

NFPA 13-Proposed 2019 Edition

Standard for the Installation of Automatic Sprinkler Systems

TIA Log No.: 1384

Reference: Chapter 25 various

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www.nfpa.org/13

1. *Add the following new paragraphs to Chapter 25 to read as follows:*

25.2.3.1.3 For design densities of 0.2 gpm/ft² (8.2 mm/min) or less, standard-response CMDA sprinklers with a K-factor of K-5.6 (80) or larger shall be permitted.

25.2.3.1.4 For design densities greater than 0.2 gpm/ft² to 0.34 gpm/ft² (8.2 mm/min to 13.9 mm/min), standard-response CMDA sprinklers with a nominal K-factor of K-8.0 (115) or larger shall be used.

25.2.3.1.5 For design densities greater than 0.34 gpm/ft² (13.9 mm/min), standard-response CMDA sprinklers with a K-factor of K-11.2 (160) or larger that are listed for storage applications shall be used.

25.2.3.1.6 The requirements of 25.2.3.1.4 and 25.2.3.1.5 shall not apply to modifications to existing storage application systems, using sprinklers with K-factors of K-8.0 (115) or less.

25.2.3.1.7 The use of quick-response CMDA sprinklers for storage applications shall be permitted when listed for such use.

25.2.3.1.8 The ceiling sprinkler design figures in 25.2.3 indicate water demands for ordinary-temperature-rated and nominal high-temperature-rated CMDA sprinklers at the ceiling.

25.2.3.1.8.1 The ordinary-temperature ceiling sprinkler design densities correspond to ordinary-temperature-rated sprinklers and shall be used for sprinklers with ordinary- and intermediate-temperature classification.

25.2.3.1.8.2 The high-temperature ceiling sprinkler design densities correspond to high-temperature-rated sprinklers and shall be used for sprinklers having a high-temperature rating.

25.2.3.1.9 Ordinary- and intermediate-temperature CMDA ceiling sprinklers with K-factors of K-11.2 (K-160) or larger, where listed for storage, shall be permitted to use the densities for high-temperature sprinklers.

25.2.3.1.10 Discharge Considerations.

25.2.3.1.10.1 The water supply for ceiling and in-rack sprinklers only shall be determined from the density/area requirements of Chapter 25.

25.2.3.1.10.2 The calculations shall satisfy any single point on appropriate density/area curves.

25.2.3.1.10.3 The design area shall meet the requirements of 27.2.4.2.1.

25.2.3.1.10.4 The minimum design density shall be not less than 0.15 gpm/ft² (6.1 mm/min) after all adjustments are made.

Substantiation: The new requirements indicated in this TIA are needed in Chapter 25. They were requirements previously in Chapter 12 (Chapter 20 for the 2019 Edition of NFPA 13). However, during the reformatting of the 2019 Edition of NFPA 13, the requirements referenced above were not moved into Chapter 20; but moved into Chapter 21 instead. This was because they apply to CMDA sprinklers only and Chapter 21 is specific to CMDA sprinklers. However, since Chapter 25 now contains requirements for CMDA sprinklers in combination with in-rack sprinklers, these same requirements must be available to the CMDA sprinkler designs in Chapter

25. They currently are not as they are in Chapter 21 instead of Chapter 20. Therefore, the requirements outlined above need to be inserted into Chapter 25 so that the design requirements for CMDA sprinklers in Chapter 25 for the 2019 Edition of NFPA 13 are the same as they were in the 2016 Edition of NFPA 13.

Emergency Nature: The standard contains an error or an omission that was overlooked during the regular revision process.

Without the requirements provided above, the CMDA sprinkler design guidelines will not be the same guidelines that were provided in the 2016 Edition of NFPA 13.

Anyone may submit a comment by the closing date indicated above. Please identify the TIA number forward to the Secretary, Standards Council. [SUBMIT A COMMENT](#)