

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 6ft

### 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

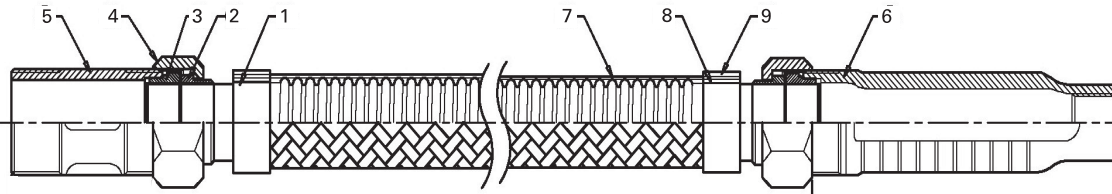
\*\*DO NOT bend within 2.5" from connection nuts.

## SH HOSE BRACKET APPROVALS

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

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

