in accordance with fire protection engineering standards that includes a water supply source, a control valve, a waterflow alarm, and a drain. The portion of the sprinkler system above ground is a network of specifically sized or hydraulically designed piping installed in a building, structure, or area, generally overhead, and to which sprinklers are attached in a systematic pattern. (13, 2022)

Automatic sprinkler

A fire suppression or control device that operates automatically when its heat-activated element is heated to its thermal rating or above, allowing to discharge over a specified area. (13, 2022)

Statement of Problem and Substantiation for Public Input

Sprinkler systems and automatic sprinklers should be defined in NFPA 101. This PI are definitions extracted from the 2022 edition of NFPA 13.

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
Public Input No. 335-NFPA 101-2021 [Section No. 9.7]	

Submitter Information Verification

Submitter Full Name: Jeffrey Hugo
Organization: National Fire Sprinkler Associ
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City:
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Submittal Date: Tue Jun 01 10:18:50 EDT 2021
Committee: SAF-BSF

**Public Input No. 243-NFPA 101-2021 [Section No. 9.4.5]****9.4.5* Elevator Machine Rooms.**

Elevator machine rooms that contain solid-state equipment for elevators, other than existing elevators, having a travel distance exceeding 50 ft (15 m) above the level of exit discharge, or exceeding 30 ft (9.1 m) below the level of exit discharge, shall be provided with ~~independent ventilation or air-conditioning systems~~ a natural or mechanical means to maintain temperature during fire fighters' emergency operations for elevator operation (see 9.4.3). The operating temperature shall be established by the elevator equipment manufacturer's specifications. When standby power is connected to the elevator, the ~~machine room ventilation or air-conditioning shall~~ means to control the temperature in the machine room shall be connected to standby power, if applicable.

Statement of Problem and Substantiation for Public Input

Update to better align with the requirements in ASME A17.1/CSA B44.

Submitter Information Verification

Submitter Full Name: Kevin Brinkman

Organization: National Elevator Industry, Inc.

Street Address:

City:

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Submittal Date: Fri May 28 11:40:13 EDT 2021

Committee: SAF-BSF



Public Input No. 199-NFPA 101-2021 [Sections 9.6.2.10.5, 9.6.2.10.6, 9.6.2.10.7

]

Sections 9.6.2.10.5, 9.6.2.10.6, 9.6.2.10.7

9.6.2.10.5*

~~Unless otherwise provided in 9.6.2.10.7, smoke~~

~~-~~

Smoke alarms and smoke detectors shall not be installed

within an area of exclusion determined by a 10 ft

between 10 ft (3.

0 m) radial distance

0 m) and 20 ft (6.1 m) along a horizontal flow path from a stationary or fixed cooking appliance

~~, unless listed for installation in close proximity to cooking appliances. Smoke alarms and smoke detectors installed between 10 ft (3.0 m) and 20 ft (6.1 m)~~

unless the devices comply with the following:

1) Prior to January 1, 2023, smoke alarms and smoke detectors shall be equipped with an alarm silencing means, use photoelectric detection, or be listed for resistance to common nuisance sources from cooking in accordance with the 8th edition of UL 217, Smoke Alarms, the 7th edition of UL 268, Smoke Detectors for Fire Alarm Systems, or subsequent editions.

2) Effective January 1, 2023, smoke alarms and smoke detectors shall be listed for resistance to common nuisance sources from cooking in accordance with the 8th edition of UL 217, the 7th edition of UL 268, or subsequent editions.

[72:29.11.3.4(4)]

~~-~~

9.6.2.10.6 Smoke alarms and smoke detectors shall not be installed within an area of exclusion determined by a 10 ft (3.0 m) radial distance along a horizontal flow path from a stationary or fixed cooking appliance

~~shall be equipped with an alarm silencing means or use photoelectric detection.~~

[72 : 29.11.3.4(

4

5)]

9.6.2.10.

6-

Smoke

7

When the 10ft (3.0m) area of exclusion would prohibit the placement of a smoke alarm or smoke detector required by other sections of this Code, and when the kitchen or cooking area and adjacent spaces have no clear interior partitions or headers, smoke alarms or smoke detectors

that use photoelectric detection

shall be permitted for installation at a radial distance

greater than 6 ft

between 6ft (1.

8 m)

8m) and 10ft (3.0m) from any stationary or fixed cooking appliance

when

unless the

following conditions are met:

- The kitchen or cooking area and adjacent spaces have no clear interior partitions or headers. The 10 ft (3.0 m) area of exclusion would prohibit the placement of a smoke alarm or smoke detector required by other sections of NFPA 72 .

devices comply with the following:

1) Prior to January 1, 2023, the devices shall use photoelectric detection or be listed for resistance to common nuisance sources from cooking in accordance with the 8th edition of UL 217, the 7th edition of UL 268, or subsequent editions.

2) Effective January 1, 2023, the devices shall be listed for resistance to common nuisance sources from cooking nuisance alarms in accordance with the 8th edition of UL 217, the 7th edition of UL 268, or subsequent editions. [72 : 29.11.3.4(5)]

9.6.2.10.7 * _

Smoke alarms and smoke detectors shall not be installed within a 36 in. (910 mm) horizontal path from a door to a bathroom containing a shower or tub unless listed for installation in close proximity to such locations. [72 : 29.11.3.4(7)]

Statement of Problem and Substantiation for Public Input

This Public Input seeks to accomplish two important objectives.

1. Reduce unwanted alarm activations from smoke alarms and smoke detectors being installed near stationary or fixed cooking appliances.
2. Align the requirements in NFPA 101 with the requirements in the 2022 edition of NFPA 72 and NFPA 1 CI-9.

Submitter Information Verification

Submitter Full Name: Megan Hayes

Organization: Nema

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Submittal Date: Wed May 26 13:34:35 EDT 2021

Committee:

SAF-BSF



Public Input No. 298-NFPA 101-2021 [New Section after 9.6.3.6.1]

9.6.3.6.1 *

Where modular rooms and sleep pods complying with Section 10.6 are provided in indoor areas with occupant notification systems, the required audible and visible signal shall be extended into the interior of these units.

A.9.6.3.6.1

Modular rooms such as lactation stations and other small privacy enclosures, including sleep pods, are showing up in an increasing number of indoor locations. These include airports, convention centers, business and government buildings. Because these portable products include sound deadening construction and privacy walls, it may not be possible for occupants to hear or see alarm notification signals in the area in which they are located.

Statement of Problem and Substantiation for Public Input

Modular rooms and sleep pods are becoming increasingly popular, and are showing up in a variety of different occupancies. This proposal provides a means for AHJs to approve these installations and allow the use of these prefabricated structures.

This proposal treats modular rooms and sleep pods, such as those shown in the attached pictures, as products that can be installed in a building, and not as building construction, while not losing applicable code requirements.

The UL 962 listing covers the fabrication and safety of the modular room. UL 962 includes requirements for insulation, finish materials, internal wiring, lighting, ventilation, and other construction features. Markings are to be provided on the listed products to document the Interior finish and foamed plastic ratings, such as the ASTM E84 (UL 723) flame spread and smoke developed indexes. This makes it easy to determine their suitability for use in the specific areas of the building.

Section 10.6.5 allows the AHJ to approve the installation locations, to make sure the means of egress is not compromised and other code requirements are not adversely impacted.

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
Public Input No. 296-NFPA 101-2021 [New Section after 3.3.189]	
Public Input No. 297-NFPA 101-2021 [New Section after 3.3.262]	
Public Input No. 299-NFPA 101-2021 [Section No. 10.1.3.2]	
Public Input No. 300-NFPA 101-2021 [New Section after 10.5.5]	
Public Input No. 301-NFPA 101-2021 [New Section after 12.7.5]	
Public Input No. 302-NFPA 101-2021 [New Section after 13.7.5]	
Public Input No. 303-NFPA 101-2021 [New Section after 18.7.6]	
Public Input No. 305-NFPA 101-2021 [New Section after 20.7.6]	
Public Input No. 307-NFPA 101-2021 [New Section after 21.7.6]	
Public Input No. 309-NFPA 101-2021 [New Section after 36.4.4.12]	

[Public Input No. 310-NFPA 101-2021 \[New Section after 37.4.4.12\]](#)

[Public Input No. 311-NFPA 101-2021 \[New Section after 38.7.7\]](#)

[Public Input No. 312-NFPA 101-2021 \[New Section after 39.7.7\]](#)

[Public Input No. 313-NFPA 101-2021 \[New Section after 40.7.3\]](#)

Submitter Information Verification

Submitter Full Name: Kelly Nicolello

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Submittal Date: Mon May 31 15:41:40 EDT 2021

Committee: SAF-BSF



Public Input No. 108-NFPA 101-2021 [Section No. 9.6.3.6.1]

9.6.3.6.1

Areas not subject to occupancy by persons who are ~~hearing impaired shall~~ deaf or hard of hearing shall not be required to comply with the provisions for visible signals.

Statement of Problem and Substantiation for Public Input

The NFPA Disability Access Review and Advisory Committee (DARAC) requests an update to the terminology used to describe individuals with disabilities. In general, we suggest using “people first” language to avoid characterizing a person or group of persons entirely by their disability. Also, where possible, we recommend substituting the appropriate technical term when describing building elements that are accessible to individuals with disabilities, rather than describing the element as being “for” such people. For example, we would say “accessible parking” instead of “handicap parking”. The substitute terms we recommend are found to be more acceptable to the disability community and its supporters and, therefore, demonstrate greater respect.

We used following resources to develop our input:

- “Guidelines for Writing About People with Disabilities” ADA National Network at <https://adata.org/factsheet/ADANN-writing>
- “Disability Style Guide” National Center on Disability and Journalism at <https://ncdj.org/style-guide/>
- “Resources for Reporters Writing About Blindness and Vision Loss” American Foundation for the Blind at <https://www.afb.org/news-publications/press-room/reporter-resources-writing-about-blindness-vision-loss>
- “Five Tips for Writing About People with Disabilities” Adaptive Sports Center at <https://www.adaptivesports.org/blog/announcements/five-tips-writing-about-people-disabilities>
- “Fact Sheet: Drug Addiction and Federal Disability Rights Laws” U.S. Department of Health and Hum Services: Office for Civil Rights at <https://www.hhs.gov/sites/default/files/drug-addiction-aand-federal-disability-rights-laws-fact-sheet.pdf>
- “People First Language” District of Columbia Office of Disability Rights at <https://odr.dc.gov/page/people-first-language>

Submitter Information Verification

Submitter Full Name: Marsha Mazz

Organization: United Spinal Association

Affiliation: Representing the DARAC Advisory Committee

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City:

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Submission Date: Thu May 06 12:17:57 EDT 2021

Committee: SAF-BSF



Public Input No. 430-NFPA 101-2021 [Section No. 9.6.3.7.3]

9.6.3.7.3

Where occupants are incapable of evacuating themselves because of age, physical or mental disabilities, or physical restraint, all of the following shall apply:

- (1) The private operating mode, as described in *NFPA 72* shall be permitted to be used.
- (2) Only the attendants and other personnel required to evacuate occupants from a zone, area, floor, or building shall be required to be notified. This notification shall not be required to go through the fire alarm system but may be another means, such as overhead paging, mass communication systems, or other technology.
- (3) Notification of personnel as specified in 9.6.3.7.3(2) shall include means to readily identify the zone, area, floor, or building in need of evacuation.

Statement of Problem and Substantiation for Public Input

The verbiage in 9.6.3.7.3(3) implies a voice evacuation system which is not required for many buildings nor is it the intent of the code language. Other reliable technological means are permissible for notification of necessary personnel.

Submitter Information Verification

Submitter Full Name: Joshua Brackett

Organization:

Street Address:

City:

State:

Zip:

Submittal Date: Tue Jun 01 15:57:45 EDT 2021

Committee: SAF-BSF



Public Input No. 435-NFPA 101-2021 [Section No. 9.6.8.4]

9.6.8.4

Where a floor area exceeds 22,500 ft² (2090 m²), additional fire alarm zoning notification zoning shall be provided, and the length of any single fire alarm zone shall not exceed 300 ft (91 m) in any direction, except as provided in 9.6.8.4.1 through 9.6.8.4.6, or as otherwise modified by another section of this *Code*.

9.6.8.4.1

Where permitted by another section of this *Code*, fire alarm notification zones shall be permitted to exceed 22,500 ft² (2090 m²), and the length of a zone shall be permitted to exceed 300 ft (91 m) in any direction.

9.6.8.4.2

Where the building is protected by an automatic sprinkler system in accordance with 9.7.1.1(1), the area of the fire alarm notification zone shall be permitted to coincide with the allowable area of the sprinkler system.

9.6.8.4.3

Where the building is protected by a water mist system in accordance with 9.8.1 and Table 9.8.1, the area of the fire alarm notification zone shall be permitted to coincide with the allowable area of the water mist system.

9.6.8.4.4

Unless otherwise prohibited by another section of this *Code*, where a building not exceeding four stories in height is protected by an automatic water mist system in accordance with 9.8.1, the water mist system shall be permitted to be annunciated on the fire alarm system as a single zone.

9.6.8.4.5

Unless otherwise prohibited by another section of this *Code*, where a building not exceeding four stories in height is protected by an automatic sprinkler system in accordance with 9.7.1.1(1), the sprinkler system shall be permitted to be annunciated on the fire alarm system as a single zone.

9.6.8.4.6

Where the building is protected by an automatic sprinkler system in accordance with 9.7.1.1(2) or 9.7.1.1(3), the sprinkler system shall be permitted to be annunciated on the fire alarm system as a single zone.

9.6.8.4.7

Where the occupancy is a defend in place occupancy the fire alarm notification zones shall be permitted to align with the facilities fire response plan and evacuation zones.

Statement of Problem and Substantiation for Public Input

Aligning terminology with NFPA 72 and adding a clause for defend in place occupancy types

Submitter Information Verification

Submitter Full Name: Joshua Brackett

Organization:

Street Address:

City:

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Submittal Date: Tue Jun 01 16:04:51 EDT 2021

Committee: SAF-BSF



Public Input No. 335-NFPA 101-2021 [Section No. 9.7]

9.7 Automatic Sprinklers Sprinkler Systems .

9.7.1 General.

9.7.1.1*

Each automatic sprinkler system required by another section of this *Code* shall be in accordance with one of the following:

- (1) NFPA 13
- (2) NFPA 13D
- (3) NFPA 13R

9.7.1.2

Sprinkler piping serving not more than six sprinklers for any hazardous area shall be permitted to be connected directly to a domestic water supply system having a capacity sufficient to provide 0.15 gpm/ft² (6.1 mm/min) throughout the entire enclosed area.

9.7.1.3

Sprinkler piping serving hazardous areas as described in 9.7.1.2 shall be provided with an indicating shutoff valve, supervised in accordance with 9.7.2 or NFPA 13, and installed in an accessible, visible location between the sprinklers and the connection to the domestic water supply.

9.7.1.4*

In areas protected by automatic sprinklers, automatic heat-detection devices required by other sections of this *Code* shall not be required.

9.7.1.5

Automatic sprinkler systems installed to make use of an alternative permitted by this *Code* shall be considered required systems and shall meet the provisions of this *Code* that apply to required systems.

9.7.2 Supervision.

9.7.2.1 Supervisory Signals.

9.7.2.1.1

Where supervised automatic sprinkler systems are required by another section of this *Code*, supervisory attachments shall be installed and monitored for integrity in accordance with *NFPA 72* and a distinctive supervisory signal shall be provided to indicate a condition that would impair the satisfactory operation of the sprinkler system.

9.7.2.1.2

Supervisory signals shall sound and shall be displayed either at a location within the protected building that is constantly attended by qualified personnel or at an approved, remotely located receiving facility.

9.7.2.2 Alarm Signal Transmission.

9.7.2.2.1

Where supervision of automatic sprinkler systems is required by another section of this *Code*, waterflow alarms shall be transmitted to an approved, proprietary alarm-receiving facility, a remote station, a central station, or the fire department.

9.7.2.2.2

The connection described in 9.7.2.2.1 shall be in accordance with 9.6.1.3.

Statement of Problem and Substantiation for Public Input

Automatic sprinklers are a part of an automatic sprinkler system. The title change accurately reflects the entire system installed.

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
Public Input No. 338-NFPA 101-2021 [New Section after 3.3.273]	

Submitter Information Verification

Submitter Full Name: Jeffrey Hugo
Organization: National Fire Sprinkler Associ
Affiliation: NFSA
Street Address:
City:
State:
Zip:
Submittal Date: Tue Jun 01 10:09:37 EDT 2021
Committee: SAF-BSF



Public Input No. 449-NFPA 101-2021 [New Section after 9.7.1.1]

A.9.7.1

Automatic sprinkler systems are required by this Code or are installed voluntarily for the exceptions, material tradeoffs, and economic benefits. Due care must be taken by jurisdictions who adopt and modify this Code when altering, adding, or removing active or passive fire protection requirements. When editions of this Code are updated, often the fire sprinkler requirement is assumed and built upon.

Statement of Problem and Substantiation for Public Input

When codes are updated or adopted, the fire sprinkler requirement can be written out of the code. This annex note provides the caution to the AHJ who is involved locally to examine the entire code when removing fire sprinkler requirements.

Submitter Information Verification

Submitter Full Name: Jeffrey Hugo

Organization: National Fire Sprinkler Associ

Affiliation: NFSA

Street Address:

City:

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Submittal Date: Tue Jun 01 16:50:52 EDT 2021

Committee: SAF-BSF



Public Input No. 230-NFPA 101-2021 [New Section after 9.7.2.1.1]

A.9.7.2.1.1

Supervisory (tamper) switches on valves controlling water supply to the automatic sprinkler system, including floor control assemblies, sectional and isolation valves, pressure switches, and waterflow switches, are examples of electrical supervisory attachments, or more appropriately defined by NFPA 72 as supervisory signal initiating devices. Some installation standards, such as NFPA 13, permit chains and locks on valves, this method is not acceptable for new installations of automatic sprinkler systems when required by building, life safety, and fire codes. Other system components and parameters that are required to be supervised include, but not limited to, levels and temperatures of water in tanks, tank pressure, and air pressure on dry-pipe and preaction valves.

Valves controlling the water supply to fire sprinkler and standpipe systems within the building is in supervision scope of NFPA 101. The extent or demarcation line of valves outside of the building, typically located underground is often handled by multiple authorities. When valves are located underground, located on or off the property, the application of supervisory initiating devices is best handled by the appropriate installation standard or water utility. For example, NFPA 24 for private water supplies, requires control valves to be supervised, however, the method of supervision can be electrical or physical (chain, locks, or seals). The curb box or roadway valve box is not required to be supervised. NFPA 24, or NFPA 101 does not have authority of public water utility valves aboveground or underground.

Statement of Problem and Substantiation for Public Input

The 1980 NFPA 101 added Section 6-4.2 with text for "...electrical supervision for control valves, fire pump power supplies and running conditions, water tank levels and temperatures, pressure of pressure tanks, and air pressure on dry pipe valves..." This remained in NFPA 101 until the 2012 edition when SAF-BSF (101-A2011-ROP, 101-203 Log #293) removed the above list from the 9.7.2.1 text and relocated in the annex. The entire NFPA 101, A.9.7.2.1 annex text was removed by SAF-BSF FR-6543-2018 in the 2021 edition.

The SAF-AAC and BLD-AAC formed a task group to review fire sprinkler supervision requirements in NFPA 101 and 5000. The TG felt the removal of annex text leaves the new or inexperienced user of the code leads to the interpretation that the installation standard, such as NFPA 13, controls the method of supervision. The loss of the preview annex note removes the other portions of the system that are meant to be electrically supervised. The annex note addresses the application of electrical supervision to other valves, typically installed underground or in a yard.

The FCC-AAC (NFPA 1) formed a task group on fire sprinkler supervision requirements and submitted PIs to NFPA 101 (PI 182, PI 183) and NFPA 5000 (PI 48, PI 49) to change "supervisory attachments" to "initiating devices" as defined by NFPA 72.

This PI is on behalf of FCC-AAC task group on sprinkler supervision.

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
Public Input No. 182-NFPA 101-2021 [Section No. 9.7.2.1.1]	

Submitter Information Verification

Submitter Full Name:	Jeffrey Hugo
Organization:	National Fire Sprinkler Associ
Affiliation:	On behalf SAF-ACC and BLD-AAC Task Group on Sprinkler Supervision
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Submittal Date:	Fri May 28 10:41:29 EDT 2021
Committee:	SAF-BSF



Public Input No. 182-NFPA 101-2021 [Section No. 9.7.2.1.1]

9.7.2.1.1

Where supervised automatic sprinkler systems are required by another section of this *Code*, alarm and supervisory attachments shall initiating devices shall be installed and monitored for integrity in accordance with *NFPA 72* and a distinctive supervisory signal shall be provided to indicate a condition that would impair the satisfactory operation of the sprinkler system.

Statement of Problem and Substantiation for Public Input

Supervisory attachments is an undefined and ambiguous term in NFPA 101, NFPA 13, and NFPA 72. The new text, initiating devices, is a defined term in NFPA 72. See PI 183 for extracting the definition from NFPA 72, Section 3.3.141, into NFPA 101.

This PI is on behalf of FCC-AAC task group on sprinkler supervision.

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
Public Input No. 183-NFPA 101-2021 [New Section after 3.3.14]	
Public Input No. 183-NFPA 101-2021 [New Section after 3.3.14]	
Public Input No. 230-NFPA 101-2021 [New Section after 9.7.2.1.1]	

Submitter Information Verification

Submitter Full Name: Jeffrey Hugo

Organization: National Fire Sprinkler Associ

Affiliation: On behalf of FCC-AAC task group on sprinkler supervision

Street Address:

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Submittal Date: Fri May 21 10:03:38 EDT 2021

Committee: SAF-BSF

**Public Input No. 437-NFPA 101-2021 [Section No. 9.8.1]****9.8.1* Alternative Systems.**

In any occupancy where the character of the fuel for fire is such that extinguishment or control of fire is accomplished by a type of automatic extinguishing system in lieu of an automatic sprinkler system, such extinguishing system shall be installed in accordance with the applicable standard referenced in Table 9.8.1.

Table 9.8.1 Fire Suppression System Installation Standards

<u>Fire Suppression System</u>	<u>Installation Standard</u>
Low-, medium-, and high-expansion foam systems	NFPA 11
Carbon dioxide systems	NFPA 12
Halon 1301 systems	NFPA 12A
Water spray fixed systems	NFPA 15
Deluge foam-water sprinkler systems	NFPA 16
Dry chemical systems	NFPA 17
Wet chemical systems	NFPA 17A
Water mist systems	NFPA 750
<u>Hybrid (Water and Inert-Gas) Fire Extinguishing systems</u>	<u>NFPA 770</u>
<u>Clean agent extinguishing systems</u>	<u>NFPA 2001</u>

-

Statement of Problem and Substantiation for Public Input

NFPA 770 (2021 edition) is a new standard and should be added as a option for a fire protection system.

Submitter Information Verification

Submitter Full Name: Kevin Kelly

Organization: Victaulic

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Submittal Date: Tue Jun 01 16:13:48 EDT 2021

Committee: SAF-BSF



Public Input No. 200-NFPA 101-2021 [New Section after 9.12]

9.12.1*

Carbon monoxide detectors that are installed in air duct systems shall not be used as a substitute for open area protection. [72:17.2.3]

A.9.12.1 At present there is no product performance listing for duct mounted carbon monoxide detectors because there is no peer reviewed research to determine what the alarm thresholds for duct mounted carbon monoxide detectors should be. There are considerable differences between the operation of a spot-type carbon monoxide detector and a duct mounted carbon monoxide detector. The environment in ducts can be very harsh and could impact the carbon monoxide detector's sensing element. Furthermore, in most buildings, there are periods when the HVAC system is not moving significant quantities of air from the compartments it serves. As a result, the carbon monoxide detection system cannot be designed to rely on the HVAC system operation for the transport of carbon monoxide to the carbon monoxide detectors.

Statement of Problem and Substantiation for Public Input

This Public Input seeks to prevent a potential life safety issue by prohibiting duct mounted carbon monoxide (CO) detectors from being installed in lieu of “open area” CO detectors or alarms. This change is needed for the following reasons:

1. Duct mounted CO detectors are commercially available, however, there are no alarm thresholds for duct mounted CO detectors in UL 2075 or UL 2034
2. Duct mounted CO detectors have been proposed for use in applications where CO detection is needed, which has created confusion for designers and code officials.
3. When the HVAC system is not moving significant quantities of air duct mounted CO detectors cannot accurately detect potentially hazardous levels of CO in the rooms served by the HVAC system.
4. This PI should remove confusion about duct mounted CO detectors being used as the required means of providing code mandated protection.

Align the duct CO detection requirements in NFPA 101 with the requirement in the 2022 edition of NFPA 72 and FR-18 for the 2024 edition of NFPA 1.

Submitter Information Verification

Submitter Full Name: Megan Hayes

Organization: Nema

Street Address:

City:

State:

Zip:

Submittal Date: Wed May 26 14:07:30 EDT 2021

Committee: SAF-BSF



Public Input No. 194-NFPA 101-2021 [New Section after 9.15]

9.16 Automated External Defibrillators

9.16.1 All new structures built in accordance with this code with a total occupancy capacity greater than 50 person shall have an automated external defibrillator (AED) present.

9.16.1.1 In structures containing multiple occupancies and occupancy types, one AED for the structure shall suffice

9.16.1.2 The AHJ may adopt more stringent requirements for placement locations and intervals within a structure of AEDs for public use

9.16.2 All AEDs required under this code shall be maintained in accordance with manufacturers guidelines

9.16.3 Required AEDs under this code shall be placed in readily identifiable areas of the structure and shall be available at all times the structure may potentially be occupied, and location shall be approved by the AHJ

Statement of Problem and Substantiation for Public Input

More than 336,000 cardiac arrests occur in the United States each year, according to the American Heart Association's latest data. AEDs are one of only two forms of treatment proven to improve survival from sudden cardiac arrest, the other being CPR. However, currently only 6% of prehospital cardiac arrests have an AED used prior to EMS arrival. This is despite the fact that use of an AED has been shown to double survival from cardiac arrest. Many times, AEDs are not available at the locations of cardiac arrest

Current 911 systems can provide for telephone CPR instructions for any bystander who contacts and requests EMS, however, they cannot make an AED arrive sooner than the time of EMS or other first responder arrival. While once cost prohibitive, AEDs are now drastically less expensive, especially in comparison to fire protection systems and other building maintenance and safety costs. By requiring them for larger structures with higher occupant loads greater than 50 reduces cost burden to smaller facilities and structures, as well as maximizes their location to places with a higher likelihood of use.

The purpose of this code is to improve life safety of a community, especially in large groups as a population. Ensuring AED availability is an important way of doing so, that is just as effective in reducing loss of life as requiring fire extinguishers in an occupancy, if not more so. Adding this requirement could potentially save hundreds, if not thousands, of additional lives each year by ensuring that these devices are accessible amongst the populations within a community and capable of being used prior to EMS arrival.

Submitter Information Verification

Submitter Full Name: Christopher Wanka

Organization: College Park Vol. Fire Department

Street Address:

City:

State:

Zip:

Submittal Date: Tue May 25 16:55:25 EDT 2021

Committee: SAF-BSF



Public Input No. 427-NFPA 101-2021 [Section No. 9.15]

9.15* Two-Way Radio Communication- In-Building Emergency Responder Communications Enhancement Systems.

9.15.1

Where provided, two-way radio

In-building emergency responder communication enhancement systems shall

be in accordance with NFPA 1221.

comply with the design, installation, testing, inspection, and maintenance requirements of NFPA 1225.

9.15.2

In new buildings,

minimum radio signal strength for fire department communications

the minimum in-building emergency responder communication enhancement system signal strength shall be in accordance with NFPA

1221

1225 .

9.15.3 *

In existing buildings,

radio signal strength for fire department communications shall

the minimum in-building emergency responder communication enhancement signal strength signal strength shall be as required

by the authority having jurisdiction

1225 .

Additional Proposed Changes

<u>File Name</u>	<u>Description</u>	<u>Approved</u>
SAF-BSF_ERCES_PI_Chapt_9_Clean-up.pdf	Modification to 1225 terminology	

Statement of Problem and Substantiation for Public Input

This Public Input seeks to align the design, installation, testing, inspection, and maintenance requirement in 9.15.1 of NFPA 101, Life Safety Code, with the requirement in section 11.10.3 of the 2021 edition of NFPA 1, Fire Code. The Public Input is needed because a second correlation revisions SCR-11 and SCR-12 replaced the word "Two" with "where provided". The change by the Correlating Committee for 2021 edition of NFPA 101 makes compliance with the minimum in-building emergency responder communications signal strength in NFPA 1221 voluntary. The intent of the SAF-BSF Technical Committee (see FR-6540) is to require in-building emergency responder communication enhancement systems buildings without approved in building communication coverage specified in NFPA 1221, now NFPA 1225.

Submitter Information Verification

Submitter Full Name: Christopher Creamer
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Submittal Date: Tue Jun 01 15:48:38 EDT 2021
Committee: SAF-BSF

DRAFT Public Input (PI)
2024 EDITION OF NFPA 101 and NFPA 5000
In-Building Emergency Responder Communications Enhancement Systems

SAF-BSF Proposed Text of Public Input:

9.15* ~~Two-Way Radio~~ In-Building Emergency Responder Communications Enhancement Systems.

A.915 ~~Two-way radio~~ In-Building emergency responder communications enhancement systems provide for greater flexibility and safety for emergency responders during in-building operations relating to fire and non-fire emergencies.

9.15.1 ~~Where provided, two-way radio communication enhancement systems shall be in accordance with NFPA 1221.~~ In-building emergency responder communication enhancement systems shall comply with the design, installation, testing, inspection, and maintenance requirements of NFPA 1225.

9.15.2 In new buildings, the minimum ~~radio in-building emergency responder communications~~ signal strength ~~for fire department communications~~ shall be in accordance with NFPA ~~1221~~ 1225.

9.15.3* In existing buildings, ~~radio~~ the minimum in-building emergency responder communications signal strength ~~for fire department communications~~ shall be as required by the authority having jurisdiction.

SAF-RES Statement of Problem and Substantiation of Public Input:

This Public Input seeks to align the design, installation, testing, inspection, and maintenance requirement in 9.15.1 of NFPA 101, *Life Safety Code*, with the requirement in section 11.10.3 of the 2021 edition of NFPA 1, *Fire Code*. The Public Input is needed because a second correlation revisions SCR-11 and SCR-12 replaced the word “Two” with “where provided”. The change by the Correlating Committee for 2021 edition of NFPA 101 makes compliance with the minimum in-building emergency responder communications signal strength in NFPA 1221 voluntary. The intent of the SAF-BSF Technical Committee (see FR-6540) is to require in-building emergency responder communication enhancement systems buildings without approved in building communication coverage specified in NFPA 1221, now NFPA 1225.



Public Input No. 448-NFPA 101-2021 [Section No. 9.15]

9.15* ~~Two-Way Radio- In-Building Emergency Responder~~ Communication Enhancement Systems.

9.15.1

Where provided, ~~two-way radio communication- in-building emergency responder communication~~ enhancement systems shall be in accordance with NFPA 1221 1225 .

9.15.2

In new buildings, ~~the~~ minimum radio signal strength for ~~fire department communications- in-building emergency responder communication enhancement systems~~ shall be in accordance with NFPA 1221 1225 .

9.15.3*

In existing buildings, ~~radio signal strength for fire department communications shall- in-building emergency responder communication enhancement system signal strength shall~~ be as required by the authority having jurisdiction ~~in accordance with NFPA 1225~~ .

Statement of Problem and Substantiation for Public Input

This Public Input seeks to replace the term “Two-Way Radio Communication Enhancement Systems” with “In-Building Emergency Responder Communication Enhancement Systems”. The change is needed to align with other codes & standards such as NFPA 1225, NFPA 1 and the 2024 edition of the International Fire Code (IFC). Having a consistent term used for all codes & standards reduces confusion.

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
Public Input No. 450-NFPA 101-2021 [Sections A.9.15, A.9.15.3]	

Submitter Information Verification

Submitter Full Name: Alan Perdue
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Submittal Date: Tue Jun 01 16:44:45 EDT 2021
Committee: SAF-BSF



Public Input No. 169-NFPA 101-2021 [Section No. A.9.6.2.6]

A.9.6.2.6

The manual fire alarm box required by 9.6.2.6 is intended to provide a means to manually activate the fire alarm system when the automatic fire detection system or waterflow devices are out of service due to maintenance or testing, or where human discovery of the fire precedes automatic sprinkler system or automatic detection system activation. Where the fire alarm system is connected to a monitoring facility, the manual fire alarm box required by 9.6.2.6 should be connected to a separate circuit that is not placed "on test" when the detection or sprinkler system is placed on test. ~~The manual fire alarm box should be located in an area that is accessible to occupants of the building and should not be locked~~ means is only intended for use by the system technician or the building owner and should be located by the sprinkler riser or fire alarm control unit .

Statement of Problem and Substantiation for Public Input

The location of the single manual fire alarm box described in A.9.6.2.6 differs from that described in NFPA 72 A.23.8.5.1.2. This has led to confusion as to the desired location for this manual fire alarm box. Although this is Annex language, Authorities Having Jurisdiction are referring to this language for guidance regarding the placement of this manual fire alarm box. As NFPA 72 is the standard for the installation of fire alarm systems, the language from that standard should take precedence. If the intent of the designer or reviewing code authority is to provide a manual fire alarm system within a building, the manual boxes should be located according to the requirements of NFPA 101 9.6.2.3 in accordance with Chapters 11 through 43.

Submitter Information Verification

Submitter Full Name: Joseph Ripp
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Submittal Date: Tue May 18 15:03:10 EDT 2021
Committee: SAF-BSF



Public Input No. 281-NFPA 101-2021 [Section No. A.9.6.2.6]

A.9.6.2.6

The manual fire alarm box required by 9.6.2.6 is intended to provide a means to manually activate the fire alarm system when the automatic fire detection system or waterflow devices are out of service due to maintenance or testing, or where human discovery of the fire precedes automatic sprinkler system or automatic detection system activation. Where the fire alarm system is connected to a monitoring facility, the manual fire alarm box required by 9.6.2.6 should be connected to a separate circuit that is not placed "on test" when the detection or sprinkler system is placed on test. ~~The manual fire alarm box should be located in an area that is accessible to occupants of the building and should not be locked~~ means is only intended for use by the system technician or the building owner and should be located by the sprinkler riser or fire alarm control unit.

Additional Proposed Changes

<u>File Name</u>	<u>Description</u>	<u>Approved</u>
NFPA_101_A.9.6.2.6_PI.docx	Clarification and Substation to A.9.6.2.6	

Statement of Problem and Substantiation for Public Input

Statement:

The location of the single manual fire alarm box described in A.9.6.2.6 differs from that described in NFPA 72 A.23.8.5.1.2. This has led to confusion as to the desired location for this manual fire alarm box. Although this is Annex language, Authorities Having Jurisdiction are referring to this language for guidance regarding the placement of this manual fire alarm box. As NFPA 72 is the standard for the installation of fire alarm systems, the language from that standard should take precedence. If the intent of the designer or reviewing code authority is to provide a manual fire alarm system within a building, the manual boxes should be located according to the requirements NFPA 101 9.6.2.3 in accordance with Chapters 11 through 43.

NFPA 72 (for reference)

23.8.5.1.2* Where connected to a supervising station, fire alarm systems employing automatic fire detectors or waterflow detection devices shall include a manual fire alarm box to initiate a signal to the supervising station.

A.23.8.5.1.2 The manual means required by 23.8.5.1.2 is intended to provide a backup means to manually actuate the fire alarm system when the automatic fire detection system or waterflow devices are out of service due to maintenance or testing, or where human discovery of the fire precedes automatic sprinkler system or automatic detection system activation. The manual fire alarm box required by 23.8.5.1.2 should be connected to a separate circuit that is not placed "on test" when the detection or sprinkler system is placed "on test." The manual means is only intended for use by the system technician or the building owner and should be located by the sprinkler riser or fire alarm control unit.

Submitter Information Verification

Submitter Full Name: Christopher Creamer

Organization: Dynafire

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Submittal Date: Mon May 31 10:54:36 EDT 2021

Committee: SAF-BSF

NFPA 101

9.6.2.6* For fire alarm systems using automatic fire detection or waterflow detection devices to initiate the fire alarm system in accordance with Chapters 11 through 43, not less than one manual fire alarm box, located as required by the authority having jurisdiction, shall be provided to initiate a fire alarm signal.

A.9.6.2.6 The manual fire alarm box required by 9.6.2.6 is intended to provide a means to manually activate the fire alarm system when the automatic fire detection system or waterflow devices are out of service due to maintenance or testing, or where human discovery of the fire precedes automatic sprinkler system or automatic detection system activation. Where the fire alarm system is connected to a monitoring facility, the manual fire alarm box required by 9.6.2.6 should be connected to a separate circuit that is not placed “on test” when the detection or sprinkler system is placed on test. ~~The manual fire alarm box should be located in an area that is accessible to occupants of the building and should not be locked. The manual means is only intended for use by the system technician or the building owner and should be located by the sprinkler riser or fire alarm control unit.~~

Statement:

The location of the single manual fire alarm box described in A.9.6.2.6 differs from that described in NFPA 72 A.23.8.5.1.2. This has led to confusion as to the desired location for this manual fire alarm box. Although this is Annex language, Authorities Having Jurisdiction are referring to this language for guidance regarding the placement of this manual fire alarm box. As NFPA 72 is the standard for the installation of fire alarm systems, the language from that standard should take precedence. If the intent of the designer or reviewing code authority is to provide a manual fire alarm system within a building, the manual boxes should be located according to the requirements NFPA 101 9.6.2.3 in accordance with Chapters 11 through 43.

NFPA 72 (for reference)

23.8.5.1.2* Where connected to a supervising station, fire alarm systems employing automatic fire detectors or waterflow detection devices shall include a manual fire alarm box to initiate a signal to the supervising station.

A.23.8.5.1.2 The manual means required by 23.8.5.1.2 is intended to provide a backup means to manually actuate the fire alarm system when the automatic fire detection system or waterflow devices are out of service due to maintenance or testing, or where human discovery of the fire precedes automatic sprinkler system or automatic detection system activation. The manual fire alarm box required by 23.8.5.1.2 should be connected to a separate circuit that is not placed “on test” when the detection or sprinkler system is placed “on test.” **The manual means is only intended for use by the system technician or the building owner and should be located by the sprinkler riser or fire alarm control unit.**

**Public Input No. 429-NFPA 101-2021 [Section No. A.9.15]****A.9.15**

~~Two-way radio communication-~~ In-Building emergency responder communications enhancement systems provide for greater flexibility and safety for emergency responders during in-building operations relating to fire and non-fire emergencies.

Additional Proposed Changes

<u>File Name</u>	<u>Description</u>	<u>Approved</u>
SAF-BSF_ERCES_PI_Chapt_9_Clean-up.pdf	Terminology Clean up from 1225 Committee Work	

Statement of Problem and Substantiation for Public Input

This Public Input seeks to align the design, installation, testing, inspection, and maintenance requirement in 9.15.1 of NFPA 101, Life Safety Code, with the requirement in section 11.10.3 of the 2021 edition of NFPA 1, Fire Code. The Public Input is needed because a second correlation revisions SCR-11 and SCR-12 replaced the word "Two" with "where provided". The change by the Correlating Committee for 2021 edition of NFPA 101 makes compliance with the minimum in-building emergency responder communications signal strength in NFPA 1221 voluntary. The intent of the SAF-BSF Technical Committee (see FR-6540) is to require in-building emergency responder communication enhancement systems buildings without approved in building communication coverage specified in NFPA 1221, now NFPA 1225.

Submitter Information Verification

Submitter Full Name: Christopher Creamer
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Submittal Date: Tue Jun 01 15:56:26 EDT 2021
Committee: SAF-BSF

DRAFT Public Input (PI)
2024 EDITION OF NFPA 101 and NFPA 5000
In-Building Emergency Responder Communications Enhancement Systems

SAF-BSF Proposed Text of Public Input:

9.15* ~~Two-Way Radio~~ In-Building Emergency Responder Communications Enhancement Systems.

A.915 ~~Two-way radio~~ In-Building emergency responder communications enhancement systems provide for greater flexibility and safety for emergency responders during in-building operations relating to fire and non-fire emergencies.

9.15.1 ~~Where provided, two-way radio communication enhancement systems shall be in accordance with NFPA 1221.~~ In-building emergency responder communication enhancement systems shall comply with the design, installation, testing, inspection, and maintenance requirements of NFPA 1225.

9.15.2 In new buildings, the minimum ~~radio in-building emergency responder communications~~ signal strength ~~for fire department communications~~ shall be in accordance with NFPA ~~1221~~ 1225.

9.15.3* In existing buildings, ~~radio~~ the minimum in-building emergency responder communications signal strength ~~for fire department communications~~ shall be as required by the authority having jurisdiction.

SAF-RES Statement of Problem and Substantiation of Public Input:

This Public Input seeks to align the design, installation, testing, inspection, and maintenance requirement in 9.15.1 of NFPA 101, *Life Safety Code*, with the requirement in section 11.10.3 of the 2021 edition of NFPA 1, *Fire Code*. The Public Input is needed because a second correlation revisions SCR-11 and SCR-12 replaced the word “Two” with “where provided”. The change by the Correlating Committee for 2021 edition of NFPA 101 makes compliance with the minimum in-building emergency responder communications signal strength in NFPA 1221 voluntary. The intent of the SAF-BSF Technical Committee (see FR-6540) is to require in-building emergency responder communication enhancement systems buildings without approved in building communication coverage specified in NFPA 1221, now NFPA 1225.



Public Input No. 450-NFPA 101-2021 [Sections A.9.15, A.9.15.3]

Sections A.9.15, A.9.15.3

A.9.15

~~Two-way radio~~ In-building emergency responder communication enhancement systems provide for greater flexibility and safety for emergency responders during in-building operations relating to fire and non-fire emergencies.

A.9.15.3

In existing buildings, it might be difficult to meet the ~~minimum radio signal~~ minimum signal strength required by NFPA 1224 1225 . The authority having ~~jurisdiction might~~ jurisdiction might determine that certain areas of a building do not need to meet the ~~radio signal~~ the signal strength coverage required by NFPA 1224 1225 . The authority having jurisdiction might also determine that compliance with the ~~minimum radio signal strength in-building emergency responder communication enhancement system~~ outlined in NFPA 1224 1225 is appropriate.

Statement of Problem and Substantiation for Public Input

This Public Input seeks to replace the term “Two-Way Radio Communication Enhancement Systems” with “In-Building Emergency Responder Communication Enhancement Systems”. The change is needed to align with other codes & standards such as NFPA 1225, NFPA 1 and the 2024 edition of the International Fire Code (IFC). Having a consistent term used for all codes & standards reduces confusion.

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
Public Input No. 448-NFPA 101-2021 [Section No. 9.15]	

Submitter Information Verification

Submitter Full Name: Alan Perdue
Organization: Safer Buildings Coalition
Affiliation: Safer Buildings Coalition
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City:
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Submittal Date: Tue Jun 01 16:53:32 EDT 2021
Committee: SAF-BSF

COPY FOR TC REVIEW - PI assigned to FUN**Public Input No. 296-NFPA 101-2021 [New Section after 3.3.189]****3.3.189 Modular Room.**

An occupiable prefabricated structure, consisting of walls and a ceiling, with or without an integrated floor, designed and intended for use as an office or privacy space, which may include integral electrical wiring, ventilation, and furnishings.

Statement of Problem and Substantiation for Public Input

Modular rooms and sleep pods are becoming increasingly popular, and are showing up in a variety of different occupancies. This proposal provides a means for AHJs to approve these installations and allow the use of these prefabricated structures.

This proposal treats modular rooms and sleep pods, such as those shown in the attached pictures, as products that can be installed in a building, and not as building construction, while not losing applicable code requirements.

The UL 962 listing covers the fabrication and safety of the modular room. UL 962 includes requirements for insulation, finish materials, internal wiring, lighting, ventilation, and other construction features. Markings are to be provided on the listed products to document the Interior finish and foamed plastic ratings, such as the ASTM E84 (UL 723) flame spread and smoke developed indexes. This makes it easy to determine their suitability for use in the specific areas of the building.

Section 10.6.5 allows the AHJ to approve the installation locations, to make sure the means of egress is not compromised and other code requirements are not adversely impacted.

Submitter Information Verification**Submitter Full Name:** Kelly Nicoello**Organization:** UL LLC**Street Address:****City:****State:****Zip:****Submittal Date:** Mon May 31 15:37:25 EDT 2021**Committee:** SAF-FUN

COPY FOR TC REVIEW - PI assigned to FUN**Public Input No. 297-NFPA 101-2021 [New Section after 3.3.262]****3.3.262 Sleep Pod.**

A modular room that is designed and used for sleeping purposes.

Statement of Problem and Substantiation for Public Input

Modular rooms and sleep pods are becoming increasingly popular, and are showing up in a variety of different occupancies. This proposal provides a means for AHJs to approve these installations and allow the use of these prefabricated structures.

This proposal treats modular rooms and sleep pods, such as those shown in the attached pictures, as products that can be installed in a building, and not as building construction, while not losing applicable code requirements.

The UL 962 listing covers the fabrication and safety of the modular room. UL 962 includes requirements for insulation, finish materials, internal wiring, lighting, ventilation, and other construction features. Markings are to be provided on the listed products to document the Interior finish and foamed plastic ratings, such as the ASTM E84 (UL 723) flame spread and smoke developed indexes. This makes it easy to determine their suitability for use in the specific areas of the building.

Section 10.6.5 allows the AHJ to approve the installation locations, to make sure the means of egress is not compromised and other code requirements are not adversely impacted.

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
<u>Public Input No. 296-NFPA 101-2021 [New Section after 3.3.189]</u>	

Submitter Information Verification

Submitter Full Name: Kelly Nicoletto

Organization: UL LLC

Street Address:

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Submittal Date: Mon May 31 15:39:04 EDT 2021

Committee: SAF-FUN

COPY FOR TC REVIEW - PI assigned to FUN



Public Input No. 195-NFPA 101-2021 [New Section after 3.3.125]

Fuel -Burning Appliance. A device that burns solid, liquid, or gaseous fuel or a combination thereof.

Statement of Problem and Substantiation for Public Input

This term is currently undefined in 101 but is used throughout the code. The proposed definition is verbatim from the 2015 edition of NFPA 720.

Submitter Information Verification

Submitter Full Name: Kris Hauschildt

Organization: Jenkins Foundation

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Submittal Date: Tue May 25 17:37:24 EDT 2021

Committee: SAF-FUN

COPY FOR TC REVIEW - PI assigned to FUN



Public Input No. 425-NFPA 101-2021 [Section No. 2.2]

2.2* NFPA Publications.

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

NFPA 1, *Fire Code*, 2021 [edition](#).

NFPA 4, *Standard for Integrated Fire Protection and Life Safety System Testing*, 2021 [edition](#).

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

NFPA 11, *Standard for Low-, Medium-, and High-Expansion Foam*, 2016 [edition](#).

NFPA 12, *Standard on Carbon Dioxide Extinguishing Systems*, 2018 [edition](#).

NFPA 12A, *Standard on Halon 1301 Fire Extinguishing Systems*, 2018 [edition](#).

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

NFPA 13D, *Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes*, 2019 [edition](#).

NFPA 13R, *Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies*, 2019 [edition](#).

NFPA 14, *Standard for the Installation of Standpipe and Hose Systems*, 2019 [edition](#).

NFPA 15, *Standard for Water Spray Fixed Systems for Fire Protection*, 2017 [edition](#).

NFPA 16, *Standard for the Installation of Foam-Water Sprinkler and Foam-Water Spray Systems*, 2019 [edition](#).

NFPA 17, *Standard for Dry Chemical Extinguishing Systems*, 2021 [edition](#).

NFPA 17A, *Standard for Wet Chemical Extinguishing Systems*, 2021 [edition](#).

NFPA 20, *Standard for the Installation of Stationary Pumps for Fire Protection*, 2019 [edition](#).

NFPA 25, *Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems*, 2020 [edition](#).

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

NFPA 30B, *Code for the Manufacture and Storage of Aerosol Products*, 2019 [edition](#).

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

NFPA 40, *Standard for the Storage and Handling of Cellulose Nitrate Film*, 2019 [edition](#).

NFPA 45, *Standard on Fire Protection for Laboratories Using Chemicals*, 2019 [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 80, *Standard for Fire Doors and Other Opening Protectives*, 2019 [edition](#).

NFPA 82, *Standard on Incinerators and Waste and Linen Handling Systems and Equipment*, 2019 [edition](#).

NFPA 88A, *Standard for Parking Structures*, 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 92, *Standard for Smoke Control Systems*, 2018 [edition](#).

NFPA 96, *Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations*,

2021 [edition](#).

NFPA 99, *Health Care Facilities Code*, 2021 [edition](#).

NFPA 101A, *Guide on Alternative Approaches to Life Safety*, 2019 [edition](#).

NFPA 105, *Standard for Smoke Door Assemblies and Other Opening Protectives*, 2019 [edition](#).

NFPA 110, *Standard for Emergency and Standby Power Systems*, 2019 [edition](#).

NFPA 111, *Standard on Stored Electrical Energy Emergency and Standby Power Systems*, 2019 [edition](#).

NFPA 150, *Fire and Life Safety in Animal Housing Facilities Code*, 2019 [edition](#).

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

NFPA 170, *Standard for Fire Safety and Emergency Symbols*, 2018 [edition](#).

NFPA 204, *Standard for Smoke and Heat Venting*, 2018 [edition](#).

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

NFPA 220, *Standard on Types of Building Construction*, 2021 [edition](#).

NFPA 221, *Standard for High Challenge Fire Walls, Fire Walls, and Fire Barrier Walls*, 2021 [edition](#).

NFPA 241, *Standard for Safeguarding Construction, Alteration, and Demolition Operations*, 2019 [edition](#).

NFPA 252, *Standard Methods of Fire Tests of Door Assemblies*, 2017 [edition](#).

NFPA 253, *Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source*, 2019 [edition](#).

NFPA 257, *Standard on Fire Test for Window and Glass Block Assemblies*, 2017 [edition](#).

NFPA 259, *Standard Test Method for Potential Heat of Building Materials*, 2018 [edition](#).

NFPA 260, *Standard Methods of Tests and Classification System for Cigarette Ignition Resistance of Components of Upholstered Furniture*, 2019 [edition](#).

NFPA 261, *Standard Method of Test for Determining Resistance of Mock-Up Upholstered Furniture Material Assemblies to Ignition by Smoldering Cigarettes*, 2018 [edition](#).

NFPA 265, *Standard Methods of Fire Tests for Evaluating Room Fire Growth Contribution of Textile or Expanded Vinyl Wall Coverings on Full Height Panels and Walls*, 2019 [edition](#).

NFPA 286, *Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth*, 2019 [edition](#).

NFPA 288, *Standard Methods of Fire Tests of Horizontal Fire Door Assemblies Installed in Horizontal Fire Resistance–Rated Assemblies*, 2017 [edition](#).

NFPA 289, *Standard Method of Fire Test for Individual Fuel Packages*, 2019 [edition](#).

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

NFPA 415, *Standard on Airport Terminal Buildings, Fueling Ramp Drainage, and Loading Walkways*, 2016 [edition](#).

NFPA 418, *Standard for Heliports*, 2016 [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 703, *Standard for Fire-Retardant-Treated Wood and Fire-Retardant Coatings for Building Materials*, 2021 [edition](#).

NFPA 731, *Standard for the Installation of Electronic Premises Security Systems*, 2017 [edition](#).

NFPA 750, *Standard on Water Mist Fire Protection Systems*, 2019 [edition](#).

NFPA 855, *Standard for the Installation of Stationary Energy Storage Systems*, 2020 [edition](#).

NFPA 914, *Code for the Protection of Historic Structures*, 2019 [edition](#).

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

NFPA 1221, *Standard for the Installation, Maintenance, and Use of Emergency- 1225, Standard for Emergency Services Communications- Systems*, 2019 - 2022 [edition](#).

NFPA 2001, *Standard on Clean Agent Fire Extinguishing Systems*, 2018 [edition](#).

Additional Proposed Changes

<u>File Name</u>	<u>Description</u>	<u>Approved</u>
SAF-BSF_ERCES_PI_Chapt_2.pdf	NFPA Standard update	

Statement of Problem and Substantiation for Public Input

As part of the consolidation plan, NFPA 1225 is combining Standards NFPA 1061 and NFPA 1221. This Public Input references the correct NFPA standard for In-Building Emergency Responder Communication Enhancement Systems in Chapter 2.

Submitter Information Verification

Submitter Full Name: Christopher Creamer
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Submittal Date: Tue Jun 01 15:42:02 EDT 2021
Committee: SAF-FUN

DRAFT Public Input (PI)
2024 EDITION OF NFPA 101 and NFPA 5000
In-Building Emergency Responder Communications Enhancement Systems

SAF-BSF Proposed Text of Public Input:

Referenced Publications

2.2* NFPA Publications.

~~NFPA 1221, Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems, 2019 edition.~~ [NFPA 1225, Standards for Emergency Services Communications, 2022 edition.](#)

SAF-RES Statement of Problem and Substantiation of Public Input:

As part of the consolidation plan, NFPA 1225 is combining Standards NFPA 1061 and NFPA 1221. This Public Input references the correct NFPA standard for In-Building Emergency Responder Communication Enhancement Systems in Chapter 2.

**Public Input No. 129-NFPA 5000-2021 [Global Input]**

7.1.5.2.2.2 Where a one- or two-family dwelling, or townhouse, is protected with an approved automatic sprinkler system that is installed in accordance with ~~NFPA 13D~~ 55.3.1.1(3) or ~~NFPA 13R~~ 55.3.1.1(2), as applicable, the distance in 7.1.5.2.2.1 shall be permitted to be increased to 150 ft (46 m).

7.1.5.2.3.2 When buildings are protected throughout with an approved automatic sprinkler system that is installed in accordance with ~~NFPA 13~~ 55.3.1.1(1), ~~NFPA 13R~~ 55.3.1.1(2), or ~~NFPA 13D~~ 55.3.1.1(3), the distance shall be permitted to be increased to 450 ft (137 m).

7.4.1.4.7 * Power-Generation Structures. Structures of Type I or Type II construction used exclusively for the enclosure of steam generators, steam turbines, gas turbines, heat recovery generators, and flue gas treatment equipment shall be permitted to be of unlimited height and area when special hazards are protected by an approved automatic suppression system in accordance with NFPA 11, NFPA 12, ~~NFPA 13~~ 55.3.1.1(1), NFPA 15, NFPA 16, NFPA 17, NFPA 750, or NFPA 2001.

7.6.2.3.4.2 The sum of the allowable area ratios for all stories in buildings protected in accordance with ~~NFPA 13R~~ 55.3.1.1(2) shall not be greater than the following:

- (1) 1.0 for one-story buildings
- (2) 2.0 for two-story buildings
- (3) 3.0 for three-story buildings
- (4) 4.0 for four-story buildings

8.3.3.11.2.2 Single opening protectives in fire walls shall not be limited in size where the buildings on both sides of the fire wall are protected throughout by automatic sprinkler systems in accordance with ~~NFPA 13~~ 55.3.1.1(1) or ~~NFPA 13R~~ 55.3.1.1(2).

8.12.5.2 Where permitted by Chapters 15 through 31 and 33 through 34, unenclosed vertical openings created by convenience stairways shall be permitted as follows:

- (3) The convenience stair openings shall be protected ~~in accordance~~ with the method detailed for the protection of vertical openings in ~~NFPA 13~~ accordance with 55.3.1.1(1).

8.12.6.2 Any escalators and moving walks not constituting an exit, or serving as a required means of egress, shall have their floor openings enclosed or protected as required for other vertical openings, unless permitted by the following:

- (2) In buildings protected throughout by an approved automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) or ~~NFPA 13R~~ 55.3.1.1(2), escalators or moving walk openings shall be permitted to be protected ~~in accordance~~ with the method detailed in ~~NFPA 13~~ accordance with 55.3.1.1(1) or in accordance with a method approved by the authority having jurisdiction and the opening shall not connect more than four contiguous stories unless otherwise permitted by Chapters 15 through 31 and 33 through 34.

8.12.6.3 In buildings protected throughout by an approved automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) or ~~NFPA 13R~~ 55.3.1.1(2), escalators or moving walk openings shall be permitted to be protected by rolling steel shutters appropriate for the fire resistance rating of the vertical opening protected, and the following criteria shall be met:

- (1) The shutters shall close automatically and independently of each other upon smoke detection and sprinkler operation.
- (2) There shall be a manual means of operating and testing the operation of the shutter.

(3) The shutters shall be operated not less than once a week to ensure that they remain in proper operating condition.

(4) The shutters shall operate at a speed not to exceed 30 ft/min (0.15 m/s) and shall be equipped with a sensitive leading edge.

(5) The leading edge shall arrest the progress of a moving shutter and cause it to retract a distance of approximately 6 in. (150 mm) upon the application of a force not exceeding 20 lbf (90 N) applied to the surface of the leading edge.

(6) The shutter, following the retraction specified in 8.12.6.3(5), shall continue to close.

(7) The operating mechanism for the rolling shutter shall be provided with standby power complying with the provisions of Chapter 52.

8.14.1.2 The requirements of 8.14.1.1 shall not apply where any of the following conditions are met:

- (1) Where the space is protected throughout by an approved automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1).
- (2) Where concealed spaces serve as plenums

11.13.5.3 The absence of sprinklers in the normally unoccupied building service equipment support area as permitted by an exemption of ~~NFPA 13~~ 55.3.1.1(1), shall not cause a building to be classified as nonsprinklered for purposes of applying the provisions of 11.13.5.2.

15.4.2.9.1(2) The requirements of 15.4.2.9 shall not apply, provided that one of the following criteria is met: (2) Access shall not be required where the space created is protected by an approved sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1).

15.6.2.5.4.6 The requirement of 15.6.2.5.4 shall not apply to residential occupancies complying with ~~NFPA 13R~~ 55.3.1.1(2) or ~~NFPA 13D~~ 55.3.1.1(3) as appropriate.

16.4.7.6.1 Where required by 16.4.7.5, the proscenium opening shall be a listed, minimum 20-minute opening protective assembly, a fire curtain complying with NFPA 80, or an approved water curtain complying with ~~NFPA 13~~ 55.3.1.1(1).

19.3.5.6 Sprinklers shall not be required in clothes closets of patient sleeping rooms in hospitals where the area of the closet does not exceed 6 ft² (0.55 m²), provided that the distance from the sprinkler in the patient sleeping room to the back wall of the closet does not exceed the maximum distance permitted by ~~NFPA 13~~ 55.3.1.1(1).

19.3.5.7 Sprinklers in areas where cubicle curtains are installed shall be in accordance with ~~NFPA 13~~ 55.3.1.1(1).

20.2.2.12.2 In buildings protected throughout by an approved, electrically supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1), and 55.3.2, two rooms or spaces separated from each other by smoke-resistant partitions in accordance with the definition of area of refuge shall not be required.

20.2.5.2.1 A common path of travel shall be permitted for the first 100 ft (30 m) in a building protected throughout by an approved, electrically supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1), and 55.3.2.

20.2.5.3.1 In buildings protected throughout by an approved, electrically supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1), and 55.3.2, dead-end corridors shall not exceed 50 ft (15 m).

21.3.5.2 All buildings classified as Use Condition II, Use Condition III, Use Condition IV, or Use Condition V shall be protected throughout by an approved, electrically supervised automatic sprinkler system installed in accordance with ~~NFPA 13~~ 55.3.1.1(1).

22.3.5.2 Unless otherwise specified in Chapter 7, where modifications are permitted by this Code, based on the installation of an automatic sprinkler system, such modifications shall be permitted where the

automatic sprinkler system complies with ~~NFPA 13 55.3.1.1(1)~~, ~~NFPA 13D 55.3.1.1(3)~~, or ~~NFPA 13R 55.3.1.1(2)~~.

22.3.5.3 Where an automatic sprinkler system is provided, either for total or partial building coverage, the system shall be in accordance with ~~NFPA 13 55.3.1.1(1)~~, ~~NFPA 13R 55.3.1.1(2)~~, or ~~NFPA 13D 55.3.1.1(3)~~.

23.3.6.1 Unless otherwise specified in Chapter 7, where modifications are permitted by this Code, based on the installation of an automatic sprinkler system, such modifications shall be permitted when the automatic sprinkler system complies with ~~NFPA 13 55.3.1.1(1)~~, ~~NFPA 13R 55.3.1.1(2)~~ or ~~NFPA 13D 55.3.1.1(3)~~.

23.3.6.2.2 In buildings four or fewer stories in height and not exceeding 60 ft (18.3 m) in height above the grade plane, systems in accordance with ~~NFPA 13R 55.3.1.1(2)~~ shall be permitted.

23.3.6.2.3 Systems in accordance with ~~NFPA 13D 55.3.1.1(3)~~ shall be permitted where all of the following requirements are met:

- (1) The lodging or rooming house shall not be part of a mixed occupancy.
- (2) Entrance foyers shall be sprinklered.
- (3) Lodging or rooming houses with sleeping accommodations for more than eight occupants shall be treated as two-family dwellings with regard to the water supply.

23.3.6.2.4 In buildings sprinklered in accordance with ~~NFPA 13 55.3.1.1(1)~~, closets less than 12 ft² (1.1 m²) in area in individual dwelling units shall not be required to be sprinklered.

23.3.6.2.5 In buildings sprinklered in accordance with ~~NFPA 13 55.3.1.1(1)~~, closets that contain equipment such as washers, dryers, furnaces, or water heaters shall be sprinklered, regardless of size.

24.3.5.1 Unless otherwise specified in Chapter 7, where modifications are permitted by this Code, based on the installation of an automatic sprinkler system, such modifications shall be permitted where the automatic sprinkler system complies with ~~NFPA 13 55.3.1.1(1)~~ or ~~NFPA 13R 55.3.1.1(2)~~.

24.3.5.4 Where an automatic sprinkler system is installed, either for total or partial building coverage, the system shall be in accordance with Section 55.3, as modified by 24.3.5.5. In hotel or dormitory occupancies up to and including four stories in height that are located in buildings not exceeding 60 ft (18.3 m) in height above grade plane, systems in accordance with ~~NFPA 13R 55.3.1.1(2)~~ shall be permitted.

24.3.5.6 The provisions for draft stops and closely spaced sprinklers in accordance with NFPA 13 55.3.1.1(1) shall not apply to openings complying with 8.12.5 where the opening is within the guest room or guest suite.

25.3.5.1.2 In apartment buildings up to and including four stories in height that are located in buildings not exceeding 60 ft (18.3 m) in height above grade plane, systems in accordance with ~~NFPA 13R 55.3.1.1(2)~~ shall be permitted.

25.3.5.1.3 Unless otherwise specified in Chapter 7, where modifications are permitted by this Code, based on the installation of an automatic sprinkler system, such modifications shall be permitted where the automatic sprinkler system complies with ~~NFPA 13 55.3.1.1(1)~~ or ~~NFPA 13R 55.3.1.1(2)~~.

25.3.5.3 Closets. In buildings sprinklered in accordance with ~~NFPA 13 55.3.1.1(1)~~, closets shall meet the following requirements:

- (1) Closets of less than 12 ft² (1.1 m²) in individual dwelling units shall not be required to be sprinklered.
- (2) Closets that contain equipment such as washers, dryers, furnaces, or water heaters shall be sprinklered, regardless of size.

25.3.5.4 Convenience Openings. The draft stop and closely spaced sprinkler requirements that are in accordance with ~~NFPA 13 55.3.1.1(1)~~ shall not be required for convenience openings complying with

8.12.5 where the convenience opening is within the dwelling unit.

26.2.3.5.2 Where an automatic sprinkler system is installed, for either total or partial building coverage, all of the following requirements shall be met:

(1) The system shall be in accordance with ~~NFPA 13~~ 55.3.1.1(1) and shall initiate the fire alarm system in accordance with 26.2.3.4.1.

(2) The adequacy of the water supply shall be documented to the authority having jurisdiction.

26.2.3.5.2.1 In buildings four or fewer stories in height and not exceeding 60 ft (18.3 m) in height above grade plane, systems in accordance with ~~NFPA 13R~~ 55.3.1.1(2) shall be permitted. All habitable areas, closets, roofed porches, roofed decks, and roofed balconies shall be sprinklered.

26.2.3.5.2.2 An automatic sprinkler system complying with ~~NFPA 13D~~ 55.3.1.1(3), with a 30-minute water supply, shall be permitted. All habitable areas, closets, roofed porches, roofed decks, and roofed balconies shall be sprinklered. Facilities with more than eight residents shall be treated as two-family dwellings with regard to water supply.

26.2.3.5.2.3 An automatic sprinkler system complying with ~~NFPA 13D~~ 55.3.1.1(3), with a 30-minute water supply, shall be permitted. All habitable areas and closets shall be sprinklered. Facilities with more than eight residents shall be treated as two-family dwellings with regard to water supply.

26.2.3.5.3 Automatic sprinkler systems installed in accordance with ~~NFPA 13~~ 53.3.1.1(1) and ~~NFPA 13R~~ 53.3.1.1(2) shall be provided with electrical supervision in accordance with 55.3.2.

26.2.3.5.4 Automatic sprinkler systems installed in accordance with ~~NFPA 13D~~ 55.3.1.1(3) shall be provided with valve supervision by one of the following methods:

- (1) Single, listed control valve that shuts off both domestic and sprinkler systems, and separate shutoff for the domestic system only
- (2) Electrical supervision in accordance with 55.3.2
- (3) Valve closure that causes the sounding of an audible signal in the facility

26.3.3.5.1 General. All buildings shall be protected throughout by an approved automatic sprinkler system installed in accordance with ~~NFPA 13~~ 55.3.1.1(1) and quick-response or residential sprinklers shall be provided throughout.

27.1.2.2.4 Where a number of tenant spaces under different management are located in the same building, the aggregate gross area for subclassification shall be determined in accordance with any of the following:

- (1) Where tenant spaces are not separated, the aggregate gross floor area of all such tenant spaces shall be used in determining classification per 27.1.2.2.1.
- (2) Where individual tenant spaces are separated by fire barriers with a 2-hour fire resistance rating, each tenant space shall be individually classified.
- (3) Where tenant spaces are separated by fire barriers with a 1-hour fire resistance rating and the building is protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2, each tenant space shall be individually classified.
- (4) The tenant spaces in a mall structure in accordance with 27.4.4 shall be classified individually.

27.1.3.3.2 Openings in the fire barrier shall not be required to be protected with fire-protection-rated opening protectives in enclosed parking structures that are protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2, or in open parking structures, provided that all of the following conditions are met:

- (1) The openings do not exceed 25 percent of the area of the fire barrier in which they are located.
- (2) The openings are used as a public entrance and for associated sidelight functions.
- (3) The buildings containing the mercantile occupancy are protected throughout by an approved,

supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2.

(4) Means are provided to prevent spilled fuel from accumulating adjacent to the openings and entering the building.

(5) Physical means are provided to prevent vehicles from being parked or driven within 10 ft (3050 mm) of the openings.

(6) The openings are protected as required for a smoke partition in accordance with Section 8.10, with no minimum fire protection rating required.

27.2.2.2.6 Sensor-release of electrical locking systems complying with 11.2.1.6.2 shall be permitted in buildings protected throughout by an approved, supervised fire detection system in accordance with Section 55.2 or an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2.

27.2.2.12.2 In buildings protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2, two rooms or spaces separated from each other by smoke-resistant partitions in accordance with the definition of area of refuge shall not be required.

27.2.4.4 A single means of egress shall be permitted in a Class C mercantile occupancy, provided that the travel distance to the exit or to a mall concourse does not exceed 100 ft (30 m), and the story on which the occupancy is located and all communicating levels that are traversed to reach the exit or mall concourse are protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2.

27.2.4.5 A single means of egress to an exit or to a mall concourse shall be permitted from a mezzanine within any Class A, Class B, or Class C mercantile occupancy, provided that the common path of travel does not exceed 75 ft (23 m), or does not exceed 100 ft (30 m) if protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2.

27.2.5.2 Common Paths of Travel. Common paths of travel shall be limited by any of the following:

(1) They shall not exceed 75 ft (23 m) in mercantile occupancies.

(2) They shall not exceed 100 ft (30 m) in mercantile occupancies where the building is protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2.

27.2.5.3.1 In buildings protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2, dead-end corridors shall not exceed 50 ft (15 m).

27.2.5.8 Exit Access Through Storerooms. Exit access in Class A and Class B mercantile occupancies that are protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2, and exit access in all Class C mercantile occupancies, shall be permitted to pass through storerooms, provided that all of the following conditions are met:

(1) Not more than 50 percent of exit access shall be provided through the storeroom.

(2) The storeroom shall not be subject to locking.

(3) The main aisle through the storeroom shall be not less than 44 in. (1120 mm) wide.

(4) The path of travel through the storeroom shall be defined, direct, and continuously maintained in an unobstructed condition.

27.2.6.2 Travel distance in mercantile occupancies in buildings protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2 shall not exceed 250 ft (76 m).

27.3.1 Protection of Vertical Openings. Any vertical opening shall be protected in accordance with Section 8.12, except under any of the following conditions:

(1) In Class A or Class B mercantile occupancies protected throughout by an approved, supervised

automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2 unprotected vertical openings shall be permitted at one of the following locations:

(a) Between any two floors

(b) Among the street floor, the first adjacent floor below, and the adjacent floor (or mezzanine) above

- (1) In Class C mercantile occupancies, unprotected openings shall be permitted between the street floor and the mezzanine.
- (2) The draft stop and closely spaced sprinkler requirements of ~~NFPA 13~~ 55.3.1.1(1) shall not be required for unenclosed vertical openings permitted in 27.3.1(1) and 27.3.1(2).
- (3) Unenclosed vertical openings in accordance with 8.12.5.2 shall be permitted and the provisions of 8.12.5.2(5) shall not apply.
- (4) Unenclosed vertical openings in accordance with 8.12.6.2 shall be permitted and the number of contiguous stories shall not be limited.

27.3.2.1.2 In general storage and stock areas protected by an automatic extinguishing system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2, an enclosure, if provided, shall be exempt from the provisions of 8.15.2.

27.3.4.2 Initiation. Initiation of the required fire alarm system shall be by any one of the following:

- (1) Manual means in accordance with 55.2.2.1
- (2) Approved automatic fire detection system in accordance with 55.2.2.1 that provides protection throughout the building and the provision of 55.2.2.6 shall apply.
- (3) Approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2, in accordance with 55.2.2.1 that provides protection throughout the building and the provision of 55.2.2.6 shall apply.

27.3.6.1 Where access to exits is provided by corridors, such corridors shall be separated from use areas by walls having a fire resistance rating of not less than 1 hour in accordance with Section 8.4, unless one of the following conditions exists:

- (1) Where exits are available from an open floor area
- (2) Within a space occupied by a single tenant
- (3) Within buildings protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2

27.4.4.6.9.2 Rooms housing building service equipment, janitor closets, and service elevators shall be permitted to open directly onto exit passageways, provided that all of the following criteria are met:

- (1) The required fire resistance rating between such rooms or areas and the exit passageway shall be maintained in accordance with 11.1.3.2.
- (2) Such rooms or areas shall be protected by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2; however, the exceptions in ~~NFPA 13~~ 55.3.1.1(1) that permit the omission of sprinklers from such rooms shall not be permitted.
- (3) Service elevators opening into the exit passageway shall not open into areas other than exit passageways.
- (4) Where exit stair enclosures discharge into the exit passageway, the provisions of 11.2.1.5.9 shall apply, regardless of the number of stories served.

27.4.4.8.1.1 The mall structure and all anchor buildings shall be protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1), 55.3.2, and 27.4.4.8.1.

27.4.5.3 Storage, Arrangement, Protection, and Quantities of Hazardous Commodities. The storage, arrangement, protection, and quantities of hazardous commodities shall be in accordance with the applicable provisions of the following:

- (1) NFPA 1
- (2) ~~NFPA 13~~ 55.3.1.1(1)
- (3) NFPA 30
- (4) NFPA 30B
- (5) NFPA 400, Chapter 14, for organic peroxide formulations
- (6) NFPA 400, Chapter 15, for oxidizer solids and liquids
- (7) NFPA 400, various chapters, depending on characteristics of a particular pesticide

27.4.5.5 Extinguishment Requirements. Bulk merchandising retail buildings shall be protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2 and the applicable provisions of the following:

- (1) NFPA 1
- (2) ~~NFPA 13~~
- (3) NFPA 30
- (4) NFPA 30B

28.2.4.5 A single means of egress shall be permitted from a mezzanine within a business occupancy, provided that the common path of travel does not exceed 75 ft (23 m), or 100 ft (30 m) if protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2.

28.2.4.6 A single means of egress shall be permitted for a maximum two-story, single-tenant space provided that both of the following criteria are met:

- (1) The building is protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2.
- (2) The total travel to the outside does not exceed 100 ft (30 m).

28.2.5.2.1 Common path of travel shall not exceed 100 ft (30 m) in a building protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2.

28.2.5.3.1 In buildings protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2, dead-end corridors shall not exceed 50 ft (15 m).

28.2.6.3 Travel distance shall not exceed 300 ft (91 m) in business occupancies protected throughout by an approved, supervised, automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2.

28.3.4.2 Initiation. Initiation of the required fire alarm system shall be by any one of the following:

- (1) Manual means in accordance with 55.2.2.1
- (2) Approved automatic fire detection system in accordance with 55.2.2.1 that provides protection throughout the building and the provision of 55.2.2.6 shall apply.
- (3) Approved, supervised automatic sprinkler system complying with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2 in accordance with 55.2.2.1 that provides protection throughout the building and the provision of 55.2.2.6 shall apply.

28.3.6.1 Where access to exits is provided by corridors, such corridors shall be separated from use areas by fire barriers in accordance with Section 8.4 having a minimum 1-hour fire resistance rating, unless one of the following conditions exists:

- (1) Where exits are available from an open floor area
- (2) Within a space occupied by a single tenant
- (3) Within buildings protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ [55.3.1.1\(1\)](#) and 55.3.2

Fix Table 29.2.6.1 in Terra View

29.2.6.2 Power-Generation Buildings. Buildings of Type I or Type II construction used exclusively for the enclosure of steam generators, steam turbines, gas turbines, heat recovery generators, and flue gas treatment equipment shall be permitted to have a maximum travel distance of 400 ft (122 m) where all special hazards are protected by approved automatic suppression systems in accordance with one or more of the following standards, as applicable:

- (1) NFPA 11
- (2) NFPA 12
- (3) ~~NFPA 13~~ [55.3.1.1\(1\)](#)
- (4) NFPA 15
- (5) NFPA 16
- (6) NFPA 17
- (7) NFPA 750
- (8) NFPA 2001

29.3.5.1.1 General. Industrial occupancies, other than low-hazard industrial occupancies, shall be protected by an approved automatic sprinkler system in accordance with ~~NFPA 13~~ [55.3.1.1\(1\)](#) in any of the following locations:

- (1) Throughout all industrial occupancies three or more stories in height
- (2) Throughout all industrial occupancies exceeding 12,000 ft² (1115 m²) in fire area
- (3) Where the total area of all floors, including mezzanines, exceeds 24,000 ft² (2230 m²)

29.3.5.1.3 Power-Generation Buildings. In lieu of providing sprinkler protection throughout in accordance with 29.3.5.1, buildings of Type I or Type II construction used exclusively for the enclosure of steam generators, steam turbines, gas turbines, heat recovery generators, and flue gas treatment equipment shall not be required to be sprinklered throughout, provided that the special hazards are protected by approved automatic suppression systems in accordance with NFPA 11, NFPA 12, ~~NFPA 13~~ [55.3.1.1\(1\)](#), NFPA 15, NFPA 16, NFPA 17, NFPA 750, or NFPA 2001.

Fix Table 30.2.6 in Terra View

30.3.4.1.1 Storage occupancies, other than low-hazard storage occupancies, shall be protected by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ [55.3.1.1\(1\)](#) in any of the following locations:

- (1) Throughout all storage occupancies three or more stories in height
- (2) Throughout all storage occupancies exceeding 12,000 ft² (1115 m²) in fire area
- (3) Where the total area of all floors, including mezzanines, exceeds 24,000 ft² (2230 m²)

Fix Table 30.7.5.2 in Terra View

Fix Table 30.8.2.6.1 in Terra View

30.8.3.5.1 Automatic sprinkler systems, where required, shall conform to ~~NFPA 13~~ [55.3.1.1\(1\)](#). Electronic supervision of supervisory signals shall be provided in accordance with 55.3.2.1. Waterflow alarms shall be monitored in accordance with 55.3.2.2.

31.2.3 Where underground structures have an occupant load of more than 50 persons in the underground portions of the structure, the underground portions, and all areas and floor levels traversed in traveling to the exit discharge, shall be protected by an approved, supervised automatic sprinkler system installed in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2.

31.3.1.3 Limited-access structures shall be protected by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2, except for structures meeting any of the following criteria:

- (1) Structure with an occupant load of less than 50 persons
- (2) One-story limited-access structures permitted to have a single exit in accordance with Chapters 15 through 30 and 33 through 34 and having a common path of travel not exceeding 50 ft (15 m)

31.6.1.3.1 Sprinklered Towers. In towers protected throughout by an automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1), the levels located below the observation level shall be permitted to be occupied only for any of the following uses:

- (1) Uses that support tower operations such as electrical and mechanical equipment rooms, including emergency power, radar, communications, and electronics rooms
- (2) Incidental accessory uses that support tower operations

31.6.5.2 Towers with 360-degree line-of-sight requirements shall be permitted to have a single means of egress for a distance of travel to the exit not exceeding 75 ft (23 m), or 100 ft (30 m) if the tower is protected throughout by an approved automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1).

32.3.5.2 Enclosed stadiums, arenas, and similar structures shall be protected throughout by an approved, electrically supervised automatic sprinkler system in accordance with 55.3.2 and ~~NFPA 13~~ 55.3.1.1(1), 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 shall not be required above the playing/activity area where permitted by the authority having jurisdiction.
- (2) Sprinklers shall not be required above seating areas that view the playing/activity area.

32.3.5.3 An enclosed area shall be protected by an approved sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1), 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 16.4.10.5

33.3.2.1 High-rise buildings shall be protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1), and 55.3.2.

Fix Table 34.1.3.1 Sub note d in Terra View

Fix Table 34.1.3.2.1 Sub note d in Terra View

Fix Table 34.1.3.3.1 Sub note a in Terra View

37.1.3.1 Parapets Not Required. Parapets shall not be required where any of the following conditions exist: (4) Where the entire building is protected by an automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1).

37.1.4.1 Buildings four or more stories in height above grade plane, which are not protected throughout

with a fire sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) or ~~NFPA 13R~~ 55.3.1.1(2), with openings in exterior walls located within a 60 in. (1525 mm) radius of openings in the next story above, shall be separated or protected in accordance with 37.1.4.2.

48.3.2.3 The requirements of 48.3.2.1 and 48.3.2.2 shall not apply where otherwise permitted by the following:

- (1) As provided in Section 48.5, the smoke developed index for interior trim shall not be required.
- (2) Foam plastic insulation in cold storage buildings, ice plants, food plants, food processing rooms, and similar areas that has been tested in a thickness of 4 in. (100 mm) 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, and exhibits a flame spread index not exceeding 75 and a smoke developed index not exceeding 450, shall be permitted in a thickness of up to 10 in. (255 mm) where that portion of the building and the room are equipped with an automatic fire sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1).
- (3) Foam insulation that is part of a Class A, Class B, or Class C roof covering system, when tested in accordance with ASTM E108, Standard Test Methods for Fire Tests of Roof Coverings, or UL 790, Standard Test Methods for Fire Tests of Roof Coverings, and where the system with the foam plastic insulation passes NFPA 276, or UL 1256, Fire Test of Roof Deck Constructions for roof applications, the foam plastic insulation shall not be required to meet the smoke developed index limits.

- (4) Foam plastic insulation

48.3.3.4 The requirements of 48.3.3.1 through 48.3.3.3 shall not apply where otherwise permitted by the following:

- (1) The thermal barrier shall not be required in masonry or concrete wall, floor, or roof construction where the foam plastic insulation is covered on each face by concrete or masonry with a minimum 1 in. (25 mm) thickness.
- (2) The thermal barrier shall not be required in cooler and freezer walls, provided that all of the following conditions are met:
 - (1) The foam plastic used in cooler and freezer walls is a maximum thickness of 10 in. (255 mm) and, when tested, is a minimum thickness of 4 in. (100 mm) and has a flame spread index of 25 or less and a smoke developed index of 450 or less.
 - (2) The flash and self-ignition temperatures of the foam plastic are not less than 600°F (316°C) and 800°F (427°C), respectively, when tested in accordance with ASTM D1929, Standard Test Method for Determining Ignition Temperature of Plastics.
 - (3) The foam plastic is covered by aluminum not less than 0.032 in. (0.8 mm) thick or corrosion-resistant steel having a base metal thickness not less than 0.016 in. (0.4 mm) at any point.
 - (4) The cooler or freezer walls are protected by an automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1).
 - (5) The cooler or freezer is within a building, and the cooler or freezer and the part of the building in which it is located are protected by an automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1).
- (1) The thermal barrier shall not be required in walk-in coolers in unsprinklered buildings, provided that all of the following conditions are met:
 - (1) The foam plastic insulation is used in thicknesses of 4 in. (100 mm) or less.
 - (2) The foam plastic insulation has a flame spread of 75 or less.
 - (3) The aggregate floor area of the walk-in coolers is 400 ft² (37 m²) or less.

- (4) The foam plastic insulation is covered either by aluminum not less than 0.032 in. (0.8 mm) thick or corrosion-resistant steel having a minimum base metal thickness of 0.016 in. (0.4 mm).
- (1) The thermal barrier shall not be required on or in exterior walls of one-story buildings where all of the following criteria are met:
 - (1) The foam plastic insulation meets all of the following requirements:
 - i. It is 4 in. (100 mm) or less in thickness.
 - ii. It has a flame spread index of 25 or less.
 - iii. It has a smoke developed index of 450 or less.
 - iv. It is covered either by aluminum with a thickness equal to or greater than 0.032 in. (0.8 mm) or corrosion-resistant steel having a base metal thickness greater than 0.016 in. (0.4 mm).
 - (1) The building is equipped throughout with an automatic sprinkler system in accordance with NFPA 13 55.3.1.1(1).
 - (1) The thermal barrier shall not be required in roof assemblies where the following criteria are met:
 - (1) The foam plastic insulation installed in a roof assembly in accordance with this Code and the manufacturer's installation instructions is separated from the interior of the building by wood structural sheathing not less than 0.47 in. (12 mm) in thickness bonded with exterior glue, with edges supported by one of the following:
 - i. Blocking
 - ii. Tongue-and-groove joints
 - iii. Other approved type of edge support
 - iv. Other equivalent material
 - (1) The foam plastic insulation is a part of a Class A, Class B, or Class C roof-covering assembly, provided that the assembly with the foam plastic insulation satisfactorily passes either of the following:
 - (1) FM Approval 4450, Class I Insulated Steel Deck Roofs
 - (2) UL 1256, Fire Test of Roof Deck Constructions
 - (1) The thermal barrier shall not be required in attics and crawl spaces if the foam plastic insulation is installed within an attic or crawl space where entry is made only for service of utilities, and the foam plastic insulation is protected against ignition by one of the following:
 - (1) Mineral fiber insulation of 1 1/2 in. (38 mm) thickness
 - (2) Wood structural panel, particleboard, or hardboard of 1/4 in. (6.4 mm) thickness
 - (3) Gypsum wallboard of 0.375 in. (9.5 mm) thickness
 - (4) Corrosion-resistant steel having a base metal thickness of 0.016 in. (0.4 mm)
 - (5) Other approved material consistent with the requirements of the application and installed so that the foam plastic insulation is not exposed
 - (1) The thermal barrier shall not be required in doors where the following criteria are met:
 - (1) Where the foam plastic insulation meeting the requirements of 48.3.2 is used as a core of pivoted or side-hinged doors that comply with the following:
 - (1) The doors do not require a fire protection rating.
 - (2) The door skin is steel having a thickness of at least 0.016 in. (0.4 mm) or aluminum having a

thickness of at least 0.032 in. (0.8 mm) at any point.

- (1) Where foam-filled exterior entrance doors of residential occupancies comply with the following:
 - (1) The doors do not require a fire resistance rating.
 - (2) The doors are faced with wood or other approved materials.
- (1) Where the foam plastic insulation is used as core material for garage doors, and the following criteria are met:
 - (1) No fire resistance rating is required for the assembly.
 - (2) The door is faced with at least 0.032 in. (0.8 mm) aluminum, 0.010 in. (0.25 mm) steel, or a 0.125 in. (3.1 mm) thickness of wood.
- (1) Where garage doors have facings other than those specified in 48.3.3.4(7)(c)(ii) and are tested in accordance with, and meet the acceptance criteria of, ANSI/DASMA 107, Room Fire Test Standard for Garage Doors Using Foam Plastic Insulation.
- (2) Where the foam plastic insulation is used as core material for garage doors in one- and two-family dwellings, and the foam plastic insulation complies with 48.3.2.
- (1) The thermal barrier shall not be required in conjunction with siding backer board where the following criteria are met:
 - (1) The foam plastic insulation 1/2 in. (13 mm) or less in thickness and having a potential heat of not more than 2000 Btu/ft² (22.7 MJ/m²) when tested in accordance with NFPA 259, is separated from the interior of the building by a least 2 in. (51 mm) of mineral fiber insulation or equivalent.
 - (2) The siding and foam plastic insulation are applied over existing siding.
- (1) The thermal barrier shall not be required on interior trim where the foam plastic insulation meets the requirements of Section 48.5.
- (2) The thermal barrier shall not be required on interior plastic signs in covered mall concourse buildings where used in accordance with Section 48.8.
- (3) In Type V construction, foam plastic insulation shall be permitted to be spray-applied to sill plates and headers without requiring a thermal barrier where the foam plastic insulation complies with all of the following criteria:
 - (1) The maximum thickness of the foam plastic insulation is 3 1/4 in. (82.6 mm).
 - (2) The density of the foam plastic insulation ranges between 1.5 lb/ft³ to 2.0 lb/ft³ (24 kg/m³ to 32 kg/m³).
 - (3) The foam plastic insulation has a flame spread index of 25 or less.
- (1) The thermal barrier shall not be required where tested in accordance with 48.4.4.

48.7.3.6 Unless the building is equipped throughout with an automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1), or when the building is equipped with smoke and heat vents, each skylight shall have a maximum area within the curb of 100 ft² (9 m²).

48.7.3.7.2 The aggregate area limitations of 48.7.3.7.1 shall be permitted to be increased 100 percent where the building is equipped throughout with an automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1), or where the building is equipped with smoke and heat vents.

48.7.3.8.2 The requirement of 48.7.3.8.1 shall not apply where one of the following conditions is met:

- (1) The building shall be equipped throughout with an automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1)

- (2) The skylight shall serve as an approved fire-venting system.
- (3) In one- and two-family dwellings, or on buildings with an unclassified roof covering, skylights shall be separated from each other by a distance of not less than 16 in. (405 mm), measured in a horizontal plane, and each skylight shall not exceed a maximum area within the curb of 100 ft² (9 m²).

48.7.4.2 Where walls and ceilings are required to be fire resistive or of noncombustible or limited-combustible construction, and walls are set out or ceilings are dropped more than 1¼ in. (44 mm), plastic materials with a flame spread index of 25 or less and a smoke developed index of 450 or less shall be used, unless they meet the following criteria:

- (1) The plastic materials shall be protected on both sides by an automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1).

48.7.5.2 Unless an automatic sprinkler system is installed in accordance with ~~NFPA 13~~ 55.3.1.1(1), the area of light diffusers, where used in exitways, exit passages, or corridors, shall not exceed 30 percent of the aggregate area of the ceiling in which they are installed.

48.7.6.6 Where the building is equipped throughout with an automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1), the maximum percentage area of an exterior wall in any story in light-transmitting plastic wall panels, and the maximum square footage of a single area given in Table 48.7.6.5.1, shall be permitted to be increased by 100 percent provided that the area of light-transmitting plastic wall panels does not exceed 50 percent of the wall area in any story, or the area permitted for unprotected openings, whichever is smaller.

48.7.7.2 Light-transmitting plastic glazing shall be permitted in openings in the exterior walls of buildings of types of construction other than Type V(000), where not required to be protected, in accordance with the following provisions:

- (1) The aggregate area of light-transmitting plastic glazing shall not exceed 25 percent of the area of any wall face of the story in which it is installed.
- (2) The area of a single pane of glazing installed above the first story shall not exceed 16 ft² (1.5 m²), and the vertical dimension of a single pane shall not exceed 48 in. (1220 mm).
- (3) Where an automatic sprinkler is provided throughout in accordance with ~~NFPA 13~~ 55.3.1.1(1), the aggregate area of glazing permitted by 48.7.7.2(1) shall be permitted to be increased to a maximum of 50 percent of the wall face of the story in which it is installed, with no limit on the maximum dimension or area of a single pane of glazing.
- (4) Approved flame barriers extending 30 in. (760 mm) beyond the exterior wall in the plane of the floor, or vertical panels not less than 48 in. (1220 mm) in height, shall be installed between glazed units located in adjacent stories.
- (5) Light-transmitting plastics shall not be installed more than 75 ft (23 m) above grade plane.
- (6) The requirements of 48.7.7.2(4) and 48.7.7.2(5) shall not apply to buildings equipped throughout with an automatic sprinkler in accordance with ~~NFPA 13~~ 55.3.1.1(1).

48.7.8.1 Except where prohibited, light-transmitting plastics shall be permitted to be used as light-transmitting plastic roof panels where any of the following conditions are met:

- (1) The building is equipped throughout with an automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1).
- (2) The roof construction is not required to have a fire resistance rating.
- (3) The light-transmitting plastic roof panels meet the requirements for roof coverings in accordance with Chapter 38.

48.7.8.2.2 The requirement of 48.7.8.2.1 shall not apply where one of the following conditions exists:

- (1) The separation between light-transmitting plastic roof panels shall not be required in a building equipped throughout with an automatic sprinkler system in accordance with ~~NFPA 13~~ [55.3.1.1\(1\)](#).
- (2) The separation between light-transmitting plastic roof panels shall not be required in buildings complying with the conditions of 48.7.8.4.2 and 48.7.8.4.2(3).

48.7.8.4.2 The requirement of 48.7.8.4.1 shall not apply where one of the following conditions exists:

- (1) The area limitations of Table 48.7.8.4.1 shall be permitted to be increased by 100 percent in buildings equipped throughout with an automatic sprinkler system in accordance with ~~NFPA 13~~ [55.3.1.1\(1\)](#).

55.3.3 Other Supervision. Where electrical supervision is not required by another section of this Code, supervision shall be permitted in accordance with ~~NFPA 13~~ [55.3.1.1\(1\)](#).

55.4.3 Where standpipe and hose systems are installed in combination with automatic sprinkler systems, installation shall be in accordance with ~~NFPA 13~~ [55.3.1.1\(1\)](#) and NFPA 14.

Additional Proposed Changes

<u>File Name</u>	<u>Description</u> <u>Approved</u>
CD074_-_5000_Sprinkler_Reference_Correction.docx	Full language

Statement of Problem and Substantiation for Public Input

Across the model codes, as it relates to automatic fire sprinkler systems, the proper code section that stipulates the use and installation of a particular fire protection system is provided. The proper code language is to reference that section and not the system type. This ensures that all the proper charging language is being applied. Not referencing the proper section could possibly cause misinterpretation and vital requirements being left out.

Submitter Information Verification

Submitter Full Name: Andrew Bevis

Organization: National Fire Sprinkler Associ

Street Address:

City:

State:

Zip:

Submittal Date: Tue Jun 01 13:58:53 EDT 2021

Committee: BLD-BSF

CD074: Sprinkler Reference Correction

2021 NFPA 5000

Revise as follows:

7.1.5.2.2.2 Where a one- or two-family dwelling, or townhouse, is protected with an approved automatic sprinkler system that is installed in accordance with ~~NFPA 13D~~ 55.3.1.1(3) or ~~NFPA 13R~~ 55.3.1.1(2), as applicable, the distance in 7.1.5.2.2.1 shall be permitted to be increased to 150 ft (46 m).

7.1.5.2.3.2 When buildings are protected throughout with an approved automatic sprinkler system that is installed in accordance with ~~NFPA 13~~ 55.3.1.1(1), ~~NFPA 13R~~ 55.3.1.1(2), or ~~NFPA 13D~~ 55.3.1.1(3), the distance shall be permitted to be increased to 450 ft (137 m).

7.4.1.4.7 * Power-Generation Structures. Structures of Type I or Type II construction used exclusively for the enclosure of steam generators, steam turbines, gas turbines, heat recovery generators, and flue gas treatment equipment shall be permitted to be of unlimited height and area when special hazards are protected by an approved automatic suppression system in accordance with NFPA 11, NFPA 12, ~~NFPA 13~~ 55.3.1.1(1), NFPA 15, NFPA 16, NFPA 17, NFPA 750, or NFPA 2001.

7.6.2.3.4.2 The sum of the allowable area ratios for all stories in buildings protected in accordance with ~~NFPA 13R~~ 55.3.1.1(2) shall not be greater than the following:

- (1) 1.0 for one-story buildings
- (2) 2.0 for two-story buildings
- (3) 3.0 for three-story buildings
- (4) 4.0 for four-story buildings

8.3.3.11.2.2 Single opening protectives in fire walls shall not be limited in size where the buildings on both sides of the fire wall are protected throughout by automatic sprinkler systems in accordance with ~~NFPA 13~~ 55.3.1.1(1) or ~~NFPA 13R~~ 55.3.1.1(2).

8.12.5.2 Where permitted by Chapters 15 through 31 and 33 through 34, unenclosed vertical openings created by convenience stairways shall be permitted as follows:

- (3) The convenience stair openings shall be protected ~~in accordance~~ with the method detailed for the protection of vertical openings in ~~NFPA 13~~ accordance with 55.3.1.1(1).

8.12.6.2 Any escalators and moving walks not constituting an exit, or serving as a required means of egress, shall have their floor openings enclosed or protected as required for other vertical openings, unless permitted by the following:

- (2) In buildings protected throughout by an approved automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) or ~~NFPA 13R~~ 55.3.1.1(2), escalators or moving walk openings shall be permitted to be protected ~~in accordance~~ with the method detailed in ~~NFPA 13~~ accordance with 55.3.1.1(1) or in accordance with a method approved by the authority having jurisdiction and the opening shall not connect more than four contiguous stories unless otherwise permitted by Chapters 15 through 31 and 33 through 34.

8.12.6.3 In buildings protected throughout by an approved automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) or ~~NFPA 13R~~ 55.3.1.1(2), escalators or moving walk openings shall be permitted to be protected by rolling steel shutters appropriate for the fire resistance rating of the vertical opening protected, and the following criteria shall be met:

- (1) The shutters shall close automatically and independently of each other upon smoke detection and sprinkler operation.
- (2) There shall be a manual means of operating and testing the operation of the shutter.
- (3) The shutters shall be operated not less than once a week to ensure that they remain in proper operating condition.
- (4) The shutters shall operate at a speed not to exceed 30 ft/min (0.15 m/s) and shall be equipped with a sensitive leading edge.
- (5) The leading edge shall arrest the progress of a moving shutter and cause it to retract a distance of approximately 6 in. (150 mm) upon the application of a force not exceeding 20 lbf (90 N) applied to the surface of the leading edge.
- (6) The shutter, following the retraction specified in 8.12.6.3(5), shall continue to close.
- (7) The operating mechanism for the rolling shutter shall be provided with standby power complying with the provisions of Chapter 52.

8.14.1.2 The requirements of 8.14.1.1 shall not apply where any of the following conditions are met:

- (1) Where the space is protected throughout by an approved automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1).
- (2) Where concealed spaces serve as plenums

11.13.5.3 The absence of sprinklers in the normally unoccupied building service equipment support area as permitted by an exemption of ~~NFPA 13~~ 55.3.1.1(1), shall not cause a building to be classified as nonsprinklered for purposes of applying the provisions of 11.13.5.2.

15.4.2.9.1(2) The requirements of 15.4.2.9 shall not apply, provided that one of the following criteria is met: (2) Access shall not be required where the space created is protected by an approved sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1).

15.6.2.5.4.6 The requirement of 15.6.2.5.4 shall not apply to residential occupancies complying with ~~NFPA 13R~~ 55.3.1.1(2) or ~~NFPA 13D~~ 55.3.1.1(3) as appropriate.

16.4.7.6.1 Where required by 16.4.7.5, the proscenium opening shall be a listed, minimum 20-minute opening protective assembly, a fire curtain complying with NFPA 80, or an approved water curtain complying with ~~NFPA 13~~ 55.3.1.1(1).

19.3.5.6 Sprinklers shall not be required in clothes closets of patient sleeping rooms in hospitals where the area of the closet does not exceed 6 ft² (0.55 m²), provided that the distance from the sprinkler in the patient sleeping room to the back wall of the closet does not exceed the maximum distance permitted by ~~NFPA 13~~ 55.3.1.1(1).

19.3.5.7 Sprinklers in areas where cubicle curtains are in-stalled shall be in accordance with ~~NFPA 13~~ 55.3.1.1(1).

20.2.2.12.2 In buildings protected throughout by an approved, electrically supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1), and 55.3.2, two rooms or spaces separated from each other by smoke-resistant partitions in accordance with the definition of area of refuge shall not be required.

20.2.5.2.1 A common path of travel shall be permitted for the first 100 ft (30 m) in a building protected throughout by an approved, electrically supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1), and 55.3.2.

20.2.5.3.1 In buildings protected throughout by an approved, electrically supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1), and 55.3.2, dead-end corridors shall not exceed 50 ft (15 m).

21.3.5.2 All buildings classified as Use Condition II, Use Condition III, Use Condition IV, or Use Condition V shall be protected throughout by an approved, electrically supervised automatic sprinkler system installed in accordance with ~~NFPA 13~~ 55.3.1.1(1).

22.3.5.2 Unless otherwise specified in Chapter 7, where modifications are permitted by this Code, based on the installation of an automatic sprinkler system, such modifications shall be permitted where the automatic sprinkler system complies with ~~NFPA 13~~ 55.3.1.1(1), ~~NFPA 13D~~ 55.3.1.1(3), or ~~NFPA 13R~~ 55.3.1.1(2).

22.3.5.3 Where an automatic sprinkler system is provided, either for total or partial building coverage, the system shall be in accordance with ~~NFPA 13~~ 55.3.1.1(1), ~~NFPA 13D~~ 55.3.1.1(3), or ~~NFPA 13R~~ 55.3.1.1(2).

23.3.6.1 Unless otherwise specified in Chapter 7, where modifications are permitted by this Code, based on the installation of an automatic sprinkler system, such modifications shall be permitted when the automatic sprinkler system complies with ~~NFPA 13~~ 55.3.1.1(1), ~~NFPA 13D~~ 55.3.1.1(3), or ~~NFPA 13R~~ 55.3.1.1(2).

23.3.6.2.2 In buildings four or fewer stories in height and not exceeding 60 ft (18.3 m) in height above the grade plane, systems in accordance with ~~NFPA 13R~~ 55.3.1.1(2) shall be permitted.

23.3.6.2.3 Systems in accordance with ~~NFPA 13D~~ 55.3.1.1(3) shall be permitted where all of the following requirements are met:

- (1) The lodging or rooming house shall not be part of a mixed occupancy.
- (2) Entrance foyers shall be sprinklered.
- (3) Lodging or rooming houses with sleeping accommodations for more than eight occupants shall be treated as two-family dwellings with regard to the water supply.

23.3.6.2.4 In buildings sprinklered in accordance with ~~NFPA 13~~ 55.3.1.1(1), closets less than 12 ft² (1.1 m²) in area in individual dwelling units shall not be required to be sprinklered.

23.3.6.2.5 In buildings sprinklered in accordance with ~~NFPA 13~~ 55.3.1.1(1), closets that contain equipment such as washers, dryers, furnaces, or water heaters shall be sprinklered, regardless of size.

24.3.5.1 Unless otherwise specified in Chapter 7, where modifications are permitted by this Code, based on the installation of an automatic sprinkler system, such modifications shall be permitted where the automatic sprinkler system complies with ~~NFPA 13~~ 55.3.1.1(1) or ~~NFPA 13R~~ 55.3.1.1(2).

24.3.5.4 Where an automatic sprinkler system is installed, either for total or partial building coverage, the system shall be in accordance with Section 55.3, as modified by 24.3.5.5. In hotel or dormitory occupancies up to and including four stories in height that are located in buildings not exceeding 60 ft (18.3 m) in height above grade plane, systems in accordance with ~~NFPA 13R~~ 55.3.1.1(2) shall be permitted.

24.3.5.6 The provisions for draft stops and closely spaced sprinklers in accordance with ~~NFPA 13~~ 55.3.1.1(1) shall not apply to openings complying with 8.12.5 where the opening is within the guest room or guest suite.

25.3.5.1.2 In apartment buildings up to and including four stories in height that are located in buildings not exceeding 60 ft (18.3 m) in height above grade plane, systems in accordance with ~~NFPA 13R~~ 55.3.1.1(2) shall be permitted.

25.3.5.1.3 Unless otherwise specified in Chapter 7, where modifications are permitted by this Code, based on the installation of an automatic sprinkler system, such modifications shall be permitted where the automatic sprinkler system complies with ~~NFPA 13~~ 55.3.1.1(1) or ~~NFPA 13R~~ 55.3.1.1(2).

25.3.5.3 Closets. In buildings sprinklered in accordance with ~~NFPA 13~~ 55.3.1.1(1), closets shall meet the following requirements:

- (1) Closets of less than 12 ft² (1.1 m²) in individual dwelling units shall not be required to be sprinklered.
- (2) Closets that contain equipment such as washers, dryers, furnaces, or water heaters shall be sprinklered, regardless of size.

25.3.5.4 Convenience Openings. The draft stop and closely spaced sprinkler requirements that are in accordance with ~~NFPA 13~~ 55.3.1.1(1) shall not be required for convenience openings complying with 8.12.5 where the convenience opening is within the dwelling unit.

26.2.3.5.2 Where an automatic sprinkler system is installed, for either total or partial building coverage, all of the following requirements shall be met:

- (1) The system shall be in accordance with ~~NFPA 13~~ 55.3.1.1(1) and shall initiate the fire alarm system in accordance with 26.2.3.4.1.
- (2) The adequacy of the water supply shall be documented to the authority having jurisdiction.

26.2.3.5.2.1 In buildings four or fewer stories in height and not exceeding 60 ft (18.3 m) in height above grade plane, systems in accordance with ~~NFPA 13R~~ 55.3.1.1(2) shall be permitted. All habitable areas, closets, roofed porches, roofed decks, and roofed balconies shall be sprinklered.

26.2.3.5.2.2 An automatic sprinkler system complying with ~~NFPA 13D~~ 55.3.1.1(3), with a 30-minute water supply, shall be permitted. All habitable areas, closets, roofed porches, roofed decks, and roofed balconies shall be sprinklered. Facilities with more than eight residents shall be treated as two-family dwellings with regard to water supply.

26.2.3.5.2.3 An automatic sprinkler system complying with ~~NFPA 13D~~ 55.3.1.1(3), with a 30-minute water supply, shall be permitted. All habitable areas and closets shall be sprinklered. Facilities with more than eight residents shall be treated as two-family dwellings with regard to water supply.

26.2.3.5.3 Automatic sprinkler systems installed in accordance with ~~NFPA 13~~ 53.3.1.1(1) and ~~NFPA 13R~~ 53.3.1.1(2) shall be provided with electrical supervision in accordance with 55.3.2.

26.2.3.5.4 Automatic sprinkler systems installed in accordance with ~~NFPA 13D~~ 55.3.1.1(3) shall be provided with valve supervision by one of the following methods:

- (1) Single, listed control valve that shuts off both domestic and sprinkler systems, and separate shutoff for the domestic system only
- (2) Electrical supervision in accordance with 55.3.2
- (3) Valve closure that causes the sounding of an audible signal in the facility

26.3.3.5.1 General. All buildings shall be protected throughout by an approved automatic sprinkler system installed in accordance with ~~NFPA 13~~ 55.3.1.1(1) and quick-response or residential sprinklers shall be provided throughout.

27.1.2.2.4 Where a number of tenant spaces under different management are located in the same building, the aggregate gross area for subclassification shall be determined in accordance with any of the following:

- (1) Where tenant spaces are not separated, the aggregate gross floor area of all such tenant spaces shall be used in determining classification per 27.1.2.2.1.
- (2) Where individual tenant spaces are separated by fire barriers with a 2-hour fire resistance rating, each tenant space shall be individually classified.
- (3) Where tenant spaces are separated by fire barriers with a 1-hour fire resistance rating and the building is protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2, each tenant space shall be individually classified.
- (4) The tenant spaces in a mall structure in accordance with 27.4.4 shall be classified individually.

27.1.3.3.2 Openings in the fire barrier shall not be required to be protected with fire-protection-rated opening protectives in enclosed parking structures that are protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2, or in open parking structures, provided that all of the following conditions are met:

- (1) The openings do not exceed 25 percent of the area of the fire barrier in which they are located.

- (2) The openings are used as a public entrance and for associated sidelight functions.
- (3) The buildings containing the mercantile occupancy are protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2.
- (4) Means are provided to prevent spilled fuel from accumulating adjacent to the openings and entering the building.
- (5) Physical means are provided to prevent vehicles from being parked or driven within 10 ft (3050 mm) of the openings.
- (6) The openings are protected as required for a smoke partition in accordance with Section 8.10, with no minimum fire protection rating required.

27.2.2.2.6 Sensor-release of electrical locking systems complying with 11.2.1.6.2 shall be permitted in buildings protected throughout by an approved, supervised fire detection system in accordance with Section 55.2 or an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2.

27.2.2.12.2 In buildings protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2, two rooms or spaces separated from each other by smoke-resistant partitions in accordance with the definition of area of refuge shall not be required.

27.2.4.4 A single means of egress shall be permitted in a Class C mercantile occupancy, provided that the travel distance to the exit or to a mall concourse does not exceed 100 ft (30 m), and the story on which the occupancy is located and all communicating levels that are traversed to reach the exit or mall concourse are protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2.

27.2.4.5 A single means of egress to an exit or to a mall concourse shall be permitted from a mezzanine within any Class A, Class B, or Class C mercantile occupancy, provided that the common path of travel does not exceed 75 ft (23 m), or does not exceed 100 ft (30 m) if protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2.

27.2.5.2 Common Paths of Travel. Common paths of travel shall be limited by any of the following:

- (1) They shall not exceed 75 ft (23 m) in mercantile occupancies.
- (2) They shall not exceed 100 ft (30 m) in mercantile occupancies where the building is protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2.

27.2.5.3.1 In buildings protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2, dead-end corridors shall not exceed 50 ft (15 m).

27.2.5.8 Exit Access Through Storerooms. Exit access in Class A and Class B mercantile occupancies that are protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2, and exit access in all Class C mercantile occupancies, shall be permitted to pass through storerooms, provided that all of the following conditions are met:

- (1) Not more than 50 percent of exit access shall be provided through the storeroom.
- (2) The storeroom shall not be subject to locking.
- (3) The main aisle through the storeroom shall be not less than 44 in. (1120 mm) wide.
- (4) The path of travel through the storeroom shall be defined, direct, and continuously maintained in an unobstructed condition.

27.2.6.2 Travel distance in mercantile occupancies in buildings protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2 shall not exceed 250 ft (76 m).

27.3.1 Protection of Vertical Openings. Any vertical opening shall be protected in accordance with Section 8.12, except under any of the following conditions:

- (1) In Class A or Class B mercantile occupancies protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2 unprotected vertical openings shall be permitted at one of the following locations:
 - (a) Between any two floors
 - (b) Among the street floor, the first adjacent floor below, and the adjacent floor (or mezzanine) above
- (2) In Class C mercantile occupancies, unprotected openings shall be permitted between the street floor and the mezzanine.
- (3) The draft stop and closely spaced sprinkler requirements of ~~NFPA 13~~ 55.3.1.1(1) shall not be required for unenclosed vertical openings permitted in 27.3.1(1) and 27.3.1(2).
- (4) Unenclosed vertical openings in accordance with 8.12.5.2 shall be permitted and the provisions of 8.12.5.2(5) shall not apply.
- (5) Unenclosed vertical openings in accordance with 8.12.6.2 shall be permitted and the number of contiguous stories shall not be limited.

27.3.2.1.2 In general storage and stock areas protected by an automatic extinguishing system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2, an enclosure, if provided, shall be exempt from the provisions of 8.15.2.

27.3.4.2 Initiation. Initiation of the required fire alarm system shall be by any one of the following:

- (1) Manual means in accordance with 55.2.2.1
- (2) Approved automatic fire detection system in accordance with 55.2.2.1 that provides protection throughout the building and the provision of 55.2.2.6 shall apply.
- (3) Approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2, in accordance with 55.2.2.1 that provides protection throughout the building and the provision of 55.2.2.6 shall apply.

27.3.6.1 Where access to exits is provided by corridors, such corridors shall be separated from use areas by walls having a fire resistance rating of not less than 1 hour in accordance with Section 8.4, unless one of the following conditions exists:

- (1) Where exits are available from an open floor area
- (2) Within a space occupied by a single tenant
- (3) Within buildings protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2

27.4.4.6.9.2 Rooms housing building service equipment, janitor closets, and service elevators shall be permitted to open directly onto exit passageways, provided that all of the following criteria are met:

- (1) The required fire resistance rating between such rooms or areas and the exit passageway shall be maintained in accordance with 11.1.3.2.
- (2) Such rooms or areas shall be protected by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2; however, the exceptions in ~~NFPA 13~~ 55.3.1.1(1) that permit the omission of sprinklers from such rooms shall not be permitted.
- (3) Service elevators opening into the exit passageway shall not open into areas other than exit passageways.
- (4) Where exit stair enclosures discharge into the exit passageway, the provisions of 11.2.1.5.9 shall apply, regardless of the number of stories served.

27.4.4.8.1.1 The mall structure and all anchor buildings shall be protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1), 55.3.2, and 27.4.4.8.1.

27.4.5.3 Storage, Arrangement, Protection, and Quantities of Hazardous Commodities. The storage, arrangement, protection, and quantities of hazardous commodities shall be in accordance with the applicable provisions of the following:

- (1) NFPA 1
- (2) ~~NFPA 13~~ 55.3.1.1(1)
- (3) NFPA 30
- (4) NFPA 30B
- (5) NFPA 400, Chapter 14, for organic peroxide formulations
- (6) NFPA 400, Chapter 15, for oxidizer solids and liquids
- (7) NFPA 400, various chapters, depending on characteristics of a particular pesticide

27.4.5.5 Extinguishment Requirements. Bulk merchandising retail buildings shall be protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2 and the applicable provisions of the following:

- (1) NFPA 1
- (2) ~~NFPA 13~~
- (3) NFPA 30
- (4) NFPA 30B

28.2.4.5 A single means of egress shall be permitted from a mezzanine within a business occupancy, provided that the common path of travel does not exceed 75 ft (23 m), or 100 ft (30 m) if protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2.

28.2.4.6 A single means of egress shall be permitted for a maximum two-story, single-tenant space provided that both of the following criteria are met:

- (1) The building is protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2.
- (2) The total travel to the outside does not exceed 100 ft (30 m).

28.2.5.2.1 Common path of travel shall not exceed 100 ft (30 m) in a building protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2.

28.2.5.3.1 In buildings protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2, dead-end corridors shall not exceed 50 ft (15 m).

28.2.6.3 Travel distance shall not exceed 300 ft (91 m) in business occupancies protected throughout by an approved, supervised, automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2.

28.3.4.2 Initiation. Initiation of the required fire alarm system shall be by any one of the following:

- (1) Manual means in accordance with 55.2.2.1
- (2) Approved automatic fire detection system in accordance with 55.2.2.1 that provides protection throughout the building and the provision of 55.2.2.6 shall apply.
- (3) Approved, supervised automatic sprinkler system complying with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2 in accordance with 55.2.2.1 that provides protection throughout the building and the provision of 55.2.2.6 shall apply.

28.3.6.1 Where access to exits is provided by corridors, such corridors shall be separated from use areas by fire barriers in accordance with Section 8.4 having a minimum 1-hour fire resistance rating, unless one of the following conditions exists:

- (1) Where exits are available from an open floor area
- (2) Within a space occupied by a single tenant
- (3) Within buildings protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2

29.2.6.2 Power-Generation Buildings. Buildings of Type I or Type II construction used exclusively for the enclosure of steam generators, steam turbines, gas turbines, heat recovery generators, and flue gas treatment equipment shall be permitted to have a maximum travel distance of 400 ft (122 m) where all special hazards are protected by approved automatic suppression systems in accordance with one or more of the following standards, as applicable:

- (1) NFPA 11
- (2) NFPA 12
- (3) ~~NFPA 13~~ 55.3.1.1(1)
- (4) NFPA 15
- (5) NFPA 16
- (6) NFPA 17
- (7) NFPA 750
- (8) NFPA 2001

29.3.5.1.1 General. Industrial occupancies, other than low-hazard industrial occupancies, shall be protected by an approved automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) in any of the following locations:

- (1) Throughout all industrial occupancies three or more stories in height
- (2) Throughout all industrial occupancies exceeding 12,000 ft² (1115 m²) in fire area
- (3) Where the total area of all floors, including mezzanines, exceeds 24,000 ft² (2230 m²)

29.3.5.1.3 Power-Generation Buildings. In lieu of providing sprinkler protection throughout in accordance with 29.3.5.1, buildings of Type I or Type II construction used exclusively for the enclosure of steam generators, steam turbines, gas turbines, heat recovery generators, and flue gas treatment equipment shall not be required to be sprinklered throughout, provided that the special hazards are protected by approved automatic suppression systems in accordance with NFPA 11, NFPA 12, ~~NFPA 13~~ 55.3.1.1(1), NFPA 15, NFPA 16, NFPA 17, NFPA 750, or NFPA 2001.

30.3.4.1.1 Storage occupancies, other than low-hazard storage occupancies, shall be protected by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) in any of the following locations:

- (1) Throughout all storage occupancies three or more stories in height
- (2) Throughout all storage occupancies exceeding 12,000 ft² (1115 m²) in fire area
- (3) Where the total area of all floors, including mezzanines, exceeds 24,000 ft² (2230 m²)

30.8.3.5.1 Automatic sprinkler systems, where required, shall conform to ~~NFPA 13~~ 55.3.1.1(1). Electronic supervision of supervisory signals shall be provided in accordance with 55.3.2.1. Waterflow alarms shall be monitored in accordance with 55.3.2.2.

31.2.3 Where underground structures have an occupant load of more than 50 persons in the underground portions of the structure, the underground portions, and all areas and floor levels traversed in traveling to the exit discharge, shall be protected by an approved, supervised automatic sprinkler system installed in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2.

31.3.1.3 Limited-access structures shall be protected by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) and 55.3.2, except for structures meeting any of the following criteria:

- (1) Structure with an occupant load of less than 50 persons
- (2) One-story limited-access structures permitted to have a single exit in accordance with Chapters 15 through 30 and 33 through 34 and having a common path of travel not exceeding 50 ft (15 m)

31.6.1.3.1 Sprinklered Towers. In towers protected throughout by an automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1), the levels located below the observation level shall be permitted to be occupied only for any of the following uses:

- (1) Uses that support tower operations such as electrical and mechanical equipment rooms, including emergency power, radar, communications, and electronics rooms
- (2) Incidental accessory uses that support tower operations

31.6.5.2 Towers with 360-degree line-of-sight requirements shall be permitted to have a single means of egress for a distance of travel to the exit not exceeding 75 ft (23 m), or 100 ft (30 m) if the tower is protected throughout by an approved automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1).

32.3.5.2 Enclosed stadiums, arenas, and similar structures shall be protected throughout by an approved, electrically supervised automatic sprinkler system in accordance with 55.3.2 and ~~NFPA 13~~ 55.3.1.1(1), 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 shall not be required above the playing/activity area where permitted by the authority having jurisdiction.
- (2) Sprinklers shall not be required above seating areas that view the playing/activity area.

32.3.5.3 An enclosed area shall be protected by an approved sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1), 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 16.4.10.5

33.3.2.1 High-rise buildings shall be protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1), and 55.3.2.

37.1.3.1 Parapets Not Required. Parapets shall not be required where any of the following conditions exist: (4) Where the entire building is protected by an automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1)

37.1.4.1 Buildings four or more stories in height above grade plane, which are not protected throughout with a fire sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1) or ~~NFPA 13R~~ 55.3.1.1(2), with openings in exterior walls located within a 60 in. (1525 mm) radius of openings in the next story above, shall be separated or protected in accordance with 37.1.4.2.

48.3.2.3 The requirements of 48.3.2.1 and 48.3.2.2 shall not apply where otherwise permitted by the following:

- (1) As provided in Section 48.5, the smoke developed index for interior trim shall not be required.
- (2) Foam plastic insulation in cold storage buildings, ice plants, food plants, food processing rooms, and similar areas that has been tested in a thickness of 4 in. (100 mm) 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, and exhibits a flame spread index not exceeding 75 and a smoke developed index not exceeding 450, shall be permitted in a thickness of up to 10 in. (255 mm) where that portion of the building and the room are equipped with an automatic fire sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1).
- (3) Foam insulation that is part of a Class A, Class B, or Class C roof covering system, when tested in accordance with ASTM E108, Standard Test Methods for Fire Tests of Roof Coverings, or UL 790, Standard Test Methods for Fire Tests of Roof Coverings, and where the system with the foam plastic insulation passes NFPA 276, or UL 1256, Fire Test of Roof Deck Constructions for roof applications, the foam plastic insulation shall not be required to meet the smoke developed index limits.
- (4) Foam plastic insulation

48.3.3.4 The requirements of 48.3.3.1 through 48.3.3.3 shall not apply where otherwise permitted by the following:

- (1) The thermal barrier shall not be required in masonry or concrete wall, floor, or roof construction where the foam plastic insulation is covered on each face by concrete or masonry with a minimum 1 in. (25 mm) thickness.
- (2) The thermal barrier shall not be required in cooler and freezer walls, provided that all of the following conditions are met:
 - (a) The foam plastic used in cooler and freezer walls is a maximum thickness of 10 in. (255 mm) and, when tested, is a minimum thickness of 4 in. (100 mm) and has a flame spread index of 25 or less and a smoke developed index of 450 or less.
 - (b) The flash and self-ignition temperatures of the foam plastic are not less than 600°F (316°C) and 800°F (427°C), respectively, when tested in accordance with ASTM D1929, Standard Test Method for Determining Ignition Temperature of Plastics.
 - (c) The foam plastic is covered by aluminum not less than 0.032 in. (0.8 mm) thick or corrosion-resistant steel having a base metal thickness not less than 0.016 in. (0.4 mm) at any point.
 - (d) The cooler or freezer walls are protected by an automatic sprinkler system in accordance with ~~NFPA-13~~ 55.3.1.1(1).
 - (e) The cooler or freezer is within a building, and the cooler or freezer and the part of the building in which it is located are protected by an automatic sprinkler system in accordance with ~~NFPA-13~~ 55.3.1.1(1).
- (3) The thermal barrier shall not be required in walk-in coolers in unsprinklered buildings, provided that all of the following conditions are met:
 - (a) The foam plastic insulation is used in thicknesses of 4 in. (100 mm) or less.
 - (b) The foam plastic insulation has a flame spread of 75 or less.
 - (c) The aggregate floor area of the walk-in coolers is 400 ft² (37 m²) or less.
 - (d) The foam plastic insulation is covered either by aluminum not less than 0.032 in. (0.8 mm) thick or corrosion-resistant steel having a minimum base metal thickness of 0.016 in. (0.4 mm).
- (4) The thermal barrier shall not be required on or in exterior walls of one-story buildings where all of the following criteria are met:
 - (a) The foam plastic insulation meets all of the following requirements:
 - i. It is 4 in. (100 mm) or less in thickness.
 - ii. It has a flame spread index of 25 or less.
 - iii. It has a smoke developed index of 450 or less.
 - iv. It is covered either by aluminum with a thickness equal to or greater than 0.032 in. (0.8 mm) or corrosion-resistant steel having a base metal thickness greater than 0.016 in. (0.4 mm).
 - (b) The building is equipped throughout with an automatic sprinkler system in accordance with ~~NFPA-13~~ 55.3.1.1(1).
- (5) The thermal barrier shall not be required in roof assemblies where the following criteria are met:
 - (a) The foam plastic insulation installed in a roof assembly in accordance with this Code and the manufacturer's installation instructions is separated from the interior of the building by wood structural sheathing not less than 0.47 in. (12 mm) in thickness bonded with exterior glue, with edges supported by one of the following:
 - i. Blocking

- ii. Tongue-and-groove joints
 - iii. Other approved type of edge support
 - iv. Other equivalent material
- (b) The foam plastic insulation is a part of a Class A, Class B, or Class C roof-covering assembly, provided that the assembly with the foam plastic insulation satisfactorily passes either of the following:
 - i. FM Approval 4450, Class I Insulated Steel Deck Roofs
 - ii. UL 1256, Fire Test of Roof Deck Constructions
- (6) The thermal barrier shall not be required in attics and crawl spaces if the foam plastic insulation is installed within an attic or crawl space where entry is made only for service of utilities, and the foam plastic insulation is protected against ignition by one of the following:
 - (a) Mineral fiber insulation of 1 1/2 in. (38 mm) thickness
 - (b) Wood structural panel, particleboard, or hardboard of 1/4 in. (6.4 mm) thickness
 - (c) Gypsum wallboard of 0.375 in. (9.5 mm) thickness
 - (d) Corrosion-resistant steel having a base metal thickness of 0.016 in. (0.4 mm)
 - (e) Other approved material consistent with the requirements of the application and installed so that the foam plastic insulation is not exposed
- (7) The thermal barrier shall not be required in doors where the following criteria are met:
 - (a) Where the foam plastic insulation meeting the requirements of 48.3.2 is used as a core of pivoted or side-hinged doors that comply with the following:
 - i. The doors do not require a fire protection rating.
 - ii. The door skin is steel having a thickness of at least 0.016 in. (0.4 mm) or aluminum having a thickness of at least 0.032 in. (0.8 mm) at any point.
 - (b) Where foam-filled exterior entrance doors of residential occupancies comply with the following:
 - i. The doors do not require a fire resistance rating.
 - ii. The doors are faced with wood or other approved materials.
 - (c) Where the foam plastic insulation is used as core material for garage doors, and the following criteria are met:
 - i. No fire resistance rating is required for the assembly.
 - ii. The door is faced with at least 0.032 in. (0.8 mm) aluminum, 0.010 in. (0.25 mm) steel, or a 0.125 in. (3.1 mm) thickness of wood.
 - (d) Where garage doors have facings other than those specified in 48.3.3.4(7)(c)(ii) and are tested in accordance with, and meet the acceptance criteria of, ANSI/DASMA 107, Room Fire Test Standard for Garage Doors Using Foam Plastic Insulation.
 - (e) Where the foam plastic insulation is used as core material for garage doors in one- and two-family dwellings, and the foam plastic insulation complies with 48.3.2.
- (8) The thermal barrier shall not be required in conjunction with siding backer board where the following criteria are met:
 - (a) The foam plastic insulation 1/2 in. (13 mm) or less in thickness and having a potential heat of not more than 2000 Btu/ft² (22.7 MJ/m²) when tested in accordance with NFPA 259, is separated from the interior of the building by a least 2 in. (51 mm) of mineral fiber insulation or equivalent.
 - (b) The siding and foam plastic insulation are applied over existing siding.
- (9) The thermal barrier shall not be required on interior trim where the foam plastic insulation meets the requirements of Section 48.5.

- (10) The thermal barrier shall not be required on interior plastic signs in covered mall concourse buildings where used in accordance with Section 48.8.
- (11) In Type V construction, foam plastic insulation shall be permitted to be spray-applied to sill plates and headers without requiring a thermal barrier where the foam plastic insulation complies with all of the following criteria:
 - (a) The maximum thickness of the foam plastic insulation is 31/4 in. (82.6 mm).
 - (b) The density of the foam plastic insulation ranges between 1.5 lb/ft³ to 2.0 lb/ft³ (24 kg/m³ to 32 kg/m³).
 - (c) The foam plastic insulation has a flame spread index of 25 or less.
- (12) The thermal barrier shall not be required where tested in accordance with 48.4.4.

48.7.3.6 Unless the building is equipped throughout with an automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1), or when the building is equipped with smoke and heat vents, each skylight shall have a maximum area within the curb of 100 ft² (9 m²).

48.7.3.7.2 The aggregate area limitations of 48.7.3.7.1 shall be permitted to be increased 100 percent where the building is equipped throughout with an automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1), or where the building is equipped with smoke and heat vents.

48.7.3.8.2 The requirement of 48.7.3.8.1 shall not apply where one of the following conditions is met:

- (1) The building shall be equipped throughout with an automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1).
- (2) The skylight shall serve as an approved fire-venting system.
- (3) In one- and two-family dwellings, or on buildings with an unclassified roof covering, skylights shall be separated from each other by a distance of not less than 16 in. (405 mm), measured in a horizontal plane, and each skylight shall not exceed a maximum area within the curb of 100 ft² (9 m²).

48.7.4.2 Where walls and ceilings are required to be fire resistive or of noncombustible or limited-combustible construction, and walls are set out or ceilings are dropped more than 1¾ in. (44 mm), plastic materials with a flame spread index of 25 or less and a smoke developed index of 450 or less shall be used, unless they meet the following criteria:

- (1) The plastic materials shall be protected on both sides by an automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1).

48.7.5.2 Unless an automatic sprinkler system is installed in accordance with ~~NFPA 13~~ 55.3.1.1(1), the area of light diffusers, where used in exitways, exit passages, or corridors, shall not exceed 30 percent of the aggregate area of the ceiling in which they are installed.

48.7.6.6 Where the building is equipped throughout with an automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1), the maximum percentage area of an exterior wall in any story in light-transmitting plastic wall panels, and the maximum square footage of a single area given in Table 48.7.6.5.1, shall be permitted to be increased by 100 percent provided that the area of light-transmitting plastic wall panels does not exceed 50 percent of the wall area in any story, or the area permitted for unprotected openings, whichever is smaller.

48.7.7.2 Light-transmitting plastic glazing shall be permitted in openings in the exterior walls of buildings of types of construction other than Type V(000), where not required to be protected, in accordance with the following provisions:

- (1) The aggregate area of light-transmitting plastic glazing shall not exceed 25 percent of the area of any wall face of the story in which it is installed.
- (2) The area of a single pane of glazing installed above the first story shall not exceed 16 ft² (1.5 m²), and the vertical dimension of a single pane shall not exceed 48 in. (1220 mm).
- (3) Where an automatic sprinkler is provided throughout in accordance with ~~NFPA 13~~ 55.3.1.1(1), the aggregate area of glazing permitted by 48.7.7.2(1) shall be permitted to be increased to a maximum of 50 percent of the wall face of the story in which it is installed, with no limit on the maximum dimension or area of a single pane of glazing.
- (4) Approved flame barriers extending 30 in. (760 mm) beyond the exterior wall in the plane of the floor, or vertical panels not less than 48 in. (1220 mm) in height, shall be installed between glazed units located in adjacent stories.
- (5) Light-transmitting plastics shall not be installed more than 75 ft (23 m) above grade plane.
- (6) The requirements of 48.7.7.2(4) and 48.7.7.2(5) shall not apply to buildings equipped throughout with an automatic sprinkler in accordance with ~~NFPA 13~~ 55.3.1.1(1).

48.7.8.1 Except where prohibited, light-transmitting plastics shall be permitted to be used as light-transmitting plastic roof panels where any of the following conditions are met:

- (1) The building is equipped throughout with an automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1).
- (2) The roof construction is not required to have a fire resistance rating.
- (3) The light-transmitting plastic roof panels meet the requirements for roof coverings in accordance with Chapter 38.

48.7.8.2.2 The requirement of 48.7.8.2.1 shall not apply where one of the following conditions exists:

- (1) The separation between light-transmitting plastic roof panels shall not be required in a building equipped throughout with an automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1).
- (2) The separation between light-transmitting plastic roof panels shall not be required in buildings complying with the conditions of 48.7.8.4.2(2) and 48.7.8.4.2(3).

48.7.8.4.2 The requirement of 48.7.8.4.1 shall not apply where one of the following conditions exists:

- (1) The area limitations of Table 48.7.8.4.1 shall be permitted to be increased by 100 percent in buildings equipped throughout with an automatic sprinkler system in accordance with ~~NFPA 13~~ 55.3.1.1(1).

55.3.3 Other Supervision. Where electrical supervision is not required by another section of this Code, supervision shall be permitted in accordance with ~~NFPA 13~~ 55.3.1.1(1).

55.4.3 Where standpipe and hose systems are installed in combination with automatic sprinkler systems, installation shall be in accordance with ~~NFPA 13~~ 55.3.1.1(1) and NFPA 14.

Reason: Across the model codes, as it relates to automatic fire sprinkler systems, the proper code section that stipulates the use and installation of a particular fire protection system is provided. The proper code language is to reference that section and not the system type. This ensures that all the proper charging language is being applied. Not referencing the proper section could possibly cause misinterpretation and vital requirements being left out.



Public Input No. 116-NFPA 5000-2021 [New Section after 3.1]

Sprinkler system

A system, commonly activated by heat from a fire and discharges water over the fire area, that consists of an integrated network of piping designed in accordance with fire protection engineering standards that includes a water supply source, a control valve, a waterflow alarm, and a drain. The portion of the sprinkler system above ground is a network of specifically sized or hydraulically designed piping installed in a building, structure, or area, generally overhead, and to which sprinklers are attached in a systematic pattern. (13, 2022)

Automatic sprinkler

A fire suppression or control device that operates automatically when its heat-activated element is heated to its thermal rating or above, allowing to discharge over a specified area. (13, 2022)

Statement of Problem and Substantiation for Public Input

Sprinkler systems and automatic sprinklers should be defined in NFPA 5000. This PI extracts definitions from the 2022 edition of NFPA 13. This correlates to NFPA 101 PI 338.

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
Public Input No. 114-NFPA 5000-2021 [Section No. 55.3]	

Submitter Information Verification

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Committee: BLD-BSF



Public Input No. 49-NFPA 5000-2021 [New Section after 3.3.23]

3.3.23.2 Initiating Device.

A system component that originates transmission of a change-of-state condition, such as in a smoke detector, manual fire alarm box, or supervisory switch. [72,2019]

Statement of Problem and Substantiation for Public Input

This definition is an extract from NFPA 72, Section 3.3.141 to correlate with NFPA 5000 PI 48

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
<u>Public Input No. 48-NFPA 5000-2021 [Section No. 55.3.2.1.1]</u>	
<u>Public Input No. 48-NFPA 5000-2021 [Section No. 55.3.2.1.1]</u>	

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Public Input No. 69-NFPA 5000-2021 [Sections 55.2.2.10.4, 55.2.2.10.5]

Sections 55.2.2.10.4, 55.2.2.10.5

55.2.2.10.4

~~Unless otherwise provided in 55.2.2.10.5, smoke~~ Smoke alarms and smoke detectors shall not be installed within an area of exclusion determined by a 10 ft (3.0 m) radial distance along a horizontal flow path from a stationary or fixed cooking appliance, unless listed for installation in close proximity to cooking appliances. ~~Smoke alarms and smoke detectors installed between 10 ft (3.0 m) and 20 ft~~ 20 ft (6.4 m ~~1 m~~) along a horizontal flow path from a stationary or fixed cooking appliance unless the devices comply with the following:

- 1) Prior to January 1, 2023, smoke alarms and smoke detectors shall be equipped with an alarm - silencing means or, use photoelectric detection, or be listed for resistance to common nuisance sources from cooking in accordance with the 8th edition of UL 217 Smoke Alarms, the 7th edition of UL 268, Smoke Detectors for Fire Alarm Systems, or subsequent editions.
- 2) Effective January 1, 2023, smoke alarms and smoke detectors shall be listed for resistance to common nuisance sources from cooking in accordance with the 8th edition of UL 217, the 7th edition of UL 268, or subsequent editions.

[72: 29.8 11 .3.4(4)]

55.2.2.10.5

~~Smoke alarms or smoke detectors that use photoelectric detection shall be permitted for installation at a radial distance greater than 6 ft (1.8 m) from any~~ not be installed within an area of exclusion determined by a 10 ft (3.0 m) radial distance along a horizontal flow path from a stationary or fixed cooking appliance when the following conditions are met:

- ~~• The kitchen or cooking area and adjacent spaces have no clear interior partitions or headers.~~
~~The~~ [72:29.11.3.4(5)]
When the 10 ft (3.0 m) area of exclusion would prohibit the placement of a smoke alarm or smoke detector required by other sections of

NFPA 72:

this Code, and when the kitchen or cooking area and adjacent spaces have no clear interior partitions or headers, smoke alarms or smoke detectors shall be permitted for installation at a radial distance between 6 ft (1.8 m) and 10 ft (3.0 m) from any stationary or fixed cooking appliance unless the devices comply with the following:

- 1) Prior to January 1, 2023, the devices shall use photoelectric detection or be listed for resistance to common nuisance sources from cooking in accordance with the 8th edition of UL 217, the 7th edition of UL 268, or subsequent editions.
- 2) Effective January 1, 2023, the devices shall be listed for resistance to common nuisance sources from cooking nuisance alarms in accordance with the 8th edition of UL 217, the 7th edition of UL 268, or subsequent editions.

[72: 29.

8

11 .3.4(

4

5)]

Additional Proposed Changes

<u>File Name</u>	<u>Description</u>	<u>Approved</u>
BLD_BSF_Smoke_Alarms_Near_Cooking.docx	BLD 55.2.2.10.4	

Statement of Problem and Substantiation for Public Input

This Public Input seeks to accomplish two important objectives.

1. Reduce unwanted alarm activations from smoke alarms and smoke detectors being installed near stationary or fixed cooking appliances
2. Align the requirements in NFPA 101 with the requirements in the 2022 edition of NFPA 72 and NFPA 1 CI-9.

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Committee: BLD-BSF

NFPA Public Input Form

NOTE: All Public Input must be received by 5:00 pm EST/EDST on the published Public Input Closing Date.

For further information on the standards-making process, please contact the Codes and Standards Administration at 617-984-7249 or visit www.nfpa.org/codes.

For technical assistance, please call NFPA at 1-800-344-3555

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Log #: _____

Date Rec'd: _____

Date _____ Name _____ Tel. No. _____

Company National Electrical Manufacturers Association (NEMA) Email _____

Street Address _____ City _____ State _____ Zip _____

Please indicate organization represented (if any) NEMA

1. (a) Title of NFPA Standard Building Construction and Safety Code NFPA No. & Year 5000-2021

(b) Section/Paragraph 55.2.2.10.4

2. Public Input Recommends (check one): ☒ new text ☒ revised text ☐ deleted text

3. Proposed Text of Public Input (include proposed new or revised wording, or identification of wording to be deleted):

[Note: Proposed text should be in legislative format; i.e., use underscore to denote wording to be inserted (inserted wording) and strike-through to denote wording to be deleted (~~deleted wording~~).]

~~55.2.2.10.4* Unless otherwise provided in 9.6.2.10.7 smoke alarms and smoke detectors shall not be installed within an area of exclusion determined by a 10 ft (3.0 m) radial distance along a horizontal flow path from a stationary or fixed cooking appliance, unless listed for installation in close proximity to cooking appliances. Smoke alarms and smoke detectors installed between 10 ft (3.0 m) and 20 ft (6.1 m) along a horizontal flow path from a stationary or fixed cooking appliance shall be equipped with an alarm silencing means or use photoelectric detection. [72:29.11.3.4(4)]~~

Smoke alarms and smoke detectors shall not be installed between 10 ft (3.0 m) and 20 ft (6.1 m) along a horizontal flow path from a stationary or fixed cooking appliance unless the devices comply with the following:

- 1) Prior to January 1, 2023, smoke alarms and smoke detectors shall be equipped with an alarm silencing means, use photoelectric detection, or be listed for resistance to common nuisance sources from cooking in accordance with the 8th edition of UL 217, Smoke Alarms, the 7th edition of UL 268, Smoke Detectors for Fire Alarm Systems, or subsequent editions.
- 2) Effective January 1, 2023, smoke alarms and smoke detectors shall be listed for resistance to common nuisance sources from cooking in accordance with the 8th edition of UL 217, the 7th edition of UL 268, or subsequent editions.

[72:29.11.3.4(4)]

55.2.2.10.5 Smoke alarms and smoke detectors shall not be installed within an area of exclusion determined by a 10 ft (3.0 m) radial distance along a horizontal flow path from a stationary or fixed cooking appliance [72:29.11.3.4(5)]

~~55.2.2.10.5~~ 55.2.2.10.5 ~~Smoke alarms or smoke detectors that use photoelectric detection shall be permitted for installation at a radial distance greater than 6 ft (1.8 m) from any stationary or fixed cooking appliance when the following conditions are met:~~

~~1) The kitchen or cooking area and adjacent spaces have no clear interior partitions or headers.~~

~~1. The 10 ft (3.0 m) area of exclusion would prohibit the placement of a smoke alarm or smoke detector required by other sections of NFPA 72. [72:29.11.3.4(5)]~~

When the 10 ft (3.0 m) area of exclusion would prohibit the placement of a smoke alarm or smoke detector required by other sections of this Code, and when the kitchen or cooking area and adjacent spaces have no clear interior partitions or headers, smoke alarms or smoke detectors shall be permitted for installation at a radial distance between 6 ft (1.8 m) and 10 ft (3.0 m) from any stationary or fixed cooking appliance unless the devices comply with the following:

- 1) Prior to January 1, 2023, the devices shall use photoelectric detection or be listed for resistance to common nuisance sources from cooking in accordance with the 8th edition of UL 217, the 7th edition of UL 268, or subsequent editions.
- 2) Effective January 1, 2023, the devices shall be listed for resistance to common nuisance sources from cooking nuisance alarms in accordance with the 8th edition of UL 217, the 7th edition of UL 268, or subsequent editions.

[72:29.11.3.4(5)]

4. Statement of Problem and Substantiation for Public Input: (Note: State the problem that would be resolved by your recommendation; give the specific reason for your Public Input, including copies of tests, research papers, fire experience, etc. If more than 200 words, it may be abstracted for publication.)

This Public Input seeks to accomplish two important objectives.

1. Reduce unwanted alarm activations from smoke alarms and smoke detectors being installed near stationary or fixed cooking appliances
2. Align the requirements in NFPA 101 with the requirements in the 2022 edition of NFPA 72 and NFPA 1 CI-9.

5. Copyright Assignment

(a) ☒ I am the author of the text or other material (such as illustrations, graphs) proposed in the Public Input.

(b) ☐ Some or all of the text or other material proposed in this Public Input was not authored by me. Its source is as follows: (please identify which material and provide complete information on its source)

I hereby grant and assign to the NFPA all and full rights in copyright in this Public Input (including both the Proposed Text and the Statement of Problem and Substantiation). I understand that I acquire no rights in any publication of NFPA in which this Public Input in this or another similar or analogous form is used. Except to the extent that I do not have authority to make an assignment in materials that I have identified in (b) above, I hereby warrant that I am the author of this Public Input and that I have full power and authority to enter into this assignment.

Signature (Required) _____

PLEASE USE SEPARATE FORM FOR EACH PUBLIC INPUT

To: Secretary, Standards Council National Fire Protection Association
1 Batterymarch Park · Quincy, MA 02169-7471 OR
Fax to: (617) 770-3500 OR Email to: proposals_comments@nfpa.org

6/2/2021



Public Input No. 114-NFPA 5000-2021 [Section No. 55.3]

55.3 Automatic Sprinklers Sprinkler Systems .

55.3.1 General.

55.3.1.1*

Each automatic sprinkler system required by another section of this *Code* shall be in accordance with one of the following:

- (1) NFPA 13
- (2) NFPA 13R
- (3) NFPA 13D

55.3.1.2

Sprinkler piping serving not more than six sprinklers for any hazardous area shall be permitted to be connected directly to a domestic water supply system having a capacity sufficient to provide 0.15 gpm/ft² (6.1 mm/min) throughout the entire enclosed area.

55.3.1.3

Sprinkler piping serving isolated hazardous areas as described in 55.3.1.2 shall be provided with an indicating shutoff valve supervised in accordance with 55.3.2 or 55.3.3 and installed in an accessible, visible location between the sprinklers and the connection to the domestic water supply.

55.3.1.4*

In areas protected by automatic sprinklers, automatic heat-detection devices required by other sections of this *Code* shall not be required.

55.3.1.5

Automatic sprinkler systems installed to make use of an alternative permitted by this *Code* shall be considered required systems and shall meet the provisions of this *Code* that apply to required systems.

55.3.1.6

In buildings five or more stories in height, a sprinkler control valve and a waterflow device shall be provided for each floor.

55.3.1.7

Basements exceeding 2500 ft² (232 m²) in new buildings shall be protected throughout by an approved automatic sprinkler system. [1:13.3.2.2]

55.3.2 Electrical Supervision.

55.3.2.1 Supervisory Signals.

55.3.2.1.1

Where electrically supervised automatic sprinkler systems are required by another section of this *Code*, supervisory attachments shall be installed and monitored for integrity in accordance with *NFPA 72* , and a distinctive supervisory signal shall be provided to indicate a condition that would impair the satisfactory operation of the sprinkler system.

55.3.2.1.2

Supervisory signals shall sound and shall be displayed either at a location within the protected building that is constantly attended by qualified personnel or at an approved, remotely located receiving facility.

55.3.2.2 Alarm Signal Transmission.**55.3.2.2.1**

Where electrical supervision of automatic sprinkler systems is required by another section of this *Code*, waterflow alarms shall be transmitted to an approved, proprietary alarm-receiving facility; a remote station; a central station; or the fire department.

55.3.2.2.2

The connection described in 55.3.2.2.1 shall be in accordance with 55.2.1.2.

55.3.3 Other Supervision.

Where electrical supervision is not required by another section of this *Code*, supervision shall be permitted in accordance with NFPA 13.

Statement of Problem and Substantiation for Public Input

Automatic sprinklers are a part of an automatic sprinkler system. The title change accurately reflects the entire system installed. Correlates to NFPA 101 PI 335

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
Public Input No. 116-NFPA 5000-2021 [New Section after 3.1]	

Submitter Information Verification

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Committee: BLD-BSF



Public Input No. 48-NFPA 5000-2021 [Section No. 55.3.2.1.1]

55.3.2.1.1

Where electrically supervised automatic sprinkler systems are required by another section of this *Code*, alarm and supervisory attachments shall ~~initiating devices shall~~ be installed and monitored for integrity in accordance with *NFPA 72*, and a distinctive supervisory signal shall be provided to indicate a condition that would impair the satisfactory operation of the sprinkler system.

Statement of Problem and Substantiation for Public Input

Correlates with NFPA 101 PI 182. Supervisory attachments is an undefined and ambiguous term in NFPA 5000, NFPA 101, NFPA 13, and NFPA 72. The new text, initiating devices, is a defined term in NFPA 72. See PI 49 for extracting the definition from NFPA 72, Section 3.3.141, into NFPA 5000.

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
<u>Public Input No. 49-NFPA 5000-2021 [New Section after 3.3.23]</u>	
<u>Public Input No. 49-NFPA 5000-2021 [New Section after 3.3.23]</u>	

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Committee: BLD-BSF

**Public Input No. 150-NFPA 5000-2021 [Section No. 55.5.1]****55.5.1 Alternative Systems.**

In any occupancy where the character of the fuel for fire is such that extinguishment or control of the fire is accomplished by a type of automatic extinguishing system in lieu of an automatic sprinkler system, such extinguishing system shall be installed in accordance with the applicable standard referenced in Table 55.5.1.

Table 55.5.1 Fire Suppression System Installation Standards

<u>Fire Suppression System</u>	<u>Installation Standard</u>
Low-, medium-, and high-expansion foam systems	NFPA 11, <i>Standard for Low-, Medium-, and High-Expansion Foam Systems</i>
Carbon dioxide systems	NFPA 12, <i>Standard on Carbon Dioxide Extinguishing Systems</i>
Halon 1301 systems	NFPA 12A, <i>Standard on Halon 1301 Fire Extinguishing Systems</i>
Water spray fixed systems	NFPA 15, <i>Standard for Water Spray Fixed Systems for Fire Protection</i>
Deluge foam-water sprinkler systems	NFPA 16, <i>Standard for the Installation of Foam-Water Sprinkler and Foam-Water Spray Systems</i>
Dry chemical systems	NFPA 17, <i>Standard for Dry Chemical Extinguishing Systems</i>
Wet chemical systems	NFPA 17A, <i>Standard for Wet Chemical Extinguishing Systems</i>
Water mist systems	NFPA 750, <i>Standard on Water Mist Fire Protection Systems</i>
<u>Hybrid (water and inert-gas) fire extinguishing systems</u>	<u>NFPA 770, <i>Standard on Hybrid (Water and Inert-Gas) Fire Extinguishing Systems</i></u>
<u>Clean agent extinguishing systems</u>	<u>NFPA 2001, <i>Standard on Clean Agent Fire Extinguishing Systems</i></u>

Statement of Problem and Substantiation for Public Input

NFPA 770 is a new standard on Hybrid fire extinguishing systems and should be added as an option for a fire protection system.

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Committee: BLD-BSF



Public Input No. 72-NFPA 5000-2021 [New Section after 55.11]

55.11.1*

Carbon monoxide detectors that are installed in air duct systems shall not be used as a substitute for open area protection. [72.17.2.3]

A.55.11.1

At present there is no product performance listing for duct mounted carbon monoxide detectors because there is no peer reviewed research to determine what the alarm thresholds for duct mounted carbon monoxide detectors should be. There are considerable differences between the operation of a spot-type carbon monoxide detector and a duct mounted carbon monoxide detector. The environment in ducts can be very harsh and could impact the carbon monoxide detector's sensing element. Furthermore, in most buildings, there are periods when the HVAC system is not moving significant quantities of air from the compartments it serves. As a result, the carbon monoxide detection system cannot be designed to rely on the HVAC system operation for the transport of carbon monoxide to the carbon monoxide detectors.

Statement of Problem and Substantiation for Public Input

This Public Input seeks to prevent a potential life safety issue by prohibiting duct mounted carbon monoxide (CO) detectors from being installed in lieu of "open area" CO detectors or alarms. This change is needed for the following reasons:

1. Duct mounted CO detectors are commercially available, however, there are no alarm thresholds for duct mounted CO detectors in UL 2075 or UL 2034
2. Duct mounted CO detectors have been proposed for use in applications where CO detection is needed, which has created confusion for designers and code officials.
3. When the HVAC system is not moving significant quantities of air duct mounted CO detectors cannot accurately detect potentially hazardous levels of CO in the rooms served by the HVAC system.
4. This PI should remove confusion about duct mounted CO detectors being used as the required means of providing code mandated protection.
5. Align the duct CO detection requirements in NFPA 101 with the requirement in the 2022 edition of NFPA 72 and FR-18 for the 2024 edition of NFPA 1.

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Committee: BLD-BSF