



NATIONAL FIRE PROTECTION ASSOCIATION

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

AGENDA

NFPA Technical Committee on Construction and Demolition (COD-AAA) NFPA 241 Second Draft Meeting (A2026)

August 20-21, 2025
8:00 a.m. – 5:00 p.m. (Central)

Austin, TX

To join the meeting, please contact ksmith@nfpa.org

- 1. Call to order.** Bruce Campbell.
- 2. Introductions.** See committee roster attached.
- 3. Chair report.** Bruce Campbell.
- 4. Staff liaison report.** Kevin Carr.
- 5. Previous meeting minutes.** August 20-22, 2024, Pittsburgh, PA. See attached.
- 6. NFPA 241 Second Draft.**
 - a. **Public Comments.** See attached.
 - b. **Task group report(s).**
 - i. **TG#1, Crane Safety.** Westrick.
 - ii. **TG#2, Monitored Video Surveillance.** Blankfeld.
 - iii. **TG#3, Stairs.** Hoyt.
 - iv. **TG#4, CI-26.** Towski.
 - v. **TG#5, Battery Types and Applications.** Towski.
 - vi. **TG#6, CI-43.** Carsillo.
 - c. **Committee Inputs.** See attached.
 - d. **Staff Items for Consideration.**
- 7. Other Business.**
- 8. Future meetings.**
- 9. Adjournment.**

Address List No Phone

06/12/2025

Kevin Carr

COD-AAA

Construction and Demolition

Bruce G. Campbell	SE 10/20/2010	Juan Francisco Aleman	SE 10/28/2014
Chair	COD-AAA	Principal	COD-AAA
Jensen Hughes 112 Rancho Bueno Drive Georgetown, TX 78628-9523 Alternate: Bradley E. Smeaton		Elephas Engineering Services, LLC 7612 Allentown Road Fort Washington, MD 20744	
William Ambrefe	E 4/28/2000	Daniel Arthur	SE 08/23/2023
Principal	COD-AAA	Principal	COD-AAA
City of Beverly Municipal Inspection 56 Water Street Beverly, MA 01915-5027		Code Consultants Inc. 7 Seaport Drive Unit 207 Quincy, MA 02171 Alternate: Elizabeth Kate Pennacchio	
Daniel Scott Blankfeld	SE 12/07/2021	Matthew James Bourque	SE 12/02/2020
Principal	COD-AAA	Principal	COD-AAA
CBG Building Company LLC 17600 Kirk Lane Rockville, MD 20853		W.S. Development 33 Boylston Street Suite 3000 Chestnut Hill, MA 02467	
Kelly Brooks	E 12/04/2024	Michael E. Carsillo	E 01/12/2000
Principal	COD-AAA	Principal	COD-AAA
West Metro Fire Protection District 433 S Allison Parkway Lakewood, CO 80226 Fire Marshal's Association of Colorado		Palm Beach Gardens Fire Rescue 10500 North Military Trail Palm Beach Gardens, FL 33410 International Fire Marshals Association (IFMA)	
Robert Carson	U 08/23/2023	Mark Chrisman	SE 10/28/2014
Principal	COD-AAA	Principal	COD-AAA
Dellbrook Construction 859 Willard Street Quincy, MA 02169		Henderson Engineers 8345 Lenexa Drive, Suite 300 Lenexa, KS 66214-1777	
William V. F. Cosey	U 12/07/2021	Sheldon Dacus	IM 04/02/2020
Principal	COD-AAA	Principal	COD-AAA
Savannah River Nuclear Solutions, LLC 152 Sweetbay Drive Aiken, SC 29803		Security Fire Protection Company 4495 Mendenhall Road Memphis, TN 38141 National Fire Sprinkler Association Alternate: Michael J. Joanis	
Nicholas A. Dawe	E 08/17/2018	John August Denhardt	IM 04/14/2021
Principal	COD-AAA	Principal	COD-AAA
Cobb County Fire Marshal's Office 1595 County Services Parkway Marietta, GA 30008		American Fire Sprinkler Association (AFSA) 1410 East Renner Road Suite 150 Richardson, TX 75082 Alternate: Kevin R. Hall	

Address List No Phone

06/12/2025

Kevin Carr

COD-AAA

Construction and Demolition

Kevin Feak	SE 11/29/2023	Donald Fess	U 12/08/2015
Principal LaBella Associates 404 Tuscany Lane Baldwinsville, NY 13027	COD-AAA	Principal Harvard University 46 Blackstone Street Cambridge, MA 02138	COD-AAA
Don J. Foti	SE 4/4/2017	James W. Gaut	U 12/08/2015
Principal HukariAscendent 4933 Woodhurst Drive Sarasota, FL 34243	COD-AAA	Principal Marriott Vacations Worldwide 11667 Acosta Avenue Orlando, FL 32836-8821	COD-AAA
Donald G. Goosman	SE 10/27/2005	Daniel L. Haynes	U 4/17/2002
Principal Wiss, Janney, Elstner Associates, Inc. 330 Pfingsten Road Northbrook, IL 60062	COD-AAA	Principal Lawrence Livermore National Laboratory PO Box 808 Livermore, CA 94551-0808	COD-AAA
Rick Heffernan	M 04/17/2024	Jennifer Hoyt	SE 08/23/2023
Principal SDi 545 River Moorings Drive Merritt Island, FL 32953 National Electrical Manufacturers Association	COD-AAA	Principal Code Red Consultants 132 Turnpike Road Suite 320 Southborough, MA 01772 Alternate: Corey Fisher	COD-AAA
Jason Hurin	I 4/3/2019	Kyle V. Jarvenpaa	M 08/29/2024
Principal Markel Specialty Insurance 3 Molly's Run Kennebunk, ME 04043	COD-AAA	Principal Space Age Electronics 58 Chocksett Road Sterling, MA 01564	COD-AAA
James Kane	U 08/29/2024	Justin V. Kersey	I 12/02/2020
Principal Turner Construction Company 28 Joyce Road Hartsdale, NY 10530	COD-AAA	Principal Allianz Risk Consulting, LLC 5203 S. Quintero Court Centennial, CO 80015	COD-AAA
Craig Kolakowski	I 08/09/2011	Dennis Mantjos	I 08/29/2024
Principal The Hartford Insurance Company Technical Manager-Risk Engineering 10701 South Ocean Drive Unit 872 Jensen Beach, FL 34957	COD-AAA	Principal Travelers 2127 Madeira Drive Weston, FL 33327	COD-AAA

Address List No Phone

06/12/2025

Kevin Carr

COD-AAA

Construction and Demolition

Scott G. Nacheman	SE 12/07/2022	Raymond C. O'Brocki	M 12/02/2020
Principal White Birch Group, LLC 5901 N. Cicero Avenue Suite 607 Chicago, IL 660646	COD-AAA	Principal American Wood Council 38054 Mockingbird Lane Unit 83 Selbyville, DE 19975 American Wood Council Alternate: Greg Womack	COD-AAA
Joel C. Pickering	M 8/9/2011	Bernard Ravidou	U 08/24/2021
Principal Ramtech Global North America 48 Purchase Street Middleborough, MA 02346	COD-AAA	Principal SOCOTEC 75 Hood Park Drive Suite 300 Charlestown, MA 02129 Builders Association of South Florida	COD-AAA
Shamim Rashid-Sumar	M 04/12/2022	Christopher J. Reitz	U 08/17/2017
Principal National Ready Mixed Concrete Assn. 611 W 137th Street #64 New York, NY 10031	COD-AAA	Principal Thomas Jefferson University and Hospitals 214 South 11th Street Pilot House Philadelphia, PA 19107-5501 American Society for Healthcare Engineering Alternate: James S. Peterkin	COD-AAA
Richard Jay Roberts	M 12/06/2017	Brandon Rohlfs	I 04/17/2024
Principal Honeywell Fire Safety 624 Hammer Lane North Aurora, IL 60542-9155 Automatic Fire Alarm Association	COD-AAA	Principal Liberty Mutual Insurance 1508 Jekyll Lane Waxhaw, NC 28173	COD-AAA
Dale Scheetz	L 08/29/2024	Jonathan Thomas Shriner	U 07/29/2013
Principal Local 696 JAC 41 43 East Willow Street Millburn, NJ 07041 United Assn. of Journeymen & Apprentices of the Plumbing & Pipe Fitting Industry Alternate: Ken Rose	COD-AAA	Principal US Architect of the Capitol 101 Independence Avenue, SE Washington, DC 20540-1000	COD-AAA
William Skene	I 08/10/2022	Michael Stone	M 04/17/2024
Principal FM 90 Pulpit Rock Road Woodstock, CT 06281	COD-AAA	Principal Johnson Controls 558 E. Deering Road Deering, NH 03244 Alternate: Sean Cutting	COD-AAA

Address List No Phone

06/12/2025

Kevin Carr

COD-AAA

Construction and Demolition

Chris Towski	L 12/8/2015	Patsy Warnick	E 11/30/2016
Principal Cambridge Fire Department 23 McHugh Avenue Billerica, MA 01821 International Association of Fire Fighters	COD-AAA	Principal Montgomery County 255 Rockville Pike 2nd Floor - Fire Code Rockville, MD 20850	COD-AAA
Curtis J. Westrick	I 08/17/2015	Michael S. White	M 12/02/2020
Principal Zurich Services Corporation 25 Darbywood Lane Belpre, OH 45714	COD-AAA	Principal Siemens Building Technologies Smart Infrastructure 2781 Milano Avenue Apex, NC 27502 Alternate: Jim Oare	COD-AAA
Ronald W. Woodfin	SE 1/15/2004	David K. Young	RT 04/04/2017
Principal TetraTek, Inc./AES Corporation PO Box 1094 Brighton, CO 80601 Alternate: Adam Woodfin	COD-AAA	Principal Idaho National Laboratory 1955 N. Fremont Avenue MS 3406 Idaho Falls, ID 83415	COD-AAA
Sean Cutting	M 04/09/2025	Corey Fisher	SE 04/17/2024
Alternate Johnson Controls 1467 Elmwood Avenue Cranston, RI 02910 Principal: Michael Stone	COD-AAA	Alternate Code Red Consultants 154 Turnpike Road, Suite 200 Southborough, MA 01772 Principal: Jennifer Hoyt	COD-AAA
Kevin R. Hall	IM 04/14/2021	Michael J. Joanis	IM 08/11/2020
Alternate American Fire Sprinkler Association (AFSA) 3206 Fait Avenue Baltimore, MD 21224 Principal: John August Denhardt	COD-AAA	Alternate National Fire Sprinkler Association (NFSA) 126 Elwyn Avenue Portsmouth, NH 03801 National Fire Sprinkler Association Principal: Sheldon Dacus	COD-AAA
Jim Oare	M 08/24/2021	Elizabeth Kate Pennacchio	SE 08/23/2023
Alternate Siemens Industy Inc. 145 Branum Alley Kingston, TN 37763 Principal: Michael S. White	COD-AAA	Alternate Code Consultants, Inc. 10856 Tea Olive Lane Boca Raton, FL 33498 Principal: Daniel Arthur	COD-AAA

Address List No Phone

06/12/2025

Kevin Carr

COD-AAA

Construction and Demolition

James S. Peterkin	U 08/17/2017	Ken Rose	L 04/02/2020
Alternate	COD-AAA	Alternate	COD-AAA
TLC Engineering		Sprinkler Fitters Local 183	
Senior Fire Protection Engineer		4313 Ridge Road	
255 South Orange Avenue		Colgate, WI 53017	
Suite 1600		United Assn. of Journeymen & Apprentices of the	
Orlando, FL 32801		Plumbing & Pipe Fitting Industry	
American Society for Healthcare Engineering		Principal: Dale Scheetz	
Principal: Christopher J. Reitz			
Bradley E. Smeaton	SE 08/17/2015	Greg Womack	M 08/29/2024
Alternate	COD-AAA	Alternate	COD-AAA
Jensen Hughes		American Wood Council (AWC)	
9497 La Costa Lane		1790 E. Gloucester Street	
Lone Tree, CO 80124-8965		Boise, ID 83706	
Principal: Bruce G. Campbell		Principal: Raymond C. O'Brocki	
Adam Woodfin	SE 04/12/2022	Kevin Carr	4/19/2018
Alternate	COD-AAA	Staff Liaison	COD-AAA
TetraTek, Inc.		National Fire Protection Association	
476 WO Johnston Avenue		1 Batterymarch Park	
Rocky Point, NC 28457		Quincy, MA 02169-7471	
Principal: Ronald W. Woodfin			



NATIONAL FIRE PROTECTION ASSOCIATION

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

MINUTES

Technical Committee on Construction and Demolition (COD-AAA) NFPA 241 First Draft Meeting (A2026)

August 20-August 22, 2024
8:00am – 5:00pm (ET)

Pittsburgh, PA

1. **Call to order.** Bruce Campbell, chair, called the meeting to order at 8:00am on August 20, 2024.
2. **Introductions.** Attendees introduced themselves and identified their affiliation. NFPA staff took attendance.
3. **Chair report.** Bruce Campbell welcomed attendees and provided an overview of the meeting.
4. **Staff liaison report.** Kevin Carr provided an overview of the standards development process and the revision cycle schedule.
 - i. No members declared that they had been retained to represent the interest of an entity that would be classified in an interest category different from their own with respect to a specific issue or issues that were addressed by the committee.
5. **Previous meeting minutes.** The minutes from the October 27- 30, 2020, Microsoft Teams and January 16-17, 2024, New Orleans, LA. were approved without revision.
6. **NFPA 241 First Draft.**
 - a. **Review of Public Inputs.** The Technical Committee reviewed the Public Inputs and developed First Revisions and Committee Inputs, as necessary. These will be available in the First Draft Report at www.nfpa.org/241.
 - b. **Task group report(s).** The following task groups provided their reports and recommendations.
 - i. **TG#1.** Chrisman. The task group provided a report. The task group has been discharged with thanks.
 - ii. **TG#2.** Blankfeld. The task group provided a report, and First Revisions were made. The task group has been discharged with thanks.
 - iii. **TG#3.** Westrick. The task group provided a report, and a Committee Input was made. The task group was reconstituted to continue work.

These minutes are considered preliminary until approved at the next committee meeting.

- iv. **TG#4.** Reitz. The task group provided a report, and First Revisions were made. The task group has been discharged with thanks.
 - v. **TG#5.** Fess. The task group provided a report, and First Revisions were made. The task group has been discharged with thanks.
 - vi. **TG#6.** Blankfeld. The task group provided a report, and First Revisions were made. The task group has been discharged with thanks.
 - vii. **TG#7.** Warnick. No report was provided. The task group has been discharged with thanks.
 - viii. **TG#8.** Towski. The task group provided a report. The task group has been discharged with thanks.
 - ix. **TG#9.** Hoyt. The task group provided a report, and a Committee Input was made. The task group has been discharged with thanks.
 - x. **TG#10.** Webb. The task group provided a report, and First Revisions were made. The task group has been discharged with thanks.
 - xi. **TG#11.** Reitz. The task group provided a report, and First Revisions were made. The task group has been discharged with thanks.
 - xii. **TG#12.** Warnick. No report was provided. The task group has been discharged with thanks.
 - xiii. **TG#13.** Towski. The task group provided a report, and First Revisions were made. The task group has been discharged with thanks.
 - xiv. **TG#14.** Carson. The task group provided a report, and First Revisions were made. The task group has been discharged with thanks.
 - xv. **TG#15.** Carsillo. The task group provided a report, and First Revisions were made. The task group has been discharged with thanks.
 - xvi. **TG#16.** Towski. The task group provided a report. The task group has been discharged with thanks.
 - xvii. **TG#17.** Goosman. The task group provided a report. The task group has been discharged with thanks.
 - xviii. **TG#18.** Hoyt. The task group provided a report, and First Revisions were made. The task group has been discharged with thanks.
- c. **In-meeting task groups.** The following task group were appointed to work during the First Draft meeting, and have been discharged with thanks:
- i. **Fire Protection Systems.** TG Chair: Hall. Members: Stone, Gaut, Webb, Young, Towski, Peterkin, Joanis, Rhinehart, Pickering (guest), Carson. Scope: Review the fire protection systems and equipment requirements within NFPA 241 and relocate these to a new dedicated section within Chapter 4. Further, this would require the creation of pointers back to this new section from where the material is originally moved from.

This would also maintain the distinction between temporary and permanent system requirements. No new requirements to these sections would be included. See attached.

- d. **New task groups.** The following task groups were appointed to work subsequent to the meeting:
- i. **TG#1.** TG Chair: Westrick. Members: None. Review crane safety and determine if requirements should be added to NFPA 241. This would include a review of Chapter 5.
 - ii. **TG#2.** TG Chair: Blankfeld. Members: O'Brocki, Westrick, Kolakowski, Fisher, Carson, Feak, Rhinehart, White, Pickering (guest). Scope: To provide specific requirements and annex material as it pertains to monitored video surveillance. This could include, but not be limited to, the use of applicable codes and standards, additional requirements of the Fire Prevention Program, scope of coverage and applicability of new technologies.
 - iii. **TG#3.** TG Chair: Hoyt. Members: Foti, Blankfeld, Gaut, Carsillo, Carson, Warnick, Towski. Scope: Review CI-22 and CI-23 and provide a report to the technical committee at Second Draft. The task group should consider adding new members with diverse viewpoints to address questions pertaining to stairs (life safety egress and fire service access) in building under construction, phased construction, fire service access stair terminology.
 - iv. **TG#4.** TG Chair: Towski. Members: Blankfeld, Gaut, Stone, Chrisman, Hall, Cosey, Nacheman, Fess, White, Pickering (guest). Scope: Review CI-26 and provide a report at the Second Draft meeting based on the comments received at the FD meeting and the substantiation provided by CI-26.
 - v. **TG#5.** TG Chair: Towski. Members: Hoyt, Foti, Young, Fess, Gaut, Kersey, Peterkin, Blankfeld. Scope: Review applicable PI, FR and CI that were created at the FD meeting, pertaining to battery types and applications not addressed by NFPA 855. The task group will provide a report at the SD meeting. A review of specific requirements, reference documents and definitions are included within the scope of the task group.
 - vi. **TG#6.** TG Chair: Carsillo. Members: Arthur, Westrick, Feak, Pickering (guest). Scope: Review CI-43 and provide a report at the Second Draft meeting. The task group needs to review both the technical requirements as well as level of detail, pertaining to extract material and references, on this topic.

7. Other Business. The following items were discussed:

- i. Proposed change to A.4.1.17.5 was discussed. A First Revision was created.
- ii. The structure of NFPA 241 as it pertains to extracts and references was discussed. No action taken. TC member Foti to provide a report to the technical committee at the Second Draft meeting.
- iii. Proposed changes to 4.1.13, 4.2.2(18), and 8.4 were discussed. First Revisions were created.
- iv. A proposed change to 4.2.2 (23) was discussed. A First Revision was created.

8. **Future meetings.** The next committee meeting will be Summer/Fall 2025. A meeting notification will be posted at www.nfpa.org/241next when the meeting is scheduled.
9. **Adjournment.** The meeting was adjourned at 12:15pm on August 22, 2024.

Attendees

Committee Members:

✓	Campbell, Bruce	Chair	Jensen Hughes
✓	Aleman, Juan*	Principal	Elephas Engineering Services, LLC
	Ambrefe, William	Principal	City of Beverly
✓	Arthur, Daniel	Principal	Code Consultants Inc.
✓	Blankfeld, Daniel	Principal	CBG Building Company LLC
✓	Bourque, Matthew*	Principal	W.S. Development
✓	Carsillo, Michael	Principal	International Fire Marshals Association
✓	Carson, Robert	Principal	Dellbrook Construction
✓	Chrisman, Mark*	Principal	Henderson Engineers
	Clarke, Timothy	Principal	United Assn. of Journeymen & Apprentices
✓	Cosey, William*	Principal	Savannah River Nuclear Solutions, LLC
	Dacus, Sheldon	Principal	National Fire Sprinkler Association
✓	Dawe, Nicholas*	Principal	Cobb County Fire Marshal's Office
✓	Denhardt, John	Principal	American Fire Sprinkler Association
✓	Feak, Kevin*	Principal	LaBella Associates
✓	Fess, Donald	Principal	Harvard University
✓	Foti, Don	Principal	HukariAscendent
✓	Gaut, James*	Principal	Marriott Vacations Worldwide
✓	Goosman, Donald*	Principal	Wiss, Janney, Elstner Associates, Inc.
✓	Haynes, Daniel*	Principal	Lawrence Livermore National Laboratory
✓	Heffernan, Rick*	Principal	National Electrical Manufacturers
✓	Hoyt, Jennifer	Principal	Code Red Consultants

	Hurin, Jason	Principal	Markel Specialty Insurance
✓	Kersey, Justin	Principal	Allianz
✓	Kolakowski, Craig*	Principal	The Hartford Insurance Company
✓	Nacheman, Scott*	Principal	White Birch Group, LLC
✓	O'Brocki, Raymond	Principal	American Wood Council
✓	Rabidou, Bernard*	Principal	Builders Association of South Florida
✓	Rashid-Sumar, Shamim*	Principal	National Ready Mixed Concrete Assn.
✓	Reitz, Christopher*	Principal	American Society for Healthcare
✓	Rhinehart, Patrick	Principal	Northside Hospital
	Roberts, Richard	Principal	Automatic Fire Alarm Association, Inc.
	Rohlfs, Brandon	Principal	Liberty Mutual Insurance
✓	Shriner, Jonathan*	Principal	US Architect of the Capitol
✓	Stone, Michael	Principal	Johnson Controls
✓	Towski, Chris	Principal	International Association of Fire Fighters
✓	Warnick, Patsy*	Principal	Montgomery County
✓	Westrick, Curtis	Principal	Zurich Services Corporation
✓	White, Michael	Principal	Siemens Building Technologies
	Woodfin, Ronald	Principal	TetraTek, Inc./AES Corporation
✓	Young, David	Principal	Idaho National Laboratory
✓	Skene, William*	Voting Alternate	FM Global
✓	Fisher, Corey*	Alternate	Code Red Consultants
✓	Hall, Kevin	Alternate	American Fire Sprinkler Association
✓	Joanis, Michael	Alternate	National Fire Sprinkler Association
	Oare, Jim	Alternate	Siemens Industy Inc.
✓	Pennacchio, Elizabeth*	Alternate	Code Consultants, Inc.
✓	Peterkin, James	Alternate	American Society for Healthcare

	Rose, Ken	Alternate	United Assn. of Journeymen & Apprentices
✓	Smeaton, Bradley*	Alternate	JENSEN HUGHES
✓	Woodfin, Adam*	Alternate	TetraTek, Inc.
✓	Carr, Kevin	Staff Liaison	National Fire Protection Association

Guests:

Joel Pickering	Ramtech North America
Michael Ventola*	Space Age Electronics
Jason Webb*	Potter Electric Signal Company, LLC
Val Ziavras*	NFPA

*Participated by teleconference

Total number in attendance: 47

Important Notice: This document is the copyright property of the National Fire Protection Association (NFPA), Copyright © 2024 NFPA, and may not be used for any other purpose or distributed to any other persons or parties.

Chapter 4 General Requirements

4.3* Fire Protection Systems and Equipment.

4.3.1 General.

The provisions of Chapter 4 shall apply in addition to the specific requirements of this section.

4.3.1.1

Fire protection systems shall be supervised and monitored in accordance with ~~Section 4.94.3.7.3.~~

~~4.7.4.3.2~~ Standpipes.

~~4.7.14.3.2.1~~ General.

~~4.7.1.14.3.2.1.1*~~

The pipe size, hose valves, hose, water supply, and other details for new construction shall be in accordance with NFPA 14 or the Fire Prevention Program.

~~4.7.1.2~~

On permanent Class II and Class III standpipes with a Class II connection, hose and nozzles shall be provided and made ready for use as soon as the water supply is available to the standpipe.

Commented [KK1]: Deleted by FR

~~4.7.1.34.3.2.1.2*~~

In combined systems where occupant hose is not required, temporary hose and nozzles shall be provided during construction.

~~4.7.24.3.2.2~~ Standpipe Installations in Buildings Under Construction.

~~4.7.2.14.3.2.2.1*~~

In buildings under construction that require a standpipe system, a standpipe system, either temporary or permanent, shall be installed in accordance with 4.7.2 and the Fire Prevention Program.

~~4.7.2.1.14.3.2.2.1.1*~~

Standpipes shall be installed when the progress of construction reaches 12.2 m (40 ft) in height above the lowest level of fire department vehicle access.

~~4.7.2.1.24.3.2.2.1.2*~~

As construction progresses, standpipes shall be extended to within one floor of the highest point of construction having secured decking or flooring.

Important Notice: This document is the copyright property of the National Fire Protection Association (NFPA), Copyright © 2024 NFPA, and may not be used for any other purpose or distributed to any other persons or parties.

~~4.7.2.1.3~~ **4.3.2.2.1.3***

Standpipes shall be tested for integrity in accordance with the Fire Prevention Program as new segments or portions are added.

~~4.7.2.1.4~~ **4.3.2.2.1.4**

The number and location of temporary standpipes shall be in accordance with the Fire Prevention Program.

(A)

For tall mass timber wood structures, each stairwell required for egress in the constructed areas of the structure shall be equipped with an operational standpipe during construction.

~~4.7.2.2~~ **4.3.2.2.2**

Readily accessible standpipe fire department connections shall be provided on the outside of the building at street level.

~~4.7.2.2.1~~ **4.3.2.2.2.1**

Standpipes shall be conspicuously identified in accordance with ~~4.7.5~~ **4.3.2.5**.

~~4.7.2.3~~ **4.3.2.2.3**

When temporary standpipes are provided, the sizing, location of hose valves, water supply, if provided, and other requirements shall be in accordance with the Fire Prevention Program.

~~4.7.2.4~~ **4.3.2.2.4**

The standpipe shall be supported in accordance with NFPA 14 or the Fire Prevention Program.

~~4.7.2.5~~ **4.3.2.2.5**

Standpipes shall be provided with ~~fire department~~ hose connections in accordance with ~~4.7.2.5.1~~ **4.3.2.2.5.1** through ~~4.7.2.5.3~~ **4.3.2.2.5.3**.

~~4.3.2.2.5.1~~ **4.7.2.5.1**

Hose connections shall be provided at accessible locations.

~~4.3.2.2.5.2~~ **4.7.2.5.2**

At least one approved hose connection shall be provided at each floor level in the exit stairway.

~~4.3.2.2.5.3~~ **4.7.2.5.3**

Important Notice: This document is the copyright property of the National Fire Protection Association (NFPA), Copyright © 2024 NFPA, and may not be used for any other purpose or distributed to any other persons or parties.

Where required by the AHJ, one approved hose connection shall be provided on each intermediate landing of the exit stairway.

~~4.7.2.6~~ **4.3.2.2.6**

Hose valves shall be kept closed at all times and hose threads guarded against mechanical damage.

~~4.7.2.7~~ **4.3.2.2.7**

Hose valves shall have National Hose Standard (NHS) external threads for the valve size specified in accordance with NFPA 1963 unless modified by ~~4.7.2.8~~ **4.3.2.2.8**.

~~4.7.2.8~~ **4.3.2.2.8**

Where local fire department connections do not conform to NFPA 1963, the AHJ shall designate the connection to be used.

~~4.7.2.9~~ **4.3.2.2.9**

The standpipes shall be extended up with each floor and shall be securely capped at the top to maintain integrity.

~~4.7.2.10~~ **4.3.2.2.10**

Temporary standpipes shall remain in service until the permanent standpipe installation is complete.

~~4.7.2.11~~ **4.3.2.2.11**

In all new buildings in which standpipes are required or where standpipes exist in buildings being altered or demolished, such standpipes shall be maintained in conformity with the progress of building construction in such a manner that they are always ready for use.

~~4.7.3~~ **4.3.2.3**

Fire department connections shall be located in an area accessible to the fire department, unobstructed by fences or other enclosures.

~~4.7.4~~ **4.3.2.4**

Standpipe systems shall be supervised and monitored in accordance with ~~Section 4.9~~ **4.3.7.3**.

~~4.7.5~~ **4.3.2.5 Fire Department Connection Identification.**

~~4.3.2.5.1~~ ~~4.7.5.1~~

Fire department connections shall be identified by approved signs.

Important Notice: This document is the copyright property of the National Fire Protection Association (NFPA), Copyright © 2024 NFPA, and may not be used for any other purpose or distributed to any other persons or parties.

~~4.3.2.5.2~~4.7.5.2

A light shall be provided above the fire department connection(s) to identify the location.

~~4.3.2.5.3~~4.7.5.3

The light required by 4.7.5.2~~4.3.2.5.2~~ shall be of a color approved by the AHJ.

~~9.8.44.3.2.6~~ **Standpipes During Demolition.**

Standpipes shall be maintained in conformity with the progress of demolition activity in such a manner that they are always ready for fire department use.

4.3.2.7 Standpipe Installations in Tunnels Under Construction.

~~11.8.1~~4.3.2.7.1

A standpipe system shall be installed before the tunnel has exceeded a length of 61 m (200 ft) beyond any access shaft or portal.

~~11.8.1.1~~4.3.2.7.1.1

The standpipe system shall be extended as work progresses so that a hose valve connection is available within 61 m (200 ft) of the most remote portion of the tunnel or tunnel heading.

~~11.8.2~~4.3.2.7.2

Standpipe and hose valves shall be securely supported and the system shall be securely capped at the end.

~~11.8.3~~4.3.2.7.3

Threaded connections for hose valves and fire department connections shall be of the size and type required by the responding fire department.

~~11.8.4~~4.3.2.7.4

Standpipe hose valves shall be spaced at not greater than 61 m (200 ft) intervals; and be positioned in the tunnel and kept clear to ensure ready access from the walking surface.

~~11.8.5~~4.3.2.7.5

Standpipe system water supply and fire department connection(s) shall be provided at a location(s) adjacent to the tunnel construction access point and shall be readily accessible to fire department apparatus.

Important Notice: This document is the copyright property of the National Fire Protection Association (NFPA), Copyright © 2024 NFPA, and may not be used for any other purpose or distributed to any other persons or parties.

~~11.8.6~~ 4.3.2.7.6

Temporary standpipe systems shall remain in service until the permanent standpipe system is complete.

4.3.2.8 Timing of Water Supply Installation.

4.3.2.8.1

Where construction reaches a height at which public waterworks system pressure can no longer provide the required flow and pressure, temporary or permanent fire pumps shall be installed to provide protection to the uppermost level or to the height required by the AHJ. [14, 13.6.1]

4.3.2.8.2

Where local fire department pumping apparatus is permitted by the AHJ for the standpipe pressure required, temporary or permanent fire pumps shall not be required. [14, 13.6.2]

4.3.2.9 Protection of Hose Connections and Fire Department Connections.

4.3.2.9.1

Threaded caps and plugs shall be installed on fire department connections and hose connections. [14, 13.7.1]

4.3.2.9.2

Fire department connections and hose connections shall be protected against physical damage. [14, 13.7.2]

4.3.2.4.3.3 Sprinkler Protection.

4.3.3.1 General.

4.3.2.4.3.3.1.1*

~~If~~ Where automatic sprinkler protection is to be provided, the system(s) shall be placed temporarily in service in accordance with 4.3.2.4.3.3.1.2 through 4.3.2.4.3.3.1.9.

4.3.2.4.3.3.1.2*

Measures used to place permanent fire protection systems temporarily in service during construction shall be as follows:

- (1) In conformance with the Fire Prevention Program
- (2) Evaluated based on the type and status of the system
- (3) Evaluated based on the conditions of the building construction

Important Notice: This document is the copyright property of the National Fire Protection Association (NFPA), Copyright © 2024 NFPA, and may not be used for any other purpose or distributed to any other persons or parties.

4.3.2.34.3.3.1.3*

Systems temporarily placed in service during construction shall not be required to comply with NFPA standards.

4.3.2.44.3.3.1.4*

The details of installation for systems temporarily placed in service during construction shall be in accordance with the Fire Prevention Program, including the following:

- (1) The placement of sprinklers in unfinished spaces including the following:
 - (a) The maximum deflector distance from the deck above
 - (b) The maximum sprinkler spacing before permanent walls are built
 - (c) The position of sprinklers relative to obstructions that will disrupt the discharge pattern
- (2) The design criteria for the temporary sprinkler protection including the following:
 - (a) The discharge density from the sprinklers based on classification of hazard during construction
 - (b) The remote area configuration before permanent walls are built
 - (c) The source and adequacy of the automatic water supply including hose allowance
- (3) The protection of sprinklers and piping including the following:
 - (a) To include or not include protection of sprinklers through the use of protective caps and straps or other means
 - (b) The permissible use of exposed nonmetallic piping
 - (c) The protection of water-filled pipes during the freezing season
- (4) The point in time during construction in which temporary fire protection systems are required
- (5) The procedure for the FPPM to notify the installing contractor when changes need to be made to previously installed temporary protection

4.3.2.54.3.3.1.5

Where sprinklers are required, the building shall not be occupied until the sprinkler installation has been entirely completed and tested so that the protection is not susceptible to frequent impairment caused by testing and correction, unless otherwise permitted by **4.3.2.64.3.3.1.6**.

4.3.2.64.3.3.1.6

The provision of **4.3.2.54.3.3.1.5** shall not prohibit occupancy of completed floors of a building, even where other floors are in various stages of construction or protection, provided that both of the following conditions are satisfied:

- (1) The sprinkler protection of the occupied floors has been completed and tested in accordance with **4.3.2.54.3.3.1.5**.
- (2) The sprinkler protection of the floors remaining under construction is supplied by entirely separate systems and separate control valves so that the absence or incompleteness of protection in no way impairs the sprinkler protection of the occupied floors.

4.3.2.74.3.3.1.7

The operation of sprinkler control valves shall be permitted only by properly authorized personnel and shall be accompanied by the notification of duly designated parties.

Important Notice: This document is the copyright property of the National Fire Protection Association (NFPA), Copyright © 2024 NFPA, and may not be used for any other purpose or distributed to any other persons or parties.

~~4.3.2.8~~ **4.3.3.1.8**

Where the sprinkler protection is regularly turned off and on to facilitate connection of newly completed segments, the sprinkler control valves shall be checked at the end of each work shift to ascertain that protection is in service.

~~4.3.2.9~~ **4.3.3.1.9**

Fire protection system control valves shall be identified and posted with signs that indicate whether they can be used to place systems in service in an emergency.

4.3.3.2 Trash Chutes.

4.3.3.2.1*

The interior of combustible trash chutes shall be provided with not less than one temporary automatic sprinkler within a recess near the top of the chute.

4.3.3.2.2

The temporary sprinkler required by 4.3.3.2.1 shall be protected by the recess as well as a listed sprinkler guard.

4.3.3.2.3

The temporary sprinkler required by 4.3.3.2.1 shall be connected to any available water supply with a listed fire hose, or a flexible, commercial rubber hose, with a diameter of not less than 19 mm (3/4 in.) and a listed flexible connector.

4.3.3.2.4

The temporary sprinkler required by 4.3.3.2.1 shall be protected against freezing where required by the AHJ.

Commented [KK2]: Relocated from section 7.5.4

4.3.3.3 Sprinkler Protection During Demolition

9.8.24.3.3.3.1* System Operation.

Where a building is equipped with sprinklers, the sprinkler protection shall be retained in service as long as the condition requiring the use of sprinklers exists.

9.8.34.3.3.3.2 Sprinkler Control Valves.

9.8.3.1 4.3.3.3.2.1

The operation of sprinkler control valves shall be permitted only by properly authorized personnel and shall be accompanied by the notification of designated parties.

9.8.3.2 4.3.3.3.2.2

Where the sprinkler protection is regularly turned off and on to facilitate removal and capping of segments, the sprinkler control valves shall be checked at the end of each work shift to ascertain that protection is in service.

Important Notice: This document is the copyright property of the National Fire Protection Association (NFPA), Copyright © 2024 NFPA, and may not be used for any other purpose or distributed to any other persons or parties.

4.3.34.3.4 Fire Pumps.

4.3.3.14.3.4.1 General.

The installation of fire pumps temporarily placed in service during construction shall be in accordance with 4.3.34.2 or 4.3.34.3 and the Fire Prevention Program.

4.3.3.24.3.4.2 Permanent Fire Pumps.

Where a permanent fire pump will be used for temporary fire protection, the installation shall include the following:

- (1) Adequately sized water service installed, flushed, and tested per NFPA 24
- (2) Any required backflow prevention
- (3) Electrical wiring associated with the fire pump and jockey pump completed per NFPA 70 and NFPA 20
- (4) Utility meter installed and electrical power turned on to fire pump and jockey pump
- (5) Minimum 4.4°C (40°F) permanent and reliable heat source in pump room
- (6) All required fire alarms associated with the fire pump complete, tested, and in service (local and remote), including tamper switches, fire pump running, fire pump power failure, and power phase reversal, per NFPA 72 or applicable fire alarm code
- (7) Inertia base installed and cured
- (8) Enclosure in accordance with the Fire Prevention Program

4.3.3.34.3.4.3 Temporary Pumps.

Where a temporary pump will be used for temporary fire protection, the installation shall include the following:

- (1) Adequately sized water service
- (2) Any required backflow prevention
- (3) Necessary electrical wiring to power the pump
- (4) Electrical power turned on to the pump
- (5) All required fire alarms in accordance with the Fire Prevention Program
- (6) Where required by the Fire Prevention Program, a room enclosure
- (7) Where required by the Fire Prevention Program, minimum 4.4°C (40°F) permanent and reliable heat source in the room enclosure

4.84.3.5 HydrantsWater Supply.

4.8.1-4.3.5.1

Unobstructed access to fire hydrants and to outside connections for standpipes, sprinklers, or other fire protection equipment, whether permanent or temporary, shall be provided and maintained at all times.

4.3.5.1.1

For tall mass timber wood construction, the distance between the fire department connection and hydrant shall not exceed 30.5 m (100 ft).

4.8.2-4.3.5.2

Important Notice: This document is the copyright property of the National Fire Protection Association (NFPA), Copyright © 2024 NFPA, and may not be used for any other purpose or distributed to any other persons or parties.

No material or construction activities shall interfere with access to fire protection features or equipment.

~~4.10.4.3.6*~~ ~~First-Aid Fire-Fighting Equipment~~ **Portable Fire Extinguishers.**

~~4.10.4.3.6.1*~~

The suitability, distribution, and maintenance of extinguishers shall be in accordance with NFPA 10 and the FPP.

~~4.10.2~~ **4.3.6.2**

Wherever a toolhouse, storeroom, or other shanty is located in or adjacent to the building under construction or demolition, or where a room or space within that building is used for storage, a dressing room, or a workshop, at least one approved extinguisher shall be provided and maintained in an accessible location, unless otherwise permitted by 4.10.3.4.3.6.3.

~~4.10.3~~ **4.3.6.3**

The requirement of 4.10.2.4.3.6.2 shall be permitted to be waived where the structure does not exceed 14 m² (150 ft²) in floor area or is equipped with automatic sprinklers or other approved protection.

~~4.10.4~~ **4.3.6.4**

At least one approved fire extinguisher also shall be provided in plain sight on each floor at each usable stairway as soon as significant combustible material is present.

~~4.10.5~~ **4.3.6.5**

Suitable fire extinguishers shall be provided on self-propelled equipment.

~~4.10.6~~ **4.3.6.6***

Free access to permanent, temporary, or portable ~~first-aid fire equipment~~ fire extinguishers shall be maintained at all times.

~~4.9.4.3.7~~ ~~Fire Detection and Alarms~~ **Detection, Alarm, and Communication Systems.**

~~4.9.1~~ **4.3.7.1**

If fire detection, supervision, off-site monitoring, or building notification are required, the installation shall be placed in service in accordance with the Fire Prevention Program.

~~4.9.2~~ **4.3.7.2**

The use of temporary measures to place fire detection, supervision, monitoring, or alarms in service shall be as follows:

Important Notice: This document is the copyright property of the National Fire Protection Association (NFPA), Copyright © 2024 NFPA, and may not be used for any other purpose or distributed to any other persons or parties.

- (1) In accordance with the Fire Prevention Program
- (2) Evaluated based on the hazard and the scope of the temporary measures

~~4.9.3~~ **4.3.7.3**

Fire detection, supervision, monitoring, and alarms placed in service shall comply with NFPA 72 in accordance with the Fire Prevention Program.

4.6 Fire Alarm Systems:

Where a fire alarm system is installed in a building under alteration, the system shall comply with NFPA 72.

Commented [KK3]: Redundant?

Commented [KK4R3]: Relocated to Chapter 8 by FR and should remain there.

4.6 Fire Alarm Systems:

Where a fire alarm system is installed in a building under alteration, the system shall comply with NFPA 72.

4.3.8 Other Fire Protection Systems. (Reserved)

4.3.9 Non-Listed Fire Protection or Suppression Devices and Equipment. (Reserved)

4.93.10 Installation Inspection, Testing, and Maintenance.

Where fire alarm, detection, or protection systems **fire protection systems and equipment** are required **provided**, they shall be installed **inspected, tested, and maintained**, and tested in accordance with the appropriate NFPA standards **NFPA 10, NFPA 25, and NFPA 72, as applicable**. (See Chapter 2.)

4.7.1 General:

4.7.1.1*

The pipe size, hose valves, hose, water supply, and other details for new construction shall be in accordance with NFPA 14 or the Fire Prevention Program.

4.7.1.2

On permanent Class II and Class III standpipes with a Class II connection, hose and nozzles shall be provided and made ready for use as soon as the water supply is available to the standpipe.

4.7.1.3*

In combined systems where occupant hose is not required, temporary hose and nozzles shall be provided during construction.

4.7.2 Standpipe Installations in Buildings Under Construction:

Important Notice: This document is the copyright property of the National Fire Protection Association (NFPA), Copyright © 2024 NFPA, and may not be used for any other purpose or distributed to any other persons or parties.

4.7.2.1*

~~In buildings under construction that require a standpipe system, a standpipe system, either temporary or permanent, shall be installed in accordance with 4.7.2 and the Fire Prevention Program.~~

4.7.2.1.1*

~~Standpipes shall be installed when the progress of construction reaches 12.2 m (40 ft) in height above the lowest level of fire department vehicle access.~~

4.7.2.1.2*

~~As construction progresses, standpipes shall be extended to within one floor of the highest point of construction having secured decking or flooring.~~

4.7.2.1.3*

~~Standpipes shall be tested for integrity in accordance with the Fire Prevention Program as new segments or portions are added.~~

4.7.2.1.4

~~The number and location of temporary standpipes shall be in accordance with the Fire Prevention Program.~~

4.7.2.2

~~Readily accessible standpipe fire department connections shall be provided on the outside of the building at street level.~~

4.7.2.2.1

~~Standpipes shall be conspicuously identified in accordance with 4.7.5.~~

4.7.2.3

~~When temporary standpipes are provided, the sizing, location of hose valves, water supply, if provided, and other requirements shall be in accordance with the Fire Prevention Program.~~

4.7.2.4

~~The standpipe shall be supported in accordance with NFPA 14 or the Fire Prevention Program.~~

4.7.2.5

~~Standpipes shall be provided with fire department hose connections in accordance with 4.7.2.5.1 through 4.7.2.5.3.~~

Important Notice: This document is the copyright property of the National Fire Protection Association (NFPA), Copyright © 2024 NFPA, and may not be used for any other purpose or distributed to any other persons or parties.

4.7.2.5.1

~~Hose connections shall be provided at accessible locations.~~

4.7.2.5.2

~~At least one approved hose connection shall be provided at each floor level in the exit stairway.~~

4.7.2.5.3

~~Where required by the AHJ, one approved hose connection shall be provided on each intermediate landing of the exit stairway.~~

4.7.2.6

~~Hose valves shall be kept closed at all times and hose threads guarded against mechanical damage.~~

4.7.2.7

~~Hose valves shall have National Hose Standard (NHS) external threads for the valve size specified in accordance with NFPA 1963 unless modified by 4.7.2.8.~~

4.7.2.8

~~Where local fire department connections do not conform to NFPA 1963, the AHJ shall designate the connection to be used.~~

4.7.2.9

~~The standpipes shall be extended up with each floor and shall be securely capped at the top to maintain integrity.~~

4.7.2.10

~~Temporary standpipes shall remain in service until the permanent standpipe installation is complete.~~

4.7.2.11

~~In all new buildings in which standpipes are required or where standpipes exist in buildings being altered or demolished, such standpipes shall be maintained in conformity with the progress of building construction in such a manner that they are always ready for use.~~

4.7.3

~~Fire department connections shall be located in an area accessible to the fire department, unobstructed by fences or other enclosures.~~

Important Notice: This document is the copyright property of the National Fire Protection Association (NFPA), Copyright © 2024 NFPA, and may not be used for any other purpose or distributed to any other persons or parties.

4.7.4

~~Standpipe systems shall be supervised and monitored in accordance with Section 4.9.~~

4.7.5 Fire Department Connection Identification.

4.7.5.1

~~Fire department connections shall be identified by approved signs.~~

4.7.5.2

~~A light shall be provided above the fire department connection(s) to identify the location.~~

4.7.5.3

~~The light required by 4.7.5.2 shall be of a color approved by the AHJ.~~

4.8 Hydrants.

4.8.1

~~Unobstructed access to fire hydrants and to outside connections for standpipes, sprinklers, or other fire protection equipment, whether permanent or temporary, shall be provided and maintained at all times.~~

4.8.2

~~No material or construction activities shall interfere with access to fire protection features or equipment.~~

4.9 Fire Detection and Alarms.

4.9.1

~~If fire detection, supervision, off-site monitoring, or building notification are required, the installation shall be placed in service in accordance with the Fire Prevention Program.~~

4.9.2

~~The use of temporary measures to place fire detection, supervision, monitoring, or alarms in service shall be as follows:~~

- ~~(1) In accordance with the Fire Prevention Program~~
- ~~(2)(1) Evaluated based on the hazard and the scope of the temporary measures~~

4.9.3

Important Notice: This document is the copyright property of the National Fire Protection Association (NFPA), Copyright © 2024 NFPA, and may not be used for any other purpose or distributed to any other persons or parties.

~~Fire detection, supervision, monitoring, and alarms placed in service shall comply with NFPA 72 in accordance with the Fire Prevention Program.~~

~~4.10* First Aid Fire-Fighting Equipment~~

~~4.10.1*~~

~~The suitability, distribution, and maintenance of extinguishers shall be in accordance with NFPA 10.~~

~~4.10.2~~

~~Wherever a toolhouse, storeroom, or other shanty is located in or adjacent to the building under construction or demolition, or where a room or space within that building is used for storage, a dressing room, or a workshop, at least one approved extinguisher shall be provided and maintained in an accessible location, unless otherwise permitted by 4.10.3.~~

~~4.10.3~~

~~The requirement of 4.10.2 shall be permitted to be waived where the structure does not exceed 14 m² (150 ft²) in floor area or is equipped with automatic sprinklers or other approved protection.~~

~~4.10.4~~

~~At least one approved fire extinguisher also shall be provided in plain sight on each floor at each usable stairway as soon as significant combustible material is present.~~

~~4.10.5~~

~~Suitable fire extinguishers shall be provided on self-propelled equipment.~~

~~4.10.6*~~

~~Free access to permanent, temporary, or portable first aid fire equipment shall be maintained at all times.~~

~~4.9 Installation, Testing, and Maintenance~~

~~Where fire alarm, detection, or protection systems are required, they shall be installed, maintained, and tested in accordance with the appropriate NFPA standards. (See Chapter 2.)~~

Chapter 7

7.5.4.3 *

Sprinklers shall be provided in the interior of combustible trash chutes in accordance with 4.3.3.2.
~~The interior of combustible trash chutes shall be provided with not less than one temporary automatic sprinkler within a recess near the top of the chute.~~

Important Notice: This document is the copyright property of the National Fire Protection Association (NFPA), Copyright © 2024 NFPA, and may not be used for any other purpose or distributed to any other persons or parties.

7.5.4.4

~~The temporary sprinkler required by 7.5.4.3 shall be protected by the recess as well as a listed sprinkler guard.~~

7.5.4.5

~~The temporary sprinkler required by 7.5.4.3 shall be connected to any available water supply with a listed fire hose, or a flexible, commercial rubber hose, with a diameter of not less than 19 mm (3/4 in.) and a listed flexible connector.~~

7.5.4.6

~~The temporary sprinkler required by 7.5.4.3 shall be protected against freezing where required by the AHJ.~~

Chapter 9

9.8 Fire Protection During Demolition.

9.8.5.1* Fire Protection: General.

Approved fire protection shall be provided in accordance with 4.3.

9.8.1 General.

~~The provisions of Chapter 4 shall apply in addition to the specific requirements of this section.~~

9.8.2* System Operation.

~~Where a building is equipped with sprinklers, the sprinkler protection shall be retained in service as long as the condition requiring the use of sprinklers exists.~~

9.8.3 Sprinkler Control Valves.

9.8.3.1

~~The operation of sprinkler control valves shall be permitted only by properly authorized personnel and shall be accompanied by the notification of designated parties.~~

9.8.3.2

~~Where the sprinkler protection is regularly turned off and on to facilitate removal and capping of segments, the sprinkler control valves shall be checked at the end of each work shift to ascertain that protection is in service.~~

9.8.4 Standpipes.

~~Standpipes shall be maintained in conformity with the progress of demolition activity in such a manner that they are always ready for fire department use.~~

9.8.5* Fire Protection.

Approved fire protection shall be provided

Important Notice: This document is the copyright property of the National Fire Protection Association (NFPA), Copyright © 2024 NFPA, and may not be used for any other purpose or distributed to any other persons or parties.

Chapter 11

11.8* Standpipe Installations in Tunnels Under Construction.

Where required by the AHJ, a Class I, II, or III standpipe system shall be installed and tested in tunnels under construction in accordance with ~~11.8.1 through 11.8.6~~ 11.8.3.2.7, NFPA 14, and NFPA 25.

~~11.8.1~~

~~A standpipe system shall be installed before the tunnel has exceeded a length of 61 m (200 ft) beyond any access shaft or portal.~~

~~11.8.1.1~~

~~The standpipe system shall be extended as work progresses so that a hose valve connection is available within 61 m (200 ft) of the most remote portion of the tunnel or tunnel heading.~~

~~11.8.2~~

~~Standpipe and hose valves shall be securely supported and the system shall be securely capped at the end.~~

~~11.8.3~~

~~Threaded connections for hose valves and fire department connections shall be of the size and type required by the responding fire department.~~

~~11.8.4~~

~~Standpipe hose valves shall be spaced at not greater than 61 m (200 ft) intervals, and be positioned in the tunnel and kept clear to ensure ready access from the walking surface.~~

~~11.8.5~~

~~Standpipe system water supply and fire department connection(s) shall be provided at a location(s) adjacent to the tunnel construction access point and shall be readily accessible to fire department apparatus.~~

~~11.8.6~~

~~Temporary standpipe systems shall remain in service until the permanent standpipe system is complete.~~

~~11.8.7~~ 11.8 Underground Operations.

~~11.8.7.1~~ 11.8.1*

Where required, an underground rescue plan shall be developed and addressed in the Fire Prevention Program in accordance with 4.2.2.

Important Notice: This document is the copyright property of the National Fire Protection Association (NFPA), Copyright © 2024 NFPA, and may not be used for any other purpose or distributed to any other persons or parties.

~~11.8.7.1.1~~ **11.8.1.1**

Technical rescue professional qualifications regarding underground operations shall be in accordance with NFPA 1006.

~~11.8.7.1.2~~ **11.8.1.2**

Technical rescue regarding underground operations shall be in accordance NFPA 1670.

Chapter 12

12.6 Water Mains, Standpipes, Hydrants, and Fire Department Connections.

12.6.1

Underground fire protection water mains and hydrants shall be installed in accordance with 6.3.3 and 4.3.5.

12.6.2

~~Each stairwell required for egress in the constructed areas of the structure shall be equipped with an operational standpipe during construction shall be in accordance with Section 4.7.3.2. (See 4.3.2.2.1.4(A))~~

12.6.3

The distance between the fire department connection and hydrant shall not exceed 30.5 m (100 ft).

Chapter 13

13.5 Water Mains, Standpipes, Hydrants, and Fire Department Connections.

~~Where provided, fire protection systems and equipment shall be in accordance with 4.3.~~

13.5.1

~~Underground fire protection water mains and hydrants shall be installed in accordance with 6.3.3.~~

13.5.2

~~Where standpipes are required in the occupied building or by the Fire Prevention Program, the number of temporary standpipes to be provided shall be in accordance with the Fire Prevention Program.~~

Important Notice: This document is the copyright property of the National Fire Protection Association (NFPA), Copyright © 2024 NFPA, and may not be used for any other purpose or distributed to any other persons or parties.

13.5.3

~~The distance between the fire department connection and hydrant shall not exceed 30.5 m (100 ft).~~

Commented [KK5]: Redundant to the existing requirements in Chapter 4. Nothing unique to large wood frame structures



Public Comment No. 4-NFPA 241-2025 [Global Input]

Extract Annex C from NFPA 1 to Annex C in NFPA 241 in its entirety

Statement of Problem and Substantiation for Public Comment

The existing reference to Annex C of NFPA 1 in NFPA 241 would be better served as an extracted annex in NFPA 241 for better visibility and guidance for enforcement of the FFSBMS sign, where required.

Related Item

- FR-25

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association

Affiliation: NFPA 241 TG4

Street Address:

City:

State:

Zip:

Submittal Date: Thu Apr 10 10:16:21 EDT 2025

Committee: COD-AAA



Public Comment No. 8-NFPA 241-2025 [Section No. 4.3.7]

4.3.7* Detection, Alarm, and Communication Systems.

4.3.7.1

If fire detection, supervision of other fire and life safety systems, off-site monitoring, alarms, or occupant notification are required, the installation shall be placed in service in accordance with the Fire Prevention Program.

4.3.7.2

The use of temporary measures to place fire detection, supervision of other fire and life safety systems, monitoring, occupant notification, or alarms in service shall be as follows:

- (1) In accordance with the Fire Prevention Program
- (2) Evaluated based on the hazard and the scope of the temporary measures

4.3.7.3

Fire detection, supervision of other fire and life safety systems, monitoring, occupant notification, and alarms placed in service shall comply with *NFPA 72* in accordance with the Fire Prevention Program.

A.4.3.7 Temporary fire alarm systems for notification to site workers may be provided if included as a risk mitigation strategy based on a project-specific Fire Prevention Program. A temporary fire alarm notification system should be approved for use by the AHJ and the equipment should be evaluated for safety and performance for its intended purpose.

Temporary fire alarm systems should only be used for short-term applications and not utilized in lieu of a required permanently installed fire alarm system.

Statement of Problem and Substantiation for Public Comment

Fires or other emergencies at large or multi-story construction sites would benefit from a temporary initiating and notification alarm system. This Annex Note provides guidance to the users of NFPA 241 that a temporary fire alarm system is an option to improve life safety for construction site workers where fast evacuation is needed due to fire or other construction site incidents, such as building collapse.

There is planned work with the NFPA 72 Technical Committee to consider appropriate testing standards and performance requirements, but none exist today.

There are no mandatory requirements being proposed by this Public Comment.

These temporary fire alarm systems would most likely only include pull stations or heat alarms for initiation devices because of unconditioned spaces common at construction sites that would not be appropriate for smoke detection. Notification could be horn-strobes or voice. Systems would typically be local notification only with no off-site communication or notification.

Related Item

- FR 20 and PI 85

Submitter Information Verification

Submitter Full Name: Kelly Nicoello

Organization: UL Solutions

Street Address:

City:

State:

Zip:

Submittal Date: Sat May 31 15:07:45 EDT 2025

Committee: COD-AAA



Public Comment No. 10-NFPA 241-2025 [Section No. 4.7.4]

4.7.4 Stairs.

4.7.4.1*

~~Not~~ At least two, but not less than one half of the required exit stairs in the constructed areas stairs required as a means of egress from the completed, occupied building, shall be available for egress ~~and fire department access~~ at all times once the building is one or more stories above or below grade .

A4.7. 4. 1

The intent is that portions of stairs (enclosures or exit access) are rounded up. For example, a building with three stairs in the final occupied condition would be required to have two stairs available for egress during construction. Independent spaces should also be provided with means of egress when access to the provided stairs is restricted. .

~~4. 7.4. 2-~~

~~This stairway shall be extended upward~~

1.1

Where the completed building allows for a single stair, only one stair is required.

4.7.4.1.2

Stairways required as a means of egress from the construction area shall be extended to each floor as each floor is installed in new construction- and maintained for each floor still remaining during demolition .

4.7.4. 1. 3

~~-~~

~~The stairway shall be lighted~~

During demolition, stairways required as a means of egress from the construction area shall be maintained for each floor .

4.7.4.1. 4

~~During construction, the stairway shall be enclosed where the building exterior walls are in place~~ Stairways required as a means of egress from the construction area shall be lighted at all times .

4.7.4. 1. 5

~~-~~

~~All exit stairs~~

Stairways required as a means of egress from the construction area shall be provided with stair identification signs to include the floor level, stair designation, and exit path direction, as required to provide for safe egress.

4.7.4.2

At least one egress stairway shall be designated as a Fire Service Access Stair.

4.7.4.2.1*

During construction, a Fire Service Access Stair shall be enclosed where the building exterior walls are in place on a particular floor.

A4.7.4.2.1

For the purposes of this section "enclosed" is intended to be defined as sufficient to restrict smoke spread from a floor into the stairway. Doorways should be provided with a means to limit smoke spread. Unprotected penetration necessary for the purpose of the stair are permitted. It is not the intent to provide a fire-rated assembly at the stair.

4.7.4.2.2

Enclosures shall be in accordance with 4.13.1.1 or 4.13.1.2.

4.7.4.2.3*

The exterior walls shall be considered to be in place when at least 75 percent of the exterior wall on that floor is installed.

A4.7.4.2.3

When there is a barrier at the exterior of the building which impedes smoke from escaping the building, that barrier is considered the exterior wall.

4.7.4.2.4

The Fire Service Access Stair enclosure shall be continuous to the level of exit discharge, even if the exterior walls are not complete on the discharge level.

4.7.4.2.4.1

Stairs that are open to the exterior on at least two sides shall be permitted where approved by the AHJ.

4.7.4.2.5

Where a standpipe is required in accordance with the fire Prevention Program, the standpipe hose connections shall be accessed from the Fire Service Access Stair.

Statement of Problem and Substantiation for Public Comment

There is confusion surrounding the terminology and application of enclosing stairs during construction. The task group suggests clarifying the requirements to align with the intent of safe and reliable means of egress for buildings under construction and the alignment of the enclosed stair and access to the standpipe within the same vicinity.

While a building is under construction, there is no calculated occupant load factors to determine the number of exit stairs so the task group felt it would be best practice to base the number of means of egress stairs during construction from the completed building's anticipated calculated occupant load. With regards to stair enclosures, the intent is not to construct a completed stair, but to prevent smoke spread through vertical pathways in the building and to provide additional access and time for firefighting operations. Connecting the enclosure requirements to non-combustible and limited-combustible materials aligned with other provisions within the standard.

Related Item

- CI-22

Submitter Information Verification

Submitter Full Name: Jennifer Hoyt

Organization: Code Red Consultants

Affiliation: NFPA 241 Task Group 3

Street Address:

City:

State:

Zip:

Submittal Date:	Tue Jun 03 11:09:15 EDT 2025
Committee:	COD-AAA



Public Comment No. 3-NFPA 241-2025 [Section No. 4.7.4]

4.7.4 Stairs.

4.7.4.1

Not less than one half of the required exit stairs in the constructed areas shall be available for egress and fire department access at all times.

4.7.4.2

This stairway shall be extended upward as each floor is installed in new construction and maintained for each floor still remaining during demolition.

4.7.4.3

The stairway shall be lighted.

4.7.4.4

During construction, the stairway shall be enclosed where the building exterior walls are in place.

4.7.4.5

All exit stairs shall be provided with stair identification signs to include the floor level, stair designation, and exit path direction as required to provide for safe egress.

4.12.4.2

At least one egress stairway shall be designated as a construction-phase Fire Service Access Stair .

4.12.4. ~~4.2.1~~ *

During construction, ~~the stairway shall~~ a Fire Service Access Stair shall be enclosed where the building exterior walls are in place on a particular floor .

4.12.4.2.2

Fire Service Access stair(s) shall have all fire-resistance-rated doors and opening protectives installed as construction progresses.

Statement of Problem and Substantiation for Public Comment

The proposed additional language is to add on that provided by CI-22. This additional language ensures that the fire rated doors and opening protectives are installed during the construction of that fire service access stair. These stairs will do no good to the fire service if the openings are not protected with the proper doors and dampers.

Related Item

- CI-22

Submitter Information Verification

Submitter Full Name: Scott Plumer

Organization: Arvada Fire Protection District

Street Address:

City:

State:

Zip:

Submittal Date: Fri Mar 28 13:14:44 EDT 2025

Committee: COD-AAA



Public Comment No. 5-NFPA 241-2025 [Section No. 4.11.5]

4.11.5

The FFSBMS sign shall provide basic building and structure information for firefighters responding to the building or structure. (See *Annex C*).

Statement of Problem and Substantiation for Public Comment

Section A.4.11.4 is being proposed to be deleted as the reference to Annex C is being moved as a parenthetical reference to section 4.11.5 for better visibility.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
<u>Public Comment No. 4-NFPA 241-2025 [Global Input]</u>	
<u>Public Comment No. 6-NFPA 241-2025 [Section No. A.4.11.4]</u>	
<u>Related Item</u>	
• FR-25	

Submitter Information Verification

Submitter Full Name: Kevin Hall
Organization: American Fire Sprinkler Association
Affiliation: NFPA 241 TG4
Street Address:
City:
State:
Zip:
Submittal Date: Thu Apr 10 10:18:38 EDT 2025
Committee: COD-AAA



Public Comment No. 9-NFPA 241-2025 [New Section after 5.5.6]

TITLE OF NEW CONTENT

Type your content here ...5.5.6.4 Storage

A battery containment enclosure listed to UL 1487 shall be used for storage and/or transport of lithium-ion cells, batteries, battery packs and battery-powered devices on project site.

The battery containment enclosures may also provide power distribution for charging lithium-ion cells, batteries, battery packs, or battery-powered devices.

Statement of Problem and Substantiation for Public Comment

As various devices migrate from line voltage or internal combustion power to battery power, the safe storage of batteries is becoming a greater concern due to the energy potential contained in the rechargeable cells. These batteries can pose a hazard of thermal runaway and subsequent fire and explosion hazards if handled and stored improperly. Storing these batteries in a suitable battery containment enclosure on construction sites is one way to mitigate the hazard associated with these batteries. This proposed addition will enhance the safety of site during working hours and afterwards. Reducing or eliminating the risks from internal thermal runaway and deflagration scenarios.

UL Listed enclosures intended to help mitigate the heat, fire and deflagration hazards that can result from lithium-ion battery thermal runaway.

Related Item

- FR-27

Submitter Information Verification

Submitter Full Name: Michael Ventola

Organization: Space Age Electronics

Affiliation: Space Age Electronics

Street Address:

City:

State:

Zip:

Submittal Date: Mon Jun 02 11:00:23 EDT 2025

Committee: COD-AAA



Public Comment No. 7-NFPA 241-2025 [New Section after 5.5.8]

Portable Tool Batteries

##* Portable tool batteries greater than 160 Wh and less than 1 kWh shall be stored and charged

- (1) inside of non-combustible enclosures in accordance with UL 1487 during non-work periods or when not in sight.
- (2) at least 18" from combustibles when in sight during work periods.

*Annex##

The intent is to always have the batteries under constant control of the user. Therefore, when they are within sight of the user it is considered reasonable for them to manage them away from combustibles and when they are not within sight of the user and when they are done being used at the end of the workday they are to be in a non-combustible enclosure.

UL 1487 is a standard specifically for Battery Containment Enclosures. It covers the safety requirements for enclosures designed to store and contain batteries, including lithium-ion batteries. The standard addresses several key aspects:

- (1) Fire Safety: Ensures that the enclosures can contain and suppress fires that may originate from the batteries.
- (2) Ventilation: Specifies requirements for proper ventilation to manage heat and off-gassing from the batteries.
- (3) Electrical Safety: Includes guidelines for insulation, grounding, and protection against electrical hazards.
- (4) Structural Integrity: Ensures that the enclosures are durable and can withstand physical impacts and environmental conditions

These requirements help ensure that battery containment enclosures provide a safe environment for storing batteries, reducing the risk of fire, explosions, and other hazards.

Defective batteries shall be immediately removed from service.

Batteries shall be disposed of in accordance with their manufacturer's instructions.

Chargers shall be:

- (1) Compatible to the battery
- (2) Used in accordance with the charger manufacturer's instructions

Specialized battery fire detection and suppression shall be installed in accordance with their applicable standard.

Statement of Problem and Substantiation for Public Comment

Task Group 5 response to CI 32 to provide reasonable and enforceable guidance for smaller tool batteries

Related Item

- CI 32

Submitter Information Verification

Submitter Full Name: Chris Towski

Organization: Cambridge Fire Department

Affiliation: International Association of Fire Fighters

Street Address:

City:

State:

Zip:

Submittal Date: Fri Apr 25 10:47:21 EDT 2025

Committee: COD-AAA



Public Comment No. 6-NFPA 241-2025 [Section No. A.4.11.4]

A.4.11.4 —

See Annex C of NFPA 1 for further details.

Statement of Problem and Substantiation for Public Comment

Section A.4.11.4 is being proposed to be deleted as the reference to Annex C is being moved as a parenthetical reference to section 4.11.5 for better visibility.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 4-NFPA 241-2025 [Global Input]	
Public Comment No. 5-NFPA 241-2025 [Section No. 4.11.5]	

Related Item

- FR-25

Submitter Information Verification

Submitter Full Name: Kevin Hall
Organization: American Fire Sprinkler Association
Affiliation: NFPA 241 TG4
Street Address:
City:
State:
Zip:
Submittal Date: Thu Apr 10 10:19:58 EDT 2025
Committee: COD-AAA



Public Comment No. 2-NFPA 241-2025 [Section No. A.12.2]

A.12.2

Due to the size of such structures and the potentially large concentration of combustible construction materials onsite before protection is installed, ~~an exposure fire could justify an RDP analysis~~ a fire exposure analysis should be conducted. The fire exposure analysis should examine if the building under construction introduces a risk from the impact of fire to adjacent exposed structures or the occupants of exposed structures. This analysis should, at a minimum, could consider fire exposure from the maximum number of stories that would not yet have passive or active fire protection installed; the separation distance to exposed structures; the critical heat flux (CHF) that would cause ignition or cause windows to fail on the exposed structures; the means, methods, and sequencing of the construction of the building; the impact on means of egress within the constructed building and from the adjacent building(s); active and temporary fire protection systems; and the responding fire department's capabilities. As the building under construction might not yet be enclosed enough to protect fire-resistant sheathing or fire-resistive coatings from rain or moisture, passive protection products that are moisture resistant or exterior grade could be considered.

The fire exposure analysis could also include consideration of exposure hazards from exterior factors such as thoroughfares, and impact to critical structures in the immediate vicinity of the building under construction.

The number of stories that are either not yet sprinklered or do not have fire-resistive sheathing installed on the exterior side of the exposing wall(s) should not exceed four.

Egress could be considered adequate if all of the fire-resistive stairways and all of their opening protectives and related hardware required for the constructed portions of the structure are installed.

The fire exposure analysis is intended to be developed during the pre-construction or conceptual design phase. It could change or be modified as the project evolves.

Documents such as NFPA 80A and NFPA 551 can be utilized for guidance in composing the fire exposure analysis.

Statement of Problem and Substantiation for Public Comment

This comment is to redirect the committee to PI-23 (The abbreviation "RDP" is not defined anywhere in the standard and should either be removed or defined.) Please either remove RDP from the standard or define it.

Related Item

- PI-23

Submitter Information Verification

Submitter Full Name: Scott Plumer

Organization: Arvada Fire Protection District

Street Address:

City:

State:

Zip:

Submittal Date: Fri Mar 28 12:51:38 EDT 2025

Committee:	COD-AAA
-------------------	---------



Committee Input No. 82-NFPA 241-2024 [Global Input]

Chapter 12 Safeguarding Construction Operations for Tall Mass Timber Wood Structures

12.1* General.

The provisions of Chapter 1, Chapters 3 through 8, and this chapter shall apply for all construction, as applicable.

12.2* Roofing Operations.

The requirements of Chapter 10 shall apply for roofing operations, except that torch-applied roofing systems shall be prohibited.

12.3* Fire Exposure Analysis.

Before construction begins, a study shall be conducted to ensure that the installation of passive and active fire protection features, combined with the separation provided between other structures on the same or adjacent lots, are adequate to allow safe egress and to prevent fire spread to the exposed structures.

12.3.1

The analysis shall be included with the construction documents submitted with the building permit and acceptable to the AHJ.

12.3.2

Construction shall comply with the requirements established by the fire exposure analysis.

12.4 Wood Structural Panels.

Wood structural panels shall be designed, manufactured, and identified in accordance with Chapter 35 of *NFPA 5000*.

12.4.1*

Structural wood members that are required to receive passive fire protection shall have the protection installed as required by the fire exposure analysis outlined in Section 12.3.

12.5 Site Security.

12.5.1*

Guard service trained in accordance with 4.1.17.2 or other methods acceptable to the AHJ shall be required at all times that combustible construction has exceeded three stories and workers are not on the site.

12.5.2

Minimum 1.8 m (6 ft) high security fences shall be provided around the entire exterior of the construction site.

12.6 Water Mains, Standpipes, Hydrants, and Fire Department Connections.

12.6.1

Underground fire protection water mains and hydrants shall be installed in accordance with 6.3.3.

12.6.2

Each stairwell required for egress in the constructed areas of the structure shall be equipped with an operational standpipe during construction in accordance with Section 4.7.

12.6.3

The distance between the fire department connection and hydrant shall not exceed 30.5 m (100 ft).

12.7 Fire Protection Systems.

Fire protection systems that are temporarily placed in service shall be in accordance with the Fire Prevention Program.

12.8* Hot Work.

Fire watches shall remain in place for 2 hours after hot work is complete.

12.9 Temporary Heat.**12.9.1**

The use of direct-fired heaters shall be prohibited inside the structure.

12.9.2

Heating shall be indirect fired or ducted heat from heaters located outside the structure or by permanent heating systems.

12.10 Temporary Lighting.

The use of high-intensity lighting, such as quartz or metal halide, shall be prohibited during construction or alterations.

Submitter Information Verification

Committee: COD-AAA

Submittal Date: Mon Aug 26 11:13:23 EDT 2024

Committee Statement

Committee Statement: The committee has created this CI to address the scoping of tall mass timber/mass timber structures, as well as provide a definition of tall mass timber structures within Chapter 3. Currently, there is not a definition for tall mass timber structures within NFPA 241. Therefore, applying these two terms within the standard can create confusion in regards to when a structure should be considered "tall". Public comments will be provided to assess prescriptive requirements, as well as additional annex, whether specifics, such as stories or height, can be included to provide further clarity.

Response Message: CI-82-NFPA 241-2024

Ballot Results

 **This item has not been balloted**

**Committee Input No. 22-NFPA 241-2024 [Section No. 4.12.4]**

See attached Word document

4.12.4 Stairs.**4.12.4.1– ***

Not less than one half of the ~~required exit stairs in the constructed areas~~ stairs required as a means of egress from the completed, occupied building shall be available for egress and fire department access at all times once the building is one or more stories above or below grade .

4.12.4.

~~2–~~

~~This stairway shall be extended upward 1.1 _~~

Stairways required as a means of egress from the construction area shall be extended to each floor as each floor is installed in new construction and maintained for each floor still remaining during demolition.

4.12.4.3 –

~~The stairway shall be lighted~~

1.2 _

Stairways required as a means of egress from the construction area shall be lighted at all times.

4.12.1.3

Stairways required as a means of egress from the construction area shall be provided with stair identification signs to include the floor level, stair designation, and exit path direction as required to provide for safe egress.

4.12.4.2

At least one egress stairway shall be designated as a Fire Service Access Stair .

4.12.4.4 2.1*

During construction, ~~the stairway shall~~ a Fire Service Access Stair shall be enclosed where the building exterior walls are in place on a particular floor .

4.12.4.

~~5-~~

~~All exit stairs shall be provided with stair identification signs to include the floor level, stair designation, and exit path direction as required to provide for safe egress~~ **2.1.1***

Enclosures shall be in accordance with 4.13.1.1 or 4.13.1.2.

4.12.4.2.2

The exterior walls shall be considered to be in place when at least 75 percent of the exterior wall on that floor is installed.

4.12.4.2.3

The Fire Service Access Stair enclosure shall be continuous to the level of exit discharge, even if the exterior walls are not complete on the discharge level.

4.12.4.2.4

Exterior stairs that are open on at least two sides shall be permitted where approved by the AHJ.

4.12.2.5

Where a standpipe is required in accordance with the Fire Prevention Program, the standpipe hose connections shall be accessed from the Fire Service Acces Stair .

Supplemental Information

<u>File Name</u>	<u>Description</u>	<u>Approved</u>
PI-83_CI_Document.docx		

Submitter Information Verification

Committee: COD-AAA
Submittal Date: Tue Aug 20 17:07:31 EDT 2024

Committee Statement

Committee Statement: The committee created this CI to allow the task group to continue work on this topic at Second Draft. As provided by the PI, and modified by the CI, the submission raised several questions regarding both construction and fire service access stairs, as well as the inclusion of possible annex material to provide clarity and guidance. The task group welcomes interested parties to consider participating in the task group process, as well as Public Comment on this topic.

Response Message: CI-22-NFPA 241-2024

Public Input No. 83-NFPA 241-2024 [Section No. 4.12.4]

Ballot Results

 **This item has not been balloted**



Public Input No. 83-NFPA 241-2024 [Section No. 4.12.4]

4.12.4 Stairs.

4.12.4.1— *

~~Not less than one half of the required exit stairs in the constructed areas~~ stairs required as a means of egress from the completed, occupied building shall be available for egress and fire department access at all times once the building is one or more stories above or below grade.

4.12.4.1.1

Phased construction shall comply with 4.12.4.1 for each phase.

4.12.4.

2—

~~This stairway shall be extended upward~~ 1.1

Stairways required as a means of egress from the construction area shall be extended to each floor as each floor is installed in new construction and maintained for each floor still remaining during demolition.

4.12.4.3—

~~The stairway shall be lighted~~

1.2

Stairways required as a means of egress from the construction area shall be lighted at all times.

4.12.1.3

Stairways required as a means of egress from the construction area shall be provided with stair identification signs to include the floor level, stair designation, and exit path direction as required to provide for safe egress.

4.12.4.2

At least one egress stairway shall be designated as a **construction-phase** Fire Service Access Stair.

4.12.4.2.1*

During construction, ~~the stairway shall~~ a Fire Service Access Stair shall be enclosed where the building exterior walls are in place on a particular floor.

4.12.4.

5—

~~All exit stairs shall be provided with stair identification signs to include the floor level, stair designation, and exit path direction as required to provide for safe egress~~ 2.1.1*

Enclosures shall be in accordance with 4.13.1.1 or 4.13.1.2.

4.12.4.2.2

The exterior walls shall be considered to be in place when at least 75 percent of the exterior wall on that floor is installed.

4.12.4.2.3

The Fire Service Access Stair enclosure shall be continuous to the level of exit discharge, even if the exterior walls are not complete on the discharge level.

4.12.4.2.4

Exterior stairs that are open on at least two sides shall be permitted where approved by the AHJ.

4.12.2.5

Where a standpipe is required in accordance with the Fire Prevention Program, the standpipe hose connections shall be accessed from the Fire Service Access Stair.

Statement of Problem and Substantiation for Public Input

This proposal is intended to lend clarity to the existing language and to provide reference for the allowable means of stair enclosure. The concept of a Fire Service Access Stair is included to designate the enclosure of at least one stair is aligned with the stair used to access fire department hose connections.

Submitter Information Verification

Submitter Full Name: Jennifer Hoyt

Organization: Code Red Consultants

Street Address:

City:

State:

Zip:

Submittal Date: Mon Jun 03 10:09:17 EDT 2024

Committee: COD-AAA

Copyright Assignment

I, Jennifer Hoyt, hereby irrevocably grant and assign to the National Fire Protection Association (NFPA) all and full rights in copyright in this Public Input (including both the Proposed Change and the Statement of Problem and Substantiation). I understand and intend that I acquire no rights, including rights as a joint author, in any publication of the NFPA in which this Public Input in this or another similar or derivative form is used. I hereby warrant that I am the author of this Public Input and that I have full power and authority to enter into this copyright assignment.

By checking this box I affirm that I am Jennifer Hoyt, and I agree to be legally bound by the above Copyright Assignment and the terms and conditions contained therein. I understand and intend that, by checking this box, I am creating an electronic signature that will, upon my submission of this form, have the same legal force and effect as a handwritten signature



Committee Input No. 26-NFPA 241-2024 [New Section after 4.15.6]

TITLE OF NEW CONTENT**4.15.7**

The CAD FFSBMS sign shall consist of the following:

- (1) **White reflective background with red borders and black letters**
- (2) **Durable material**
- (3) **Arabic numerals or alphabet letters**
- (4) **Securely affixed to the building or structure in an approved manner**

4.15.8

The CAD FFSBMS sign shall be a Maltese cross as shown in Figure 4.15.8

Figure 4.15.8 Sample for the CAD FFSBMS sign.

**4.15.9**

The minimum size of the CAD FFSBMS sign and lettering shown in Figure 4.15.9 shall be in accordance with the following:

- (1) **A shall be 48 in x 48 in**
- (2) **B shall be 12 in**
- (3) **C shall be 24 in**
- (4) **Letters shall be 10 in height with a stroke of 2 in [TCG1] . [TCG2] .**

Figure 4.15.9 Dimensions for the CAD FFSBMS sign.

**4.15.9.1**

Buildings and structures less than 40 feet in height, the minimum size of the CAD FFSBMS sign and lettering shown in 4.15.9 is permitted to be in accordance with the following.

- (1) **A shall be 24 in x 24 in**
- (2) **B shall be 6 in**
- (3) **C shall be 12 in**
- (4) **Letters shall be 5 in height with a stroke of 1 in**

4.15.9.2

Interior conditions, the minimum size of the CAD FFSBMS sign and lettering shown in 4.15.9 is permitted to be in accordance with the following.

- (1) **A shall be 12 in x 12 in**
- (2) **B shall be 3 in**
- (3) **C shall be 6 in**
- (4) **Letters shall be 2 ½ in height with a stroke of 1/2 in**

4.15.11 Ratings.**4.15.11.1**

Ratings shall be determined by the construction type, flammable and combustible gas or liquid, fire sprinkler, suppression and standpipe systems, utilities, and special designations in accordance with this section.

4.15.11.2

Where multiple ratings occur within a classification category, a determination shall be made by the AHJ of the rating that shall be based on the greatest potential risk for the specific category. (See Note 1 in C.2.1.).

4.15.11.3 Construction Type

The construction type shall be designated by assigning the appropriate lettering to the top of the Maltese cross as follows: - If multiple are provided, all shall be included in the Maltese cross as follows:

- (1) **I - Fire-resistive construction**
- (2) **II - Noncombustible construction**
- (3) **III - Ordinary construction**
- (4) **IV - Heavy timber construction**
- (5) **V - Combustible construction**

4.15.11.4 Flammable and Combustible Gas or Liquid and Oxidizers.

The flammable and combustible gas or liquid shall be rated by assigning the appropriate rating to the left of the Maltese cross as follows. If multiple are provided, all shall be included in the Maltese cross as follows:

- (1) **E - Explosives**
- (2) **FG - Flammable Gas**
- (3) **FL - Flammable Liquid.**
- (4) **CG - Combustible Gas**
- (5) **CL - Combustible liquid.**
- (6) **OX - Oxidizers**
- (7) **N - None**

4.15.11.5 Fire Sprinkler, Suppression and Standpipe System.

The fire sprinkler system, suppression and standpipe system shall be rated by assigning the appropriate rating to the right of the Maltese cross. If multiple systems are provided, all systems shall be included in the Maltese cross as follows:

- (1) SP - Sprinkler system installed
- (2) SUP - Suppression system installed
- (3) ST - Standpipe system installed
- (4) N - None
- (5) AW - Automatic Wet
- (6) AD - Automatic Dry
- (7) MW - Manual Wet
- (8) MD - Manual Dry

4.15.11.6 Utilities.

The utilities shall be rated - by assigning the appropriate rating to the bottom of the Maltese cross. If multiple systems are provided, all systems shall be included in the Maltese cross as follows:

- (1) GAS - Gas
- (2) ELEC - Electric
- (3) OIL - Oil
- (4) DSL - Diesel
- (5) LPG - Liquefied petroleum gas
- (6) LNG - Liquefied natural gas

4.15.11.7 Special Designations.

Special designations shall be assigned to the center of the Maltese cross. If multiple are provided, all shall be included in the Maltese cross as follows:

- (1) HF - Holes in floor
- (2) HR - Holes in roof
- (3) OS - Open shaftway
- (4) OH - Open Hoistway
- (5) ASB - Asbestos

4.15.12 Instructions, Installation and Maintenance.

4.15.12.1

The fire department shall decide when it will be appropriate to install the sign.

4.15.12.2

The fire department shall decide when it will be appropriate to remove the sign.

4.15.12.3

The fire department shall decide where to install the sign. *.(see note 2 in C.2.2).*

4.15.12.4

The fire department shall decide how many signs will be needed. (see note 2 in C.2.2).

4.15.12.5

The fire department shall be permitted to perform routine inspections to verify continued compliance with the information shown on the sign. (see note 3 in C.2.3).

4.15.12.6

The fire department shall be permitted to include or substitute NFPA 170 Standard for Fire Safety and Emergency Symbols to enhance or represent any of the ratings listed in 4.15.11.3 through 4.15.11.7. (see note 4 in C.2.4).

4.15.12.7

Installation and maintenance of the CAD FFSBMS sign shall be the responsibility of the owner :

4.15.12.8

The CAD FFSBMS sign shall be illuminated in low lighted areas to ensure it will be visible from the intended installed location.

4.15.12.9

The CAD FFSBMS sign ratings fields shall have the provisions to be readily modified when necessary. (see note 5 in C.2.5)

4.15.13 Training.**4.15.13.1**

Training shall be provided by the owner at the request of the AHJ to all fire department personnel responding to buildings using the CAD FFSBMS sign.

ANNEX C**C.1 Fire Fighter Safety Building Marking System (FFSBMS) during Construction, Alteration and Demolition (CAD).**

This annex is not a part of the requirements of this NFPA document unless specifically adopted by the jurisdiction.

C.2 Notes.

The following notes are explanatory and are not part of the mandatory text.

C.2.1 Note 1.

An example of the greatest potential risk for construction type where a type I and a type II are present, the ranking on the FFSBMS sign would be type II.

C.2.2 Note 2.

The intent of this provision is to verify that the FFSBMS sign is in the correct location for the fire department's ease of seeing on arrival at the site for an incident. A typical location is to locate the sign on the front of the building, however, depending on the site's logistics it may require multiple signs be located and the sign may have to be on a fence or gate. The height may also be determined by a visual line of sight considering obstructions such as

construction equipment or tree line landscape. Care also needs to be taken as the site changes and things such as scaffolding or exterior facades get installed or removed.

C.2.3 Note 3.

The intent of this provision is to verify that the information on the FFSBMS sign is correct on a regular basis. Fire departments responding to facilities equipped with a FFSBMS sign should verify signage and preplans. Other means of verifying the information on the FFSBMS sign could include mailings, outside consultants, and community service programs.

C.2.4 Note 4.

The intent of this provision is to allow the fire department to require symbols from NFPA 170 Standard for Fire Safety and Emergency Symbols instead of or in addition to letters or words in any of the ratings fields. An example to show that there is a fire department connection and a standpipe connection:

 **Icon Description automatically generated**

C.2.5 Note 5.

The intent of this provision is to have the information in the ratings fields be able to be easily changed as conditions change. For example, a field that had an N for no fire protection would then change to ST when standpipes were added. The material used for changing these fields could be something such as vinyl adhesive stickers.

Submitter Information Verification

Committee: COD-AAA

Submittal Date: Wed Aug 21 08:43:19 EDT 2024

Committee Statement

Committee Statement: The committee created this CI to permit further work on this topic at Second Draft. The PI, as submitted, raised several questions, including, but not limited to, whether this material should reside within the body of NFPA 241 or be a stand-alone annex, NFPA MOS formatting, when the sign is to be used, how the sign should be updated, and specifics pertaining to training requirements. The committee welcomes Public Comment on this topic. A task group has been formed to review this CI in greater detail.

Response Message: CI-26-NFPA 241-2024

[Public Input No. 31-NFPA 241-2024 \[New Section after 4.15.6\]](#)

Ballot Results

 **This item has not been balloted**



Committee Input No. 32-NFPA 241-2024 [New Section after 5.4.5]

[*See attached Word File*](#)

[Battery powered tools](#)

[Tools shall be stored and charged in a dedicated area away from flammable and combustible materials.](#)

[Battery powered tools shall use listed/certified batteries.](#)

[Batteries shall be kept in a listed/certified cabinet or enclosure when not in use.](#)

[Batteries shall be kept in a listed/certified cabinet or enclosure when charging.](#)

[Chargers shall be listed/certified.](#)

[Chargers shall be installed in accordance with NFPA 70.](#)

Submitter Information Verification

Committee: COD-AAA

Submittal Date: Wed Aug 21 10:29:34 EDT 2024

Committee Statement

Committee Statement: The committee created this CI to allow further work on this topic at Second Draft. As PI-51 was provided, questions pertaining to logistics and enforcement of such criteria were considered. A need to consider specified technical data, reports, loss history and mitigation methods will assist with creating consistent criteria. The criteria from PI-74 was added to provide reference to the applicable UL standard for battery containment enclosures. A task group will review these requirements and provide a report at the SD meeting. Members of the public are encouraged to participate on the task group.

Response Message: CI-32-NFPA 241-2024

[Public Input No. 51-NFPA 241-2024 \[New Section after 5.4.5\]](#)

[Public Input No. 74-NFPA 241-2024 \[New Section after 5.4.5\]](#)

Ballot Results

This item has not been balloted



Committee Input No. 43-NFPA 241-2024 [Section No. 7.8]

[*See attached Word document*](#)

7.8 Flammable and Combustible Liquids and Flammable Gases.

7.8.1 Storage.

7.8.1.1

Storage of flammable and combustible liquids shall be in accordance with NFPA 30 unless otherwise modified by this section.

7.8.1.2*

Storage of Class I and Class II liquids shall not exceed 227 L (60 gal) within 15 m (50 ft) of the structure.

7.8.1.3

Storage areas shall be kept free of weeds, debris, and combustible materials not necessary to the storage.

7.8.1.4

Open flames and smoking shall not be permitted in flammable and combustible liquids storage areas.

7.8.1.5

Such storage areas shall be appropriately posted as "No Smoking" areas.

7.8.1.6

Storage areas shall be appropriately posted with markings in accordance with NFPA 704.

7.8.2 Handling of Flammable and Combustible Liquids at Point of Final Use.

7.8.2.1

Handling of flammable and combustible liquids shall be in accordance with NFPA 30 except as modified by 7.8.2.2 through 7.8.2.4.

7.8.2.2

Class I and Class II liquids shall be kept in approved safety containers.

7.8.2.3

Means shall be provided to contain and dispose of leakage and spills promptly and safely.

7.8.2.4*

Class I liquids shall be dispensed only where there are no open flames or other sources of ignition within the possible path of vapor travel.

7.8.3 Storage and Handling of Combustible and Flammable Gases.

7.8.3.1

Storage and handling of combustible and flammable gases shall be in accordance with NFPA 54 and NFPA 58.

7.8.3.2

Open flames and smoking shall not be permitted in flammable gas storage areas.

Supplemental Information

<u>File Name</u>	<u>Description</u>	<u>Approved</u>
NFPA_241_Flammable_Liquid_Flammable_Gas_REVISED.docx		
Submitter Information Verification		
Committee:	COD-AAA	
Submittal Date:	Wed Aug 21 16:10:30 EDT 2024	
Committee Statement		
Committee Statement:	The committee has created this CI to allow a task group to review this material and provide a report at the Second Draft. Public Input on this topic is encouraged.	
Response Message:	CI-43-NFPA 241-2024	
	Public Input No. 66-NFPA 241-2024 [Sections 7.8, 7.9]	
	Public Input No. 67-NFPA 241-2024 [Sections 7.8.1, 7.8.2]	
	Public Input No. 68-NFPA 241-2024 [Section No. 7.8.3]	
Ballot Results		
 This item has not been balloted		

*** REVISED & NEW SECTIONS ***

7.8 Flammable and Combustible Liquids ~~and Flammable Gases~~.

7.8.1 Storage.

7.8.1.1 Storage of flammable and combustible liquids shall be in accordance with NFPA 30 unless otherwise modified by this section.

~~7.8.1.2 Container storage for the transfer of flammable and combustible liquids on construction sites shall be either approved metal safety cans in accordance with UL 30 or Department of Transportation approved nonmetallic containers in accordance with UL 1313 with a maximum quantity of 5.3 gallons (20L) or less per container, except for Class 1A flammables which are limited to 2.6 gallons (10 L) per container.~~

~~7.8.1.3 All Class I and Class II liquids in containers 1 gallon and greater stored within an unprotected building under construction and not within storage control areas that meet the requirements of NFPA 30, shall be stored in approved flammable liquid storage cabinets.~~

~~7.8.1.4 Class 1 flammable liquids may be stored on a roof in connection with work on a roof in a quantity not to exceed one (1) day's supply, but in no case more than 20 gallons shall be left overnight.~~

7.8.1.54 Open flames and smoking shall not be permitted in flammable and combustible liquids storage areas.

7.8.1.65 Such storage areas shall be appropriately posted as "No Smoking" areas.

7.8.1.76 Storage areas shall be appropriately posted with markings in accordance with NFPA 704.

7.8.1.8* Storage of Class I and Class II liquids shall not exceed 227 L (60 gal) within 15 m (50 ft) of the structure.

~~7.8.1.9 The distance between any two flammable or combustible liquid outside above ground storage tanks shall not be less than 3 feet (1m).~~

~~7.8.1.10 Aboveground storage tanks shall be appropriately grounded.~~

~~7.8.1.11 Normal and emergency venting of tanks shall be provided in accordance with applicable standards.~~

~~7.8.1.12 Aboveground storage tanks shall be protected from vehicular impact.~~

~~7.8.1.13 Spill prevention measures shall be provided, and outside storage areas shall be graded in a manner to divert possible spills away from the buildings or other exposures.~~

7.8.1.143 Storage areas shall be kept free of weeds, debris, and combustible materials not necessary to the storage.

~~7.8.1.15 The maximum travel distance from a minimum 9.1 kg (20 lb) ABC dry chemical extinguisher having an agent discharge rate of 0.45 kg/sec (1 lb/sec) or greater shall be 30.5 m (100 ft).~~

~~7.8.1.16 Flammable or combustible liquid storage area shall not permit liquid petroleum gas (LPG) container(s) to be stored within 20 feet (6m).~~

7.8.2 Handling of Flammable and Combustible Liquids at Point of Final Use.

7.8.2.1 Handling of flammable and combustible liquids shall be in accordance with NFPA 30 except as modified by 7.8.2.2 through 7.8.2.45.

7.8.2.2 Class I and Class II liquids shall be kept in approved safety containers.

7.8.2.3 Means shall be provided to contain and dispose of leakage and spills promptly and safely.

7.8.2.4* Class I liquids shall be dispensed only where there are no open flames or other sources of ignition within 50 feet or the possible path of vapor travel.

Commented [CW1]: See OSHA 1926.152(a)(1)

Commented [CW2]: Revised to NFPA 30 - Chapter 9 summary

Commented [CW3]: Although OSHA 1926 allows up to 25 gallons outside a flammable liquids cabinet, I could not find where this is permitted by NFPA. During the construction of a building, the required fire barriers and other requirements for control areas are unlikely to be met.

Commented [CW4]: See OSHA 1926.152(b)(1)

Commented [CW5]: This came from a NYC Fire Code requirement with some modifications.

Commented [CW6]: In OSHA 1926.152(i)(2)(ii)[A] but also summarizes NFPA 30-22.4.2.1 with some greater distances required for larger tanks not common on construction sites (there for "not less than" used).

Commented [CW7]: There are various requirements in OSHA 1926 and NFPA 30 that this is just summarizing and you have to go to these standards for the actual requirements.

Commented [CW8]: Similar to OSHA 1926.152(e)(4), but is also just a generally accepted best practice not specific to OSHA

Commented [CW9]: Modified from OSHA 1926.152(c)(3) but also see NFPA 30-22.11 (2024 edition)

Commented [CW10]: From NFPA 30A instead of using OSHA 1926's 75' max/25' minimum requirement

Commented [CW11]: Modified from OSHA 1926.152(i)(2)(ii)[F], but also Similar to NFPA 58-8.4.1(3) for fueling area

*** REVISED & NEW SECTIONS ***

7.8.2.5 When Class I or Class II liquids are dispensed, adequate grounding and bonding shall be provided to prevent the accumulation of static electricity.

Commented [CW12]: General statement from requirements detailed in NFPA 30

7.9.8.3 Storage and Handling of Combustible and Flammable Gases.

7.9.1 8.3.1

Storage and handling of combustible and flammable gases shall be in accordance with NFPA 54 and NFPA 58 unless otherwise modified by this section.

7.9.2 Acetylene cylinders shall be stored valve end up and secured from falling.

Commented [CW13]: See NFPA 55 - Chapter 5

7.9.3 Oxygen cylinders in storage shall be separated from fuel-gas cylinders or combustible materials (especially oil or grease), a minimum distance of 20 feet (6.1 m) or by a noncombustible barrier at least 5 feet (1.5 m) high having a fire-resistance rating of at least one-half hour.

7.9.4 Gas cylinders shall be capped when not in use (when provided)

7.9.5 Gas cylinder labels must be legible (readable)

7.9.6 Acetylene cylinders and LP Gas tanks shall not be stored in confined spaces such as drawers, closets, unventilated cabinets, automobile trunks, or toolboxes.

7.9.7 8.3.2 Open flames and smoking shall not be permitted in flammable gas storage areas.

7.9.8 Storage of LP Gas within buildings is prohibited.

7.9.9 LP Gas containers installed outside of buildings, whether of the portable type replaced on a cylinder exchange basis or permanently installed and refilled at the installation, shall be located with respect to the adjacent containers, important building, group of buildings, or line of adjoining property that can be built upon by a minimum of 10 feet (3m) for tanks 251-500 gallon water capacity per container and 25 feet (7.6m) for tanks 501-2,000 gallons (see NFPA 58 for all additional sizes).

Commented [CW15]: Summarizing NFPA 58 requirements

7.9.10 The minimum separation distance between tanks (for sizes 251-2,000 gallons) shall be 3 feet (1m).

Commented [CW16]: Summarizing NFPA 58 - 6.4.1.1

7.9.11 Combustible materials shall not accumulate or be stored within 10 ft (3 m) of LPG containers.

7.9.12 Outside storage locations shall be provided with at least one approved portable fire extinguisher having a rating of not less than 20-B:C.

7.9.13 All regulators for outdoor LPG installations shall be designed, installed, or protected so their operation will not be affected by the elements (freezing rain, sleet, snow, ice, mud, or debris).

7.9.14 Protective lids shall not rest on piping or hoses unless specifically designed and approved for and shall instead utilize lid notch outs.



Committee Input No. 23-NFPA 241-2024 [New Section after A.4.12.3.5]

A.12.4.1

The intent is that portions of stairs (enclosures or exist access) are rounded up. For example, a building with three stairs in the final occupied condition would be required to have two stairs available for egress during construction.

A.4.12.4.2.1.1

For the purposes of this section, "enclosed" is defined as sufficient to prevent smoke spread from a floor into the stairway. Doorways should be provided with a means to limit smoke spread. Unprotected penetrations necessary for the purpose of the stair are permitted. It is not the intent to provide a fire-rated assembly at the stair. Enclosures should be in accordance with Section 4.13.1.1 or 4.13.1.2.

Submitter Information Verification

Committee: COD-AAA

Submittal Date: Tue Aug 20 17:12:39 EDT 2024

Committee Statement

Committee Statement: This committee created this CI to allow continued work on this topic at Second Draft. As these PI's are annex material to PI-83, the task group will review this CI and provide proposed changes for review at the Second Draft phase.

Response Message: CI-23-NFPA 241-2024

[Public Input No. 84-NFPA 241-2024 \[New Section after A.4.12.3.5\]](#)

[Public Input No. 86-NFPA 241-2024 \[New Section after A.4.12.3.5\]](#)

Ballot Results

This item has not been balloted