

Figure 21



NFP21XXX

STANDARDS

National Fire Protection Association (NFPA)

- NFPA 13: Standard for the installation of sprinkler systems
- NFPA 13D: Standard for the installation of sprinkler systems in one- and two-family dwellings and manufactured homes
- NFPA 13R: Standard for installation of sprinkler systems in residential occupancies up to and including four stories in height
- NFPA 13 Section 9.2.1.3.3.3: No hangers are required for flexible connections as long as the length does not exceed 6 ft

American Society for Testing and Methods (ASTM)

- ASTM C635: Standard specifications for the manufacture, performance and testing of metal suspension systems for acoustical tile and lay-in panel ceilings
- ASTM C636: Standard practice for installation of metal ceiling suspension systems for acoustical tile and lay-in panels

Factory Mutual (FM), FM Class No. 1637

- Approved standard for flexible sprinkler hose with threaded end fittings

Underwriter's Laboratories, Inc. (UL), UL 2443

- Standard for flexible sprinkler hose with fittings for fire protection service

International Building Code (IBC) Section 1621/American Society of Civil Engineers (ASCE) 7 9.6.2.6.2 & 9.6.2.6.2.2

- Flexible sprinkler connections are the alternative solution to install without seismic escutcheons (oops ring)

FEATURES

- Available lengths: 31", 36", 48", 60" and 72"*
- Outlet sizes: 1/2" and 3/4"
- Includes pre-installation positioning and identification sleeve
- Max ambient temperature rating: 225° F (UL/FM)
- Max working pressure rating: 175 psi (UL/FM)
- Minimum bend radius**: UL - 4"/FM - 8"
- Connection: Inlet - 1" MNPT
- Hose Diameter: I.D. = 0.85" (21.5mm)
O.D. = 1.10" (28mm)

TECHNICAL DATA

- Hose type: Braided
- Hose: Stainless steel 304
- Nut and nipple: Zinc-plated steel
- Sealing gasket: EPDM
- Press ring (inner and outer): Stainless steel 304
- Isolation ring: Nylon

INSTALLATION

- Please refer to NFP Specflex Installation Manuals for proper installation guidelines

* 31" and 72" currently only available with 1/2" outlet

**DO NOT bend within 2.5" from connection nuts.

SH HOSE BRACKET APPROVALS

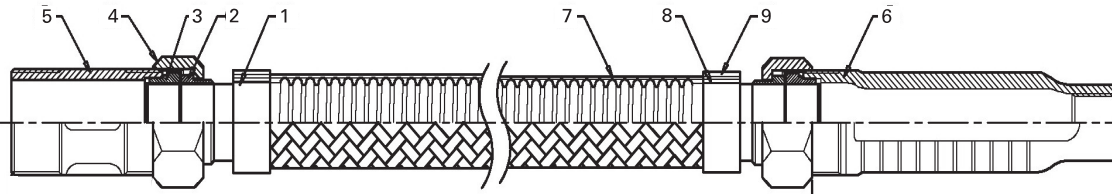
BRACKET	APPROVED BRACKET ASSEMBLY
NFP240124	FM, UL pending
NFP240724	FM, UL pending
NFP240624	FM, UL pending
NFP240148	FM
NFP2403	FM
NFP240424	FM

SPECFLEX™ SH SPRINKLER DROPS



Figure 21

BRAIDED FLEXIBLE HOSE



1. Tube
2. Isolation ring
3. Sealing gasket
4. Nut
5. Nipple (1")
6. Reducer
7. Braid
8. Press ring (inner)
9. Press ring (outer)

FRICTION LOSS DATA

LENGTH (IN.)	MAX NUMBER OF 90° BENDS		OUTLET CONNECTION	K-FACTOR	EQUIVALENT LENGTH OF 1" SCHEDULE 40 PIPE (FT)	
	UL	FM			UL	FM
31"	2	1	1/2"	5.6	27.0	33.1
36"	2	2	1/2"	5.6	31.0	37.4
			3/4"	8.0	34.0	30.4
48"	3	3	1/2"	5.6	48.0	54.9
			3/4"	8.0	51.0	48.3
60"	4	4	1/2"	5.6	60.0	72.5
			3/4"	8.0	65.0	66.2
72"	4	4	1/2"	5.6	71.0	90.5

*UL: 4" minimum bend radius, where C=120

*FM: 8" minimum bend radius, where C=120

ORDERING CODE MATRIX

