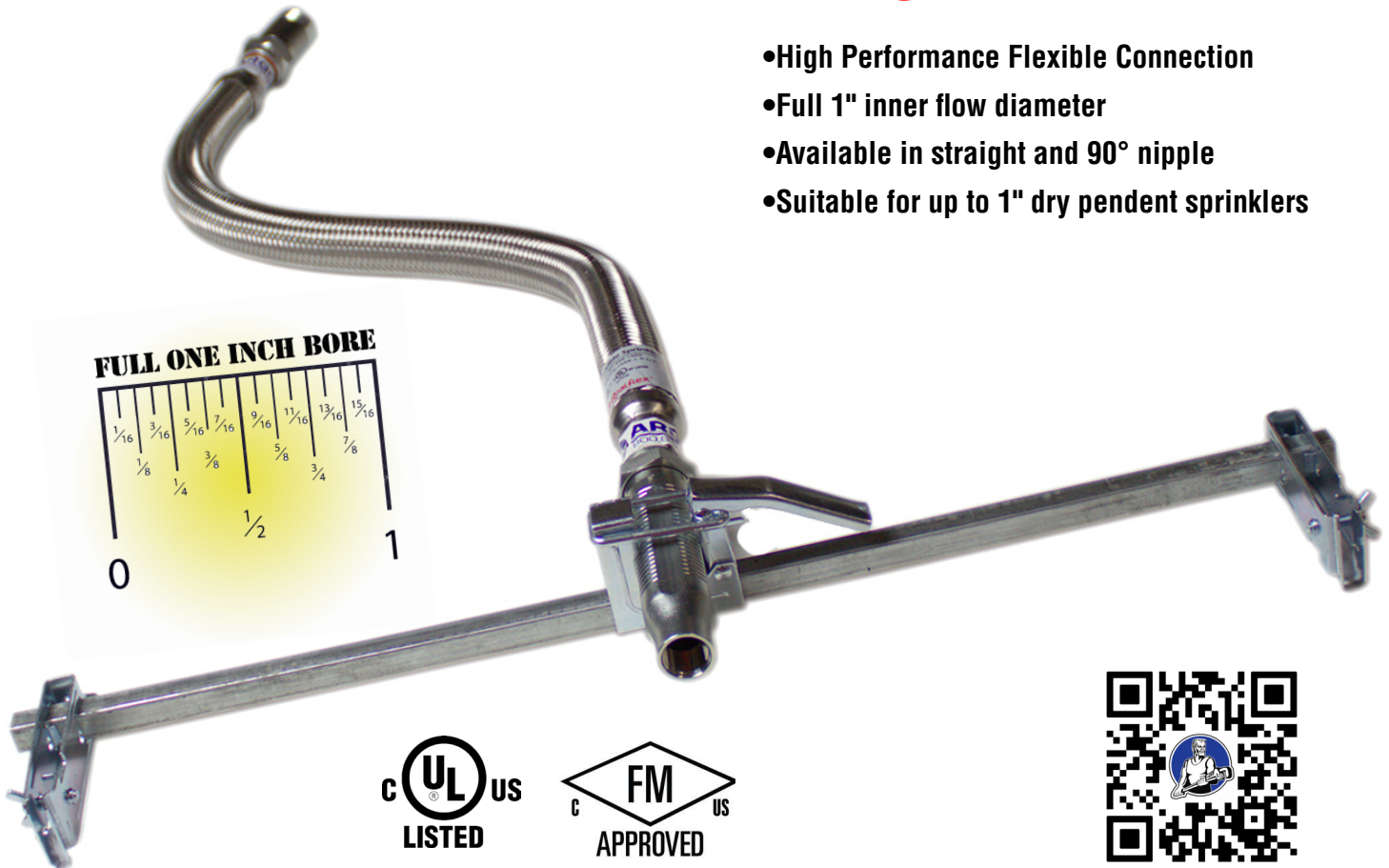


MEGAFLEX
FLEXIBLE SPRINKLER DROP HOSE FULL BORE
BRAIDED CONNECTIONS
with Straight End Connection Inlet



MEGA-FLEX

- High Performance Flexible Connection
- Full 1" inner flow diameter
- Available in straight and 90° nipple
- Suitable for up to 1" dry pendent sprinklers



PRODUCT DESCRIPTION

- Series AR-400-BR 1"/DN25 Nominal ID Braided Hose: 28, 40, 48, 60, 72"
- Sprinkler Connections: ½", ¾" and 1" NPT
- Inlet Connections: 1"/25mm NPT
- Straight Reducing Nipple Length: 5.5" (other lengths available)
- 90° Elbows: Long (typically used with recessed pendent sprinklers)

ARGCO's hoses are manufactured with corrosion resistant AISI Grade 304 Stainless Steel corrugated high flexibility tube with two hex slip nuts and high integrity O-ring seals with a burst test pressure of 70 bar/875 psi at ambient temperature, providing flexibility, high performance durability and reliability.

Flex hoses can be mounted directly to the water main water supply line via the 1" inlet nipple. To connect to CPVC* pipe, the inlet nipple must be threaded to an approved adapter.

Refer to CPVC manufacturer specifications.

TECHNICAL DATA

- Rated Pressure: 203 PSI (14 Bars)
- Maximum Ambient Temperature: 150°F (66°C)
- Maximum Sprinkler K-factor for ½" outlet: 8.0 gal/mm/(psi)^½
- Maximum Sprinkler K-factor for ¾" outlet: 14.0 gal/mm/(psi)^½
- Maximum Sprinkler K-factor for 1" outlet: 25.2 gal/mm/(psi)^½
- Designed for use in wet and dry systems
- Flexibility Type: Unlimited
- Minimum Bend Radius: 2"

• Hose Diameter: O.D. 1-3/8" / Flow 1"



Friction Loss Data continued on next page



MEGAFLEX

FLEXIBLE SPRINKLER DROP HOSE FULL BORE BRAIDED CONNECTIONS with Straight End Connection Inlet





Friction Loss Data and Specifications

				Equivalent Length of 1" Sch 40 Pipe, Ft					
Model	Length	NPT	k-Factor	c  US LISTED			 APPROVED		
				UL	Max. # of Bends	Min. Bending Radius	FM	Max. # of Bends	Min. Bending Radius
AR-400-BR FLEX-07-050	28"	1/2"	5.6 & 8.0	18	4	2"	21.5	1	7"
AR-400-BR FLEX-10-050	39"	1/2"	5.6 & 8.0	24	5	2"	28.5	3	7"
AR-400-BR FLEX-12-050	47"	1/2"	5.6 & 8.0	37	8	2"	33.2	3	7"
AR-400-BR FLEX-15-050	59"	1/2"	5.6 & 8.0	49	10	2"	40.2	4	7"
AR-400-BR FLEX-18-050	71"	1/2"	5.6 & 8.0	52	12	2"	47.2	4	7"

				Equivalent Length of 1" Sch 40 Pipe, Ft					
Model	Length	NPT	k-Factor	c  US LISTED			 APPROVED		
				UL	Max. # of Bends	Min. Bending Radius	FM	Max. # of Bends	Min. Bending Radius
AR-400-BR FLEX-07-075	28"	3/4"	8.0, 11.2, 14.0	18	4	2"	13.7	1	7"
AR-400-BR FLEX-10-075	39"	3/4"	8.0, 11.2, 14.0	24	5	2"	19.5	3	7"
AR-400-BR FLEX-12-075	47"	3/4"	8.0, 11.2, 14.0	37	8	2"	26.0	3	7"
AR-400-BR FLEX-15-075	59"	3/4"	8.0, 11.2, 14.0	49	10	2"	29.2	4	7"
AR-400-BR FLEX-18-075	71"	3/4"	8.0, 11.2, 14.0	52	12	2"	35.0	4	7"

1" Model Available upon request

Item 6531182: 1" Megaflex Hose thread x 1" NPT

				Equivalent Length of 1" Sch 40 Pipe, Ft					
Model	Length	NPT	k-Factor	c  US LISTED			 APPROVED		
				UL	Max. # of Bends	Min. Bending Radius	FM	Max. # of Bends	Min. Bending Radius
AR-400-BR FLEX-07-100	28"	1"	25.2 and less	18	4	2"	11.9	1	7"
AR-400-BR FLEX-10-100	39"	1"	25.2 and less	24	5	2"	19.2	3	7"
AR-400-BR FLEX-12-100	47"	1"	25.2 and less	37	8	2"	24.1	3	7"
AR-400-BR FLEX-15-100	59"	1"	25.2 and less	49	10	2"	31.4	4	7"
AR-400-BR FLEX-18-100	71"	1"	25.2 and less	52	12	2"	38.7	4	7"

MEGAFLEX

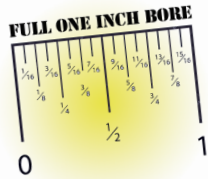
FLEXIBLE SPRINKLER DROP HOSE FULL BORE

BRAIDED CONNECTIONS

with 90° Elbow Outlet



MEGA-FLEX

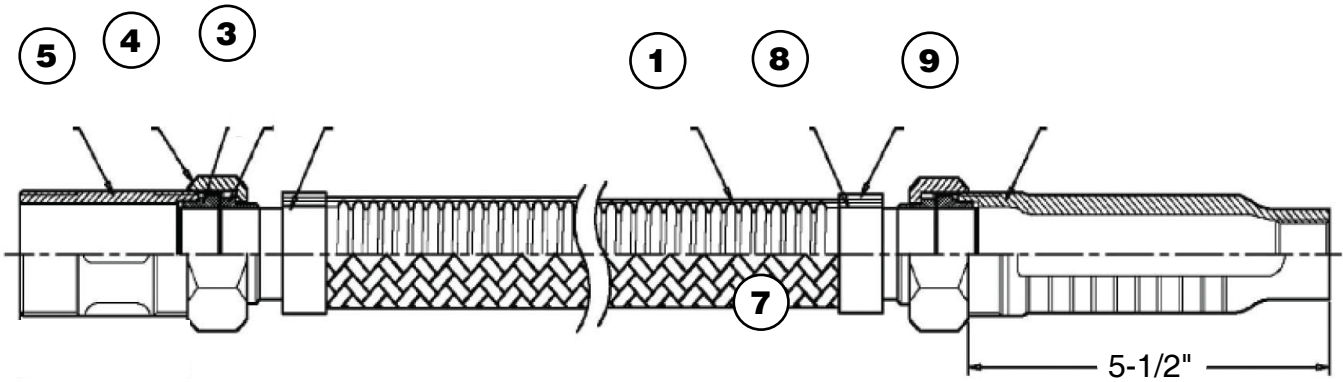


Friction Loss Data and Specifications

Model	Length	NPT	k-Factor	Equivalent Length of 1" Sch 40 Pipe	Max. # of Bends	Min. Bending Radius
AR-400-BRE FLEX-07-050	28"	1/2"	5.6 & 8.0	16.3 ft	1	7"
AR-400-BRE FLEX-10-050	39"	1/2"	5.6 & 8.0	24.4 ft	3	7"
AR-400-BRE FLEX-12-050	47"	1/2"	5.6 & 8.0	29.8 ft	3	7"
AR-400-BRE FLEX-15-050	59"	1/2"	5.6 & 8.0	37.9 ft	4	7"
AR-400-BRE FLEX-18-050	71"	1/2"	5.6 & 8.0	46.0 ft	4	7"

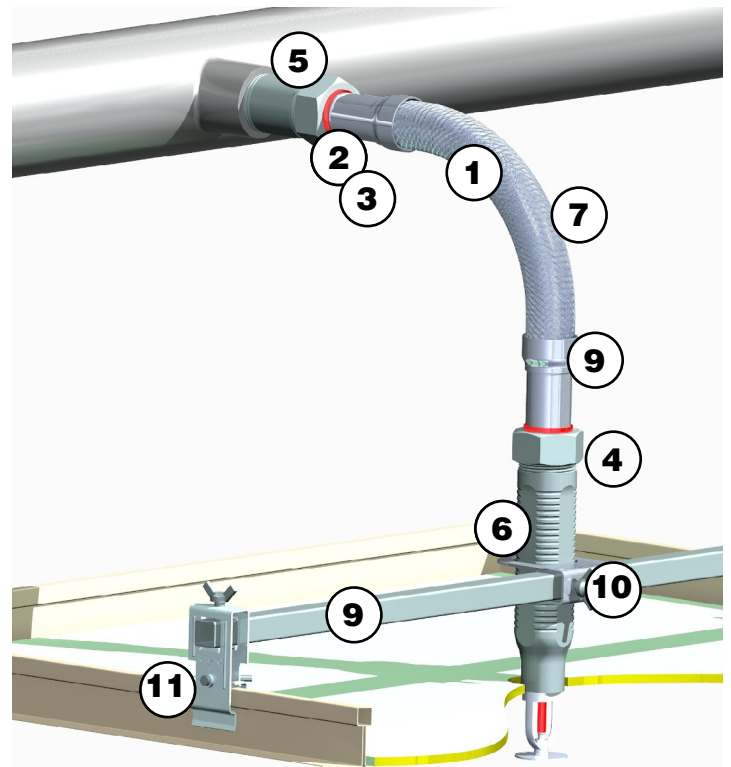
Model	Length	NPT	k-Factor	Equivalent Length of 1" Sch 40 Pipe	Max. # of Bends	Min. Bending Radius
AR-400-BRE FLEX-07-075	28"	3/4"	8.0, 11.2, 14.0	14.7 ft	1	7"
AR-400-BRE FLEX-10-075	39"	3/4"	8.0, 11.2, 14.0	23.4 ft	3	7"
AR-400-BRE FLEX-12-075	47"	3/4"	8.0, 11.2, 14.0	29.2 ft	3	7"
AR-400-BRE FLEX-15-075	59"	3/4"	8.0, 11.2, 14.0	37.9 ft	4	7"
AR-400-BRE FLEX-18-075	71"	3/4"	8.0, 11.2, 14.0	46.8 ft	4	7"

MEGAFLEX
FLEXIBLE SPRINKLER DROP HOSE FULL BORE
BRAIDED CONNECTIONS
with Straight End Connection Inlet

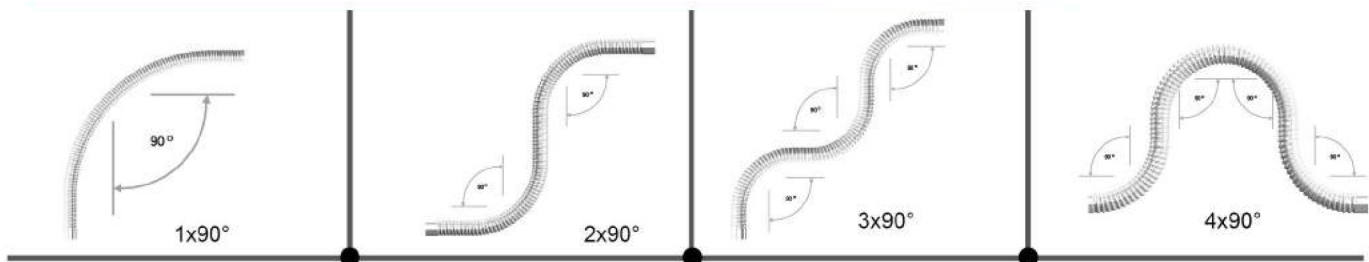


COMPONENTS:

- | | |
|------------------------|---------------------|
| 1. FLEXIBLE TUBE | 304 STAINLESS STEEL |
| 2. ISOLATION RING | NYLON 66 |
| 3. SEALING GASKET | EPDM |
| 4. NUT | ZINC PLATED STEEL |
| 5. NIPPLE 1" | ZINC PLATED STEEL |
| 6. REDUCING NIPPLE | ZINC PLATED STEEL |
| 7. BRAID | 304 STAINLESS STEEL |
| 8. COLLAR RING (OUTER) | 304 STAINLESS STEEL |
| 9. SQUARE BAR | ZINC PLATED STEEL |
| 10. CENTER BRACKET | ZINC PLATED STEEL |
| 11. 4" END BRACKET(S) | ZINC PLATED STEEL |



HOSE BENDING PARAMETERS



FLEXIBLE SPRINKLER DROP HOSE INSTALLATION INSTRUCTIONS



Determine the approximate place where the sprinklers will be located. The sprinkler should be located as close as possible to the center of the distance between ceiling grid's T-bars.

CONNECT INLET NIPPLE

Use a pipe wrench to screw the INLET NIPPLE into the branch outlet. Apply pipe joint compound or Teflon tape to the tapered threads to seal and tighten the branch line nipple into the branch line outlet, with 35ft-lbs/50N•m. **DO NOT OVERTIGHTEN.**

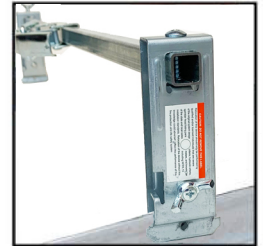
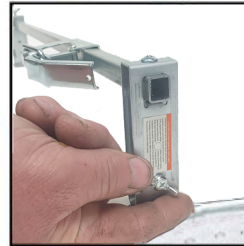
To connect to CPVC pipe, the inlet nipple must be threaded to an approved adapter. *Refer to CPVC manufacturer specifications.



ATTACH BRACKET SET

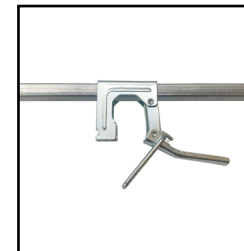
Attach SIDE BRACKETS and SQUARE BAR to the main rail of the T-Bar grid, with the CENTER BRACKET in the middle. Tighten horizontal bolts on the side brackets with 3ft-lbs/4N•m.

A second hole is pre-drilled for optional installation applications.



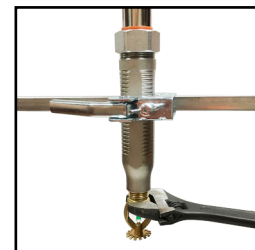
BENDING AND LOCATING

With CENTER BRACKET in the middle of the SQUARE BAR, bend the FLEXIBLE HOSE body as desired (According to hose bending parameters) and locate the DISCHARGE NIPPLE into the CENTER BRACKET and hinge arm and tighten wing nut with 3ft-lbs/4N•m torque, after the proper location of sprinkler head has been determined.



CONNECT DISCHARGE NIPPLE

Apply Teflon tape to the male threads of the sprinkler. Tighten slip nuts of CENTER BRACKET and install sprinkler head to discharge nipple by following the sprinkler manufacturer's installation instructions.



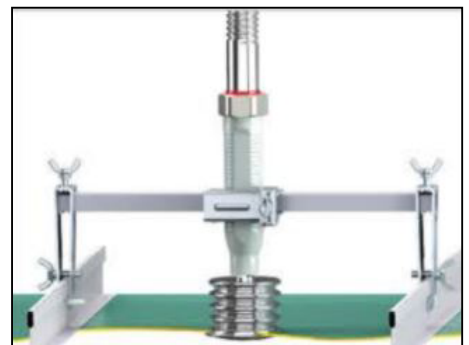
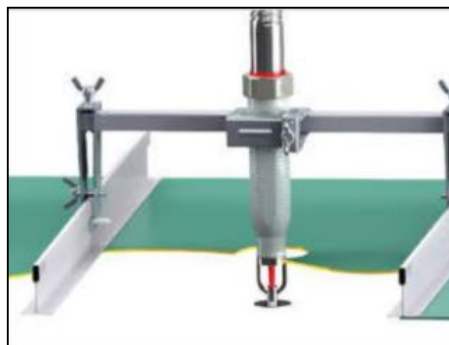
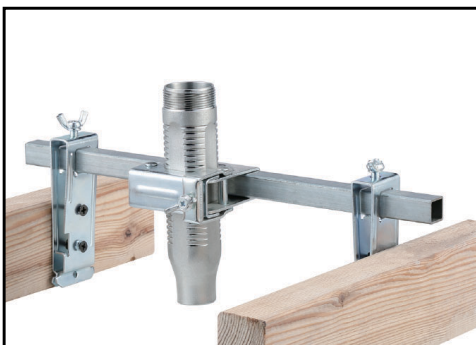
TEST

After installation is complete, test the system for leaks in accordance with NFPA guidelines.

ADDITIONAL SECURITY

Simply add 4x sheet metal screws to build a tamper resistant installation.

STUD INSTALLATION Standard End Bracket is designed to be installed between wood studs/joists. Simply use two wood screws to secure inside wood or metal studs.

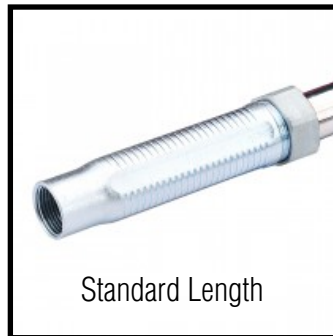


MEGAFLEX FLEXIBLE SPRINKLER DROP HOSE

ACCESSORIES



90° Reducing Nipple
MEGAFLEX HOSE:
6531190: 1" x 1/2"
6531192: 1" x 3/4"
*Only use with part # 6530183
(short end brackets).*

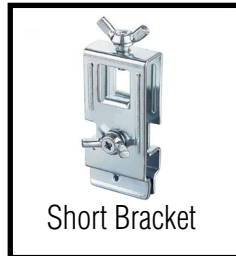


Straight Reducing Nipple MEGAFLEX HOSE
6531180: 1" x 3/4" standard
6531181: 1" x 1/2" standard
6531182: 1" x 1" standard
6531191: 1" x 1/2" x 10" length
6531191-3/4: 1" x 3/4" x 10" length

Standard Length

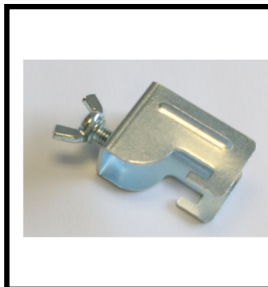


10" Length

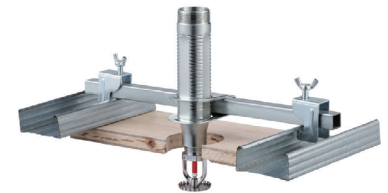


Short Bracket

Flex Hose End Brackets (fits all hoses)
6530185: Standard 4" End Brackets (sold each)
6530183: Short 2-1/4" End Brackets (sold each)
*can be installed between wood studs as well as
suspended ceiling grid



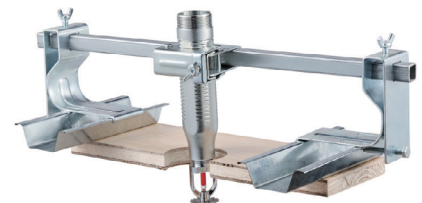
6530194 :
Model MSB
Metal Stud End Bracket
(C-Clamp)



Standard Bracket



6530195:
Model HCB
Furring Channel End Bracket
(Hat Channel Bracket)



Flex Hose Center Brackets
6530184: Center bracket with hinged lever handle
(fits standard and MegaFlex)



Flex Hose Square Bar
6530182: 25" Square bar to fit standard ceiling tile grids
(Fits standard and MegaFlex)



ARGCO Flexible Sprinkler Drops are designed to reduce labor and installation costs by installing without cutting and threading pipe associated with installing a drop, arm-over and elbows. ARGCO offers MegaFlex braided hoses in 28, 40, 48, 60 and 72” lengths with simple brackets for suspended ceilings.

National Fire Protection Association (NFPA):

- NFPA 13: Standard for the Installation of Sprinkler Systems
- NFPA 13R: Standard for the Installation of Sprinkler Systems in residential Occupancies up to and includ four stories in height.

- NFPA 13D: Standard for the Installation of Sprinkler Systems in One and Two-Family Dwellings and Manufactured Homes

- 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 feet.

- NFPA 13 17.4.1.3.3: Where flexible sprinkler hose fittings exceed 6 ft (1.8 m) in length and are supported by a suspende ceiling in accordance with 17.4.1.3.3.2 (2019), a hanger(s) attached to the structure shall be required to ensure that the maximum unsupporte length does not exceed 6 f (1.8 m). (2019 & 2022)

American Society for Testing 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):

- Approved standard for flexible sprinkler hose with threaded end fittings

Underwriter’s Laboratories (FM):

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

International Building Code (IBC):

- Flexible Sprinkler Connections are an alternative solution to install without seismic escutcheons.

System No.			
Submitted By			

Spec Section			
Approved			

