Formal Interpretation

NFPA 13
Installation of Sprinkler Systems
2010 Edition

Reference: 8.15.9
F.I. No.: 13-99-2

**Background:** Section 8-5.6 states that the clearance between the sprinkler deflector and the top of storage shall be 18 in. (457 mm) or greater. Section 8.15.9 provides guidance on sprinkler protection of library stacks. This guidance allows floor to ceiling bookshelves and requires sprinklers to be installed in every aisle with a distance between sprinklers along aisles not to exceed 12 ft (3.6 m).

**Question:** Is it acceptable to apply the principles of NFPA 13, 8.15.9 to the storage of Medical Records on fixed open bookshelves, thereby allowing the tops of the bookshelves used for this purpose to come within less than 18 inches of the horizontal plane of the sprinkler deflector with sprinklers installed in every aisle?

**Answer:** Yes.

**Issue Edition:** 1999
**Reference:** 5-13.10
**Issue Date:** January 3, 2002
**Effective Date:** January 23, 2002
Reference: 11.2.3.1.8(1) and 11.2.3.2.3.1
F.I. No.: 13-02-1

Question No. 1: Is it the intent of 11.2.3.2.3.1 to permit the system area of operation to be reduced below the limits of Figure 11.2.3.1.1 (e.g., less than 1500 sq ft)?

Answer: Yes

Question No. 2: If the Answer to Question No. 1 is yes, is the intent to allow the density to be less than the limits of Figure 11.2.3.1.1 (e.g., less than 0.1 gpm/sq ft for Light Hazard) as long as the point was legitimately picked from the density/area curve and appropriately reduced per 11.2.3.2.3?

Answer: No

Question No. 3: Is it the intent of Section 11.2.3.1.4(1) to require the densities for 1500 sq ft for all applications, including when Section 11.2.3.2.3.1 is applied, when the final area of sprinkler operation is less than 1500 sq ft?

Answer: Yes
Question No. 1: Are the dimensions in Figure 17.3.4.1.4 intended to be the only acceptable combination of rack height, clearance, flue space width, rack length and rack width?

Answer: No

Question No. 2: Are other situations not shown on the figure, such as double row racks with a width of 9½ ft (4 ft loads with 6 inch longitudinal flue), a height other than 54 ft and a length greater than 24 ft allowed as long as they comply with the other rules of NFPA 13?

Answer: Yes
Question No. 1: Can residential sprinklers of different orifice sizes be used within a compartment provided they have different directional discharge characteristics (i.e. pendent vs. sidewall)?

Answer: Yes.

Question No. 2: Can residential sprinklers of different orifice sizes be used within a compartment provided they have different thread sizes such that replacement cannot be confused?

Answer: Yes.

Question No. 3: Can residential sprinklers of different orifice sizes be used within a compartment without regard to discharge characteristics, thread sizes, or maximum protection areas?

Answer: No.