

CAST-IN-PLACE OPTIONAL PIPE SIZE SLEEVE OPS-MT SERIES



For Use With Metallic Pipe Types

For use in

- Concrete floor assemblies with flat form decks
- Dust and fiber free environments such as hospitals, computer centers and laboratories

Product Description

- HydroFlame sleeves offer fire and water protection for a variety of pipe sizes and types that pass through concrete floors in single and multi-story buildings
- These sleeves are delivered to the job site completely assembled and need only be fastened to the wood form deck for installation
- Tested and approved by UL
- OSHA compliant safety cap



Metallic Through Penetrants

½" – 6" pipe sizes: Steel Pipe, Iron Pipe, Conduit (Steel conduit or electrical metallic tubing), Copper

Product Feature & Benefits

- Simple and quick installation
- Helps prevent water, fire, smoke, moisture & mold intrusion
- Each device accepts optional pipe size (1/2"-1"), (1 ¼"-2"), (2" -3"), (3"-4") & (5"-6")
- Sleeves are pre-cut at the factory to your specified height

Not for use in

- Walls

Safety & Precautions

- Keep this device out of reach of children
- Read the Material & Safety Data Sheet

Storage of Device

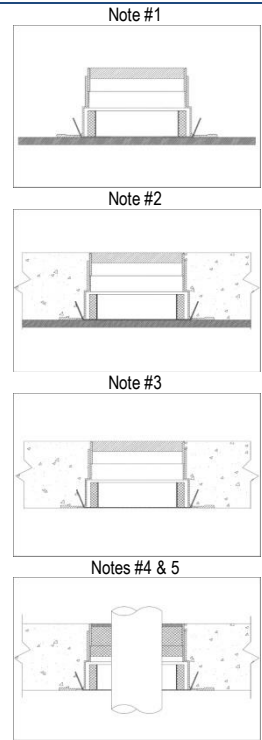
- Store in a covered or closed area protected from weather
- Do not stack devices on top of one another other than how they are shipped from manufacture

Technical Data for HYDROFLAME Firestop Material	
Physical Properties	
Color: Gray/Black	
Heat Expansion (Intumescence)	
Expansion begins:	410°F (210°C)
Significant expansion:	555°F (290°C)
Free expansion:	25 times (5 min @ 662°[350°C])
Weatherability (Tested to ASTM G23 and G53)	
Test Condition	Temperature/Humidity 90°F (32°C)/90%
Time	120 Days
After Exposure	No change in expansion
Surface Burning Characteristics (ASTM E84, UL 723)	
Flame spread index: 0	
Smoke development index: 5	
Testing Data	
UL Fire Tested & Listed to UL 1479 (ASTM E814) Standards	
CAN/UPC S115	



Installation Instructions

- Lay out lines on the wood form deck for the appropriate location of sleeve; center sleeve with the hatch marks on the sleeve base with the layout lines on the wood form deck. **Note: It is recommended to use 6 penny nails through the nail slots to secure device to the deck. You may use appropriate staples to secure the device to form deck by straddling the nail slots on the edge of the base. DO NOT USE SCREWS TO SECURE THE DEVICE TO FORM DECK BECAUSE THE FORM DECK OR DEVICE COULD BE DAMAGED.** A Minimum of 4 holes should be used for nailing the sleeve to the wood form deck.
- Before pouring of concrete slab, be sure the protective cap on top of sleeve is in place before concrete pour. Pour concrete around sleeve to the appropriate concrete thickness.
- After concrete has cured remove wood form deck and the protective cap from the top portion of device before inserting pipe of choice.
- Prior to installation, thoroughly clean the outside of the pipe to be inserted through the sleeve. The pipe must be free of concrete, dirt, paint, rust or anything protruding from the outside of pipe including burrs of pipe material. Make sure the inner seal membrane is clean of all debris, dirt, concrete, or anything that might have gotten on the inner seal membrane during or after construction that could damage the sealing surface of the inner seal membrane when the pipe is inserted through the inner seal membrane. Failure to perform proper cleaning could damage the inner seal membrane of the sleeve when the pipe is installed.
- It is recommended inserting the pipe of choice up through the bottom of the device; this will allow the inner seal membrane to be pushed upward around the pipe of choice forming a complete seal around the pipe. After pipe has been inserted up through bottom of sleeve, properly support on each side of sleeve assembly. **Note:** If water seal is needed, compress mineral wool down into the top of the sleeve approximately 2" so there is a ¼" from the top of sleeve to the top of mineral wool. To achieve water seal use 3M products FB-1000 NS, FB-3000 WT or FB-1003 SL sealant to fill the top of the packed mineral wool and around pipe to form a water tight seal. Sealant to lap a min ½" onto the top surface of concrete around perimeter of firestop device. Please refer to UL listing for full details



Note: HOLDRITE HYDROFLAME is not responsible for sleeve performance when installation instructions are not followed and will not be liable for damage to property or persons due to improper installation of materials or through attempts to utilize the material under conditions which exceed the designed capacities. Purchaser agrees to indemnify and hold us harmless for any and all claims, liabilities, damages, costs and expenses asserted against us or incurred by us because of injuries to persons or damages to property resulting from the improper installation or misuse of the material. For additional warranty limitations, refer to HOLDRITE's Limited Warranty dated 1/15/13.

Product Submittal	
Job Name:	Architect/Owner:
Date:	Contractor:
Part#:	Qty:
	Notes:

System No. F-B-1017 XHEZ.F-B-1017 Through-penetration Firestop Systems

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Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered Certified.

XHEZ - Through-penetration Firestop Systems

XHEZ7 - Through-penetration Firestop Systems Certified for Canada

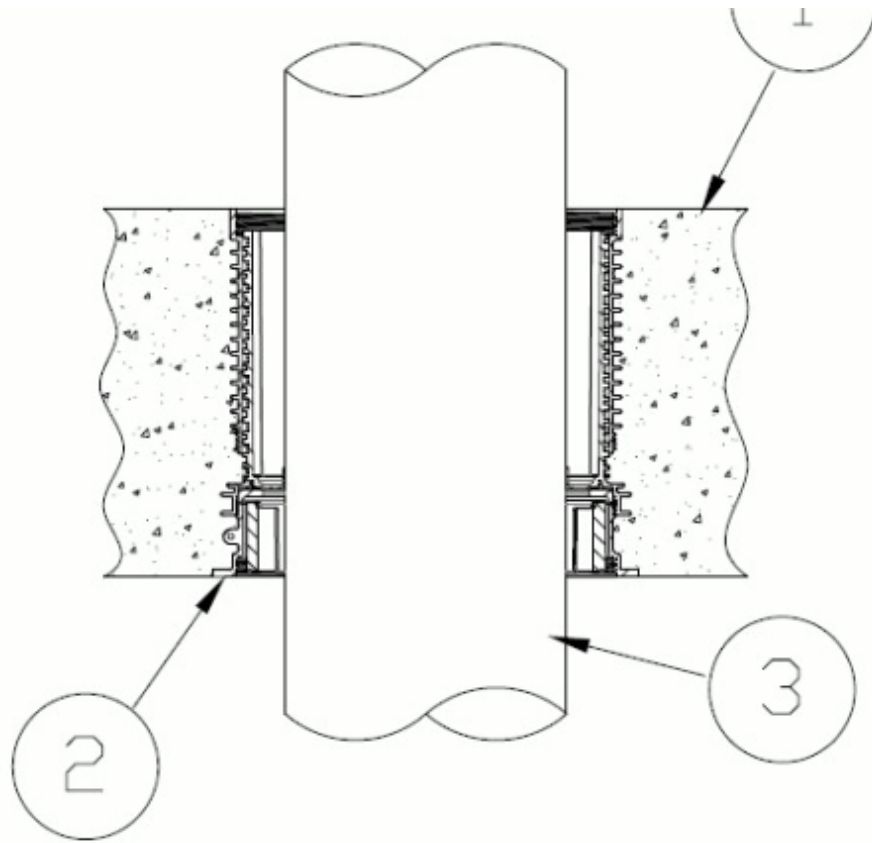
[See General Information for Through-penetration Firestop Systems](#)

[See General Information for Through-penetration Firestop Systems Certified for Canada](#)

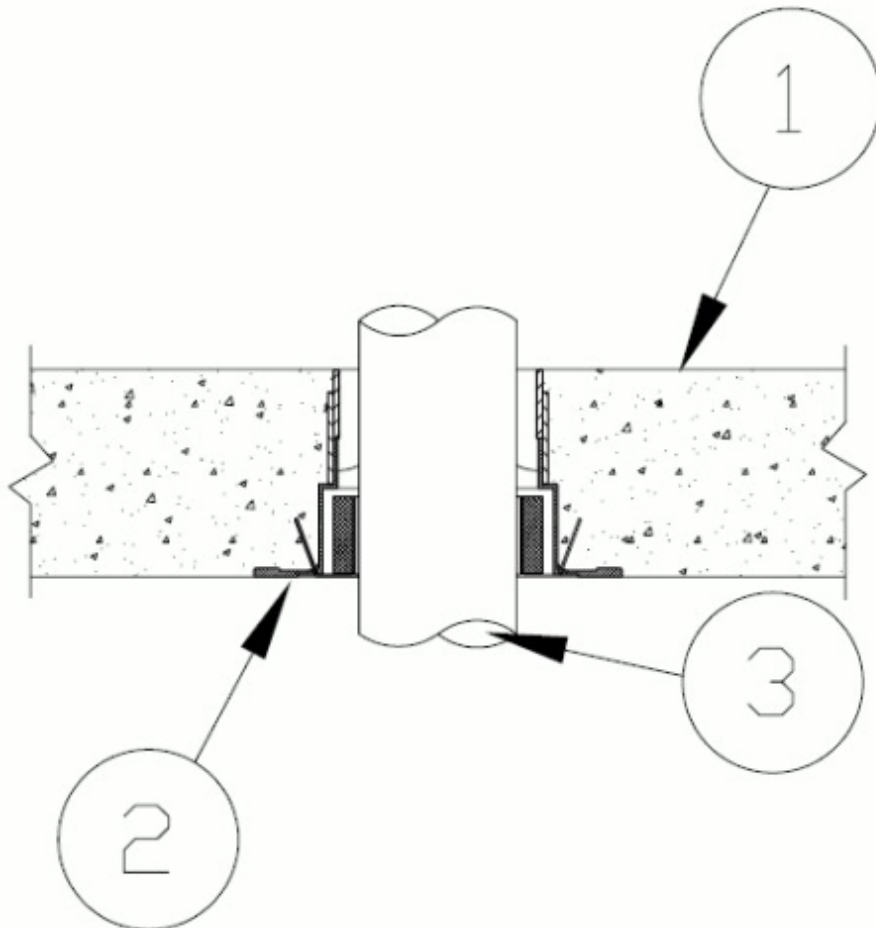
System No. F-B-1017

September 19, 2016

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 3 Hr	F Rating — 3 Hr
T Rating — 0 Hr	FT Rating — 0 Hr
L Rating At Ambient — Less Than 1 CFM/Lin Ft	FH Rating — 3 Hr
L Rating At 400°F — Less Than 1 CFM/Lin Ft	FTH Rating — 0 Hr
W Rating — Class 1 (See Item 5)	L Rating At Ambient — Less Than 5.1L/s-m ²
	L Rating At 400°F — Less Than 5.1L/s-m ²



Configuration A



Configuration B

kg/m³) concrete measured above the base of the device.

2. **Firestop Device*** — Cast in place firestop device permanently embedded during concrete placement in accordance with accompanying installation instructions. The device shall be installed flush with top and bottom surfaces of floor. The devices are sized to accommodate the following nom pipe sizes:

Configuration A HFP devices and optional accessories (not shown) includes sleeve extension, water module, aerator adapter and/or Water dam installed in accordance with installation instructions.

Configuration B devices, optional accessory (not shown) aerator adapter installed in accordance with the installation instructions.

The devices are sized to accommodate the following nom pipe sizes:

Nom Pipe Diam in. (mm)	Conf A Firestop Devices for Concrete Slab	Conf B Firestop Devices for Concrete Slab
1/2 to 1 (13 to 25)	HFP-M1, HFP-M1B, HFP-P1, HFP-P1B	WD-PL-0100, OPS-PL-0100, OPS-MT-0100
1-1/4 to 2 (32 to 51)	HF-M2, HFP-M2B, HFP-P2, HFP-P2B	WD-PL-0200, OPS-PL-0200, OPS-MT-0200
2 to 3 (51 to 76)	HFP-M3, HFP-M3B, HFP-P3, HFP-P3B	WD-PL-0300, OPS-PL-0300, OPS-MT-0300
3 to 4 (76 to 102)	HFP-M4, HFP-M4B, HFP-P4, HFP-P4B	WD-PL-0400, OPS-PL-0400, OPS-MT-0400
5 to 6 (127 to 152)	HFP-M6, HFP-M6B, HFP-P6, HFP-P6B	WD-PL-0600, OPS-PL-0600, OPS-MT-0600

SECURUS INC, DBA HOLDRITE — HydroFlame OPS-MT, OPS-PL, WD-PL, HFP-Mx, HFP-MxB, HFP-Px HFP-PxB

3. **Through Penetrant** — One metallic pipe, conduit or tubing to be installed within the firestop device. Pipe, conduit or tubing to be installed in accordance with firestop device installation instructions and rigidly supported on both sides of floor assembly. The following types of pipe, conduit or tubing may be used:

- A. **Steel Pipe** — Nom 6 in. (152 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
- B. **Iron Pipe** — Nom 6 in. (152 mm) diam (or smaller) cast or ductile iron pipe.
- C. **Conduit** — Nom 6 in. (152 mm) diam (or smaller) rigid steel conduit or nom 4 in. (102 mm) diam steel electrical metallic tubing.
- D. **Copper Tubing** — Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tubing.
- E. **Copper Pipe** — Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.

4. **Packing Material** — (Optional, Not Shown) — Min 2 in. (51 mm) depth of min 4 pcf (64 kg/m³) mineral wool batt insulation tightly-packed into annular space between penetrant and device with its top surface flush with the top surface of the floor. When optional sealant (Item 5) is used, top surface of packing material to be recessed min 1/4 in. (6 mm) from top surface of floor. W Rating applies only when packing material and sealant (Item 5) is used.

4A. **Packing Material** — (Optional instead of 4, Not Shown) — Foam backer rod firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor as required to accommodate the required thickness of fill material.

5. **Fill, Void or Cavity Material* — Sealant** — (Optional, Not Shown) — Min 1/4 in. (6 mm) thickness of sealant applied within the annulus, flush with the top surface of floor. Conf B (Only), Sealant to lap min 1/2 in. (13 mm) onto top surface of concrete around perimeter of firestop device. As an alternate 100% silicone sealant can be used.

For Configuration B, W Rating and L Ratings apply only when packing material (Item 4) and sealant (Item 5) is used.

3M COMPANY 3M FIRE PROTECTION PRODUCTS — FB-1000 NS, FB-3000 WT or FB-1003 SL

RECTORSEAL — Metacaulk 835+ or Biotherm 100 or 200

6. **Pipe Tee Fitting System** — (Optional, Not Shown) — For use with Iron Pipe (Item 3B) only, One nom 6 in. (152 mm) diam (or smaller) PVC TESTRITE TEE Fitting (matched to penetrant diameter). The PVC TESTRITE TEE Fitting is secured to metallic penetrant (Item 3B) with compression type pipe coupling elastomeric gasket with stainless steel

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

Last Updated on 2016-09-19

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System No. F-A-1133 XHEZ.F-A-1133 Through-penetration Firestop Systems

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XHEZ - Through-penetration Firestop Systems

XHEZ7 - Through-penetration Firestop Systems Certified for Canada

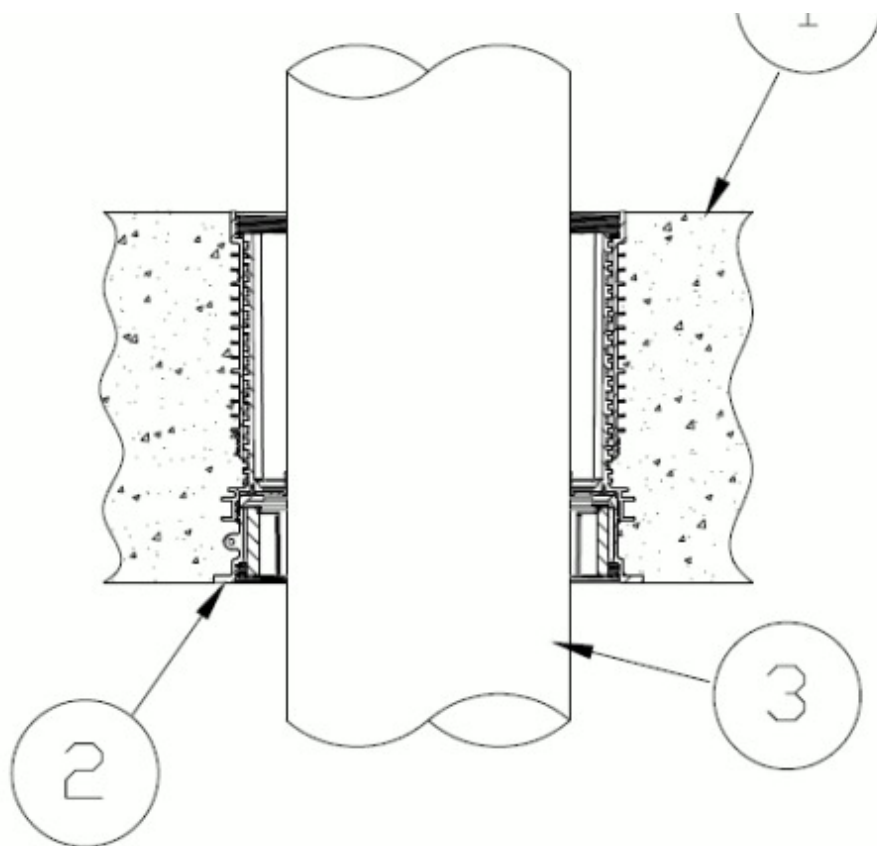
[See General Information for Through-penetration Firestop Systems](#)

[See General Information for Through-penetration Firestop Systems Certified for Canada](#)

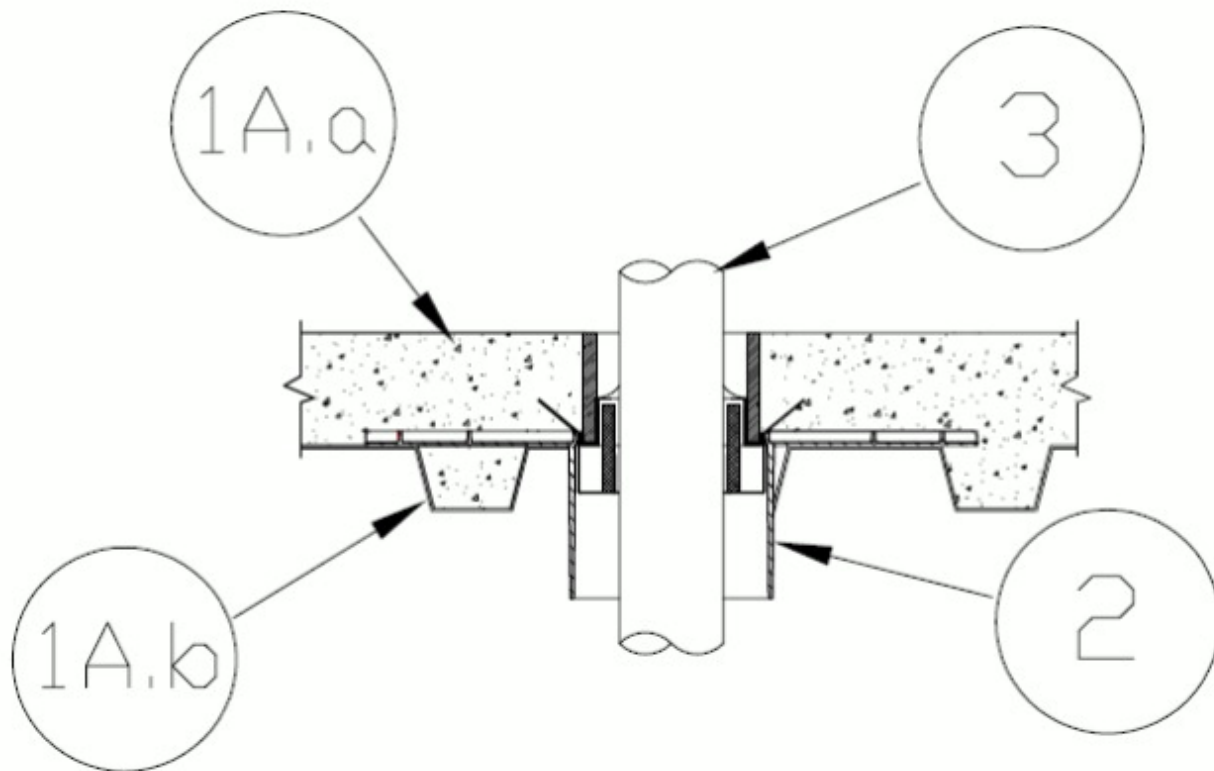
System No. F-A-1133

September 12, 2016

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Ratings — 2 and 3 Hr (See Item 6)	F Ratings — 2 and 3 Hr (See Item 6)
T Rating — 0 Hr	FT Rating — 0 Hr
L Rating At Ambient — Less Than 1 CFM/sq ft	FH Rating — 3 Hr
L Rating At 400 F — Less Than 1 CFM/sq ft	FTH Rating — 0 Hr
W Rating — Class 1 (See Item 5)	L Rating At Ambient — Less Than 1 CFM/sq ft
	L Rating At 400 F — Less Than 1 CFM/sq ft



Configuration A



Configuration B

System tested with a pressure differential of 2.5 Pa between the exposed and the unexposed surfaces with the higher pressure on the exposed side.

1. Floor Assembly — The fire-rated concrete and fluted steel deck floor assembly shall be constructed of the materials and in the manner specified in the individual D900 Series designs in the UL Fire Resistance Directory and as

over top of device base.

B. Steel Floor and Form Units* — Composite or noncomposite nom 3 in. (76 mm) deep fluted galv units as specified in the individual Floor-Ceiling design. Diam of opening cut through fluted floor unit to be maximum 1/4 in. (6 mm) larger than outside diameter of bottom extension portion of firestop device base.

1A. Floor Assembly — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight 100-150 pcf (1600-2400 kg/m³) concrete. Measured over the top of the device base.

Configuration A

2. Firestop Device* — Cast in place firestop device permanently embedded during concrete placement in accordance with accompanying installation instructions. The device shall be installed flush with top and bottom surfaces of floor. A HFP devices and optional accessories (not shown) includes sleeve extension, water module, deck adapter, aerator adapter and/or water dam installed in accordance with installation instructions. The devices are sized to accommodate the following nom pipe sizes:

Nom Pipe Diam in. (mm)	Firestop Devices for Concrete Slab	Firestop Devices for Fluted Deck (Not Shown)
1/2 to 1 (13 to 25)	HFP-M1, HFP-M1B, HFP-P1, HFP-P1B	add HFPCD1
1-1/4 to 2 (32 to 51)	HF-M2, HFP-M2B, HFP-P2, HFP-P2B	add HFPCD2
2 to 3 (51 to 76)	HFP-M3, HFP-M3B, HFP-P3, HFP-P3B	add HFPCD3
3 to 4 (76 to 102)	HFP-M4, HFP-M4B, HFP-P4, HFP-P4B	add HFPCD4
5 to 6 (127 to 152)	HFP-M6, HFP-M6B, HFP-P6, HFP-P6B	add HFPCD6

SECURUS INC, DBA HOLDRITE — HydroFlame HFP-Mx, HFP-MxB, HFP-Px HFP-PxB

Configuration B

2. Firestop Device* — Cast in place firestop device permanently embedded during concrete placement in accordance with accompanying installation instructions. The device shall be installed flush with top and bottom surfaces of floor. Optional accessory (not shown) aerator adapter installed in accordance with the installation instructions. The devices are sized to accommodate the following nom pipe sizes

Nom Pipe Diam in. (mm)	Firestop Devices for Concrete Slab	Firestop Devices for Fluted Deck (Not Shown)
1/2 to 1 (13 to 25)	CD-PL-0100, CD-OPS-PL-0100, CD-OPS-MT-0100	WD-PL-0100, OPS-PL-0100, OPS-MT-0100
1-1/4 to 2 (32 to 51)	CD-PL-0200, CD-OPS-PL-0200, CD-OPS-MT-0200	WD-PL-0200, OPS-PL-0200, OPS-MT-0200
2 to 3 (51 to 76)	CD-PL-0300, CD-OPS-PL-0300, CD-OPS-MT-0300	WD-PL-0300, OPS-PL-0300, OPS-MT-0300
3 to 4 (76 to 102)	CD-PL-0400, CD-OPS-PL-0400, CD-OPS-MT-0400	WD-PL-0400, OPS-PL-0400, OPS-MT-0400
5 to 6 (127 to 152)	CD-PL-0600, CD-OPS-PL-0600, CD-OPS-MT-0600	WD-PL-0600, OPS-PL-0600, OPS-MT-0600

SECURUS INC, DBA HOLDRITE — HydroFlame CD-OPS-MT, CD-PL, CD-OPS-PL,WD-PL, OPS-PL, OPS-MT

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A. Steel Pipe — Nom 6 in. (152 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.

B. Iron Pipe — Nom 6 in. (152 mm) diam (or smaller) cast or ductile iron pipe.

C. Conduit — Nom 6 in. (152 mm) diam (or smaller) rigid steel conduit or nom 4 in. (102 mm) diam steel electrical metallic tubing.

4. Packing Material — (Optional, Not Shown) — Min 2 in. (51 mm) depth of min 4 pcf (64 kg/m³) mineral wool batt insulation tightly-packed into annular space between penetrant and device, flush with the top surface of the floor. When optional sealant (Item 5) is used, top surface of packing material to be recessed min 1/4 in. (6 mm) from top surface of floor.

4A. Packing Material — (Optional instead of 4, Not Shown) — Foam backer rod firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor as required to accommodate the required thickness of fill material.

5. Fill, Void or Cavity Material* — Sealant — (Optional, Not Shown) — Min 1/4 in. (6 mm) thickness of sealant applied within the annulus, flush with the top surface of floor. Conf B (Only), Sealant to lap min 1/2 in. (13 mm) onto top surface of concrete around perimeter of firestop device. As an alternate 100% silicone sealant can be used.

For Configuration B, The L Rating and W Rating applies only when packing material (Item 4) and sealant (Item 5) is used.

3M COMPANY 3M FIRE PROTECTION PRODUCTS — FB-1000 NS, FB-3000 WT or FB-1003 SL

RECTORSEAL — Metacaulk 835+ or Biotherm 100 or 200

6. Pipe Tee Fitting System — (Optional, Not Shown) — For use with Iron Pipe (Item 3B) only, One nom 6 in. (152 mm) diam (or smaller) PVC TESTRITE TEE Fitting (matched to penetrant diameter). The PVC TESTRITE TEE Fitting is secured to metallic penetrant (Item 3B) with compression type pipe coupling elastomeric gasket with stainless steel jacket and stainless steel band clamps for use in vented (drain, waste or vent) iron pipe systems. Installed (Item 3B) penetrant shall extend a minimum of 6 in. (152 mm) above the surface of the floor and minimum 12 in. (302 mm) below the bottom surface of the floor above assembly.

When Item 6 is used within 24 in. (610 mm) of the device (Item 2) the F rating is limited to 2 Hours.

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

Last Updated on 2016-09-12

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