



Bob Caputo, CFPS AMERICAN FIRE SPRINKLER ASSOCIATION

AMERICAN FIRE SPRINKLER ASSOCIATION Bob Caputo, president of the American Fire Sprinkler Association (AFSA), is chair of the NFPA 4 and NFPA 291 technical committees and a member of multiple NFPA technical committees, including NFPA 13 and NFPA 25. Caputo is a contributor of the NFPA 13 fand NFPA 25 Handbooks, and the NFPA Inspection Manual. A senior member of NFPA and AFSA faculties, Caputo has written and presented semiarar worldwide on fire protection and life safety systems and is a regular packer at AFSA and NFPA conventions. Caputo is an instructor at the National Fire Academy and an advisory board member at Oklahoma State University School of Fire Protection Engineering & Safety. Caputo's industry distinctions include "Fire Prevention Officer of the Verat" from San Diego County in 1994, "Man of the Year" from Fire Protection Contractor magazine in 1977, and the Henry S. Parmelee award from AFSA in 2017. Caputo attended the University of Albuquerque, New Mexico, and is a U.S. Navy veteran and former volunteer firefighter.

> (Ú) AFSA





NFPA Standards Development

- $\overline{\mathbb{X}}$ Standards are updated every 3 to 5 years.
- Approximately 8,880 volunteers serve on NFPA Technical Committees.
- I Technical Committees represent a balanced variety of interests. Approximately 260 Technical Committees are responsible for document development.
- ℜ AFSA representation
 - ♦ 55 Committees
 - ♦ 44 Documents
 - 118 Seats (Principal/Alternate)













certifications



















Supplemental Sprinklers

19.5 Design Approaches for Supplemental Sprinklers.

When required to be included in the hydraulic calculations in accordance with 28.3.4.7.4.3, the design approach for supplemental sprinklers shall be permitted to be based on the hazard located directly below the obstruction.

Section 19.5







Sloped Ceilings and Obstructed Construction

- X Initially based on different slopes
- X Returned to 2022 language
- Updated requirements for
 - concrete tees
 - 1 in. belowLimited to 30 in. depth



Section 10.2.7.1.2



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Design Approaches for Sloped Ceilings



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Section 19.2.3.2.4





Limited Use of Sprinklers

✗ Not allowed when♦ Ceiling heights greater than 30 ft

- Sidewalls in OH1 and higher
 Sprinklers less than K-11.2 in OH2 and higher
- OH2 and higher CH2 and higher CH2 and higher
- Ceiling heights greater than 40 ft
 SR standard-coverage sprinklers in OH2

The sprinklers in OH2



Section 19.2.3.2.5

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Ceiling height ft (m)	Occupancy hazard	Sprinkler coverage	Minimum Sprinkler K-factor US (metric)	Sprinkler response	Sprinkler orientation	Minimum Sprinkler Density gpmitt ² (mm/min)	Increase to design area obtained from Table 19.2.3.1.
	0H1	Standard or extended	5.6 (80)	SR or QR	Upright or pendent	Per Table 19.2.3.1.1	30% increase
	0Н2	Standard	11.2 (160)	QR	Upright or pendent	0.37 (15.1)	None
Over 30 and up to 40 (Over 9.1 and			11.2 (160)	SR or QR	Upright	0.37 (15.1)	None
up to 12.2)		LANITURE .	25.2 (360)	SR or QR	Upright or Pendent	0.37 (15.1)	None
		Standard	16.8 (240)	SR	Upright or pendent	0.45 (10.3)	None
'	LN1 A LN2	Extended	25.2 (360)	SR	Upright or pendent	0.45 (18.3)	None
	0H1	Standard or extended	5.6 (80)	SR or QR	Upright or pendent	Per Table 19.2.3.1.1	30% increase
Over 40 (Over 12.2)	0H2	Standard	11.2 (160)	QR	Upright or Pendent	0.45 (18.3)	30% increase
			11.2 (160)	SR or QR	Upright	0.45 (10.3)	30% increase
		L X10nded	25.2 (360)	SR or QR	Upright or Pendent	0.45 (18.3)	None
		Standard	16.8 (240)	SR	Upright or Pendent	0.45 (18.3)	None
	LINIA LINZ	Extended	25.2 (360)	SR	Upright or	0.45 (18.3)	None



























Reorganization of Dry Pipe Requirements



Water delivery time requirements

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Section 8.2

were getting sloppy Clarified requirements for single and multi-orifice ITCs

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Sloped Ceilings and Obstructed Construction

- X Slopes not exceeding 4 in 12
 - 1. 1 to 12 in. below deck (each channel)
 - 2. Max depth \leq 12 in. Up to 6 in. below member 4300 cu. ft max (blocking)



Section 13.2.6.1.2.3

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♦ 6 to 12 in. below deck (each



Section 10.2.6.1.2.4































Flexible Sprinkler Hoses

- Required to be calculated
- Friction loss based on number of bends referenced in manufacturer's data
 - Previously permitted maximum only
 - Other values permitted in UL 2443 update



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Remote Acceptance

- Witnessing of test can be done remotely

 By the AHJ
 In accordance with NFPA 915

 Performance of tests remotely not permitted

APEA

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Existing System Curves

- Deleted from the 2025 edition (First Draft)
- Old curves can be used for the evaluation of existing systems
 Based on edition used at original install
 Edition of NFPA 13 used required

• Proposed for 2025

to be on the General Information

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Section 30.4.2

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Sign

Structure of Chapter 30

🕱 General

- X Components
- X Sprinklers
- 🕱 Evaluation of Existing Systems
- A Modification of Existing Systems



Testing



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General Requirements

- All other requirements of NFPA 13 apply unless modified by Chapter 30
- Verify calculations when BFP or flexible sprinklers are added
 - Full hydraulic calculations are not required
 - Verify additional friction loss is not detrimental

Section 30.1



































Deluge Systems

- ▼ Flow testing in lieu of hydro▼ Verify
 - Water discharge patterns
 - ♦ Adequate coverage
 - Design pressure at nozzle
 - Design pressure at deluge valve



Section 30.7.1.3





