# SPECFLEX™ SH SPRINKLER DROPS



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"
- 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

### SH HOSE BRACKET APPROVALS

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

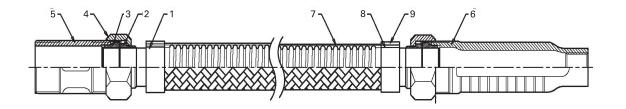
<sup>\* 31&</sup>quot; and 72" currently only available with 1/2" outlet \*\*DO NOT bend within 2.5" from connection nuts.

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Figure 21

# **BRAIDED FLEXIBLE HOSE**



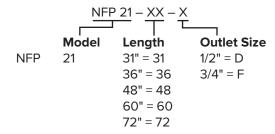
- 1. Tube
- 2. Isolation ring
- 3. Sealing gasket
- 4. Nut
- 5. Nipple (1")
- 6. Reducer
- 7. Braid
- 8. Press ring (inner)
- 9. Press ring (outer)

# **FRICTION LOSS DATA**

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

<sup>\*</sup>UL: 4" minimum bend radius, where C=120  $\,$ 

# **ORDERING CODE MATRIX**



<sup>\*</sup>FM: 8" mimimum bend radius, where C=120