

XHEZ.F-A-1122 - Through-penetration Firestop Systems

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

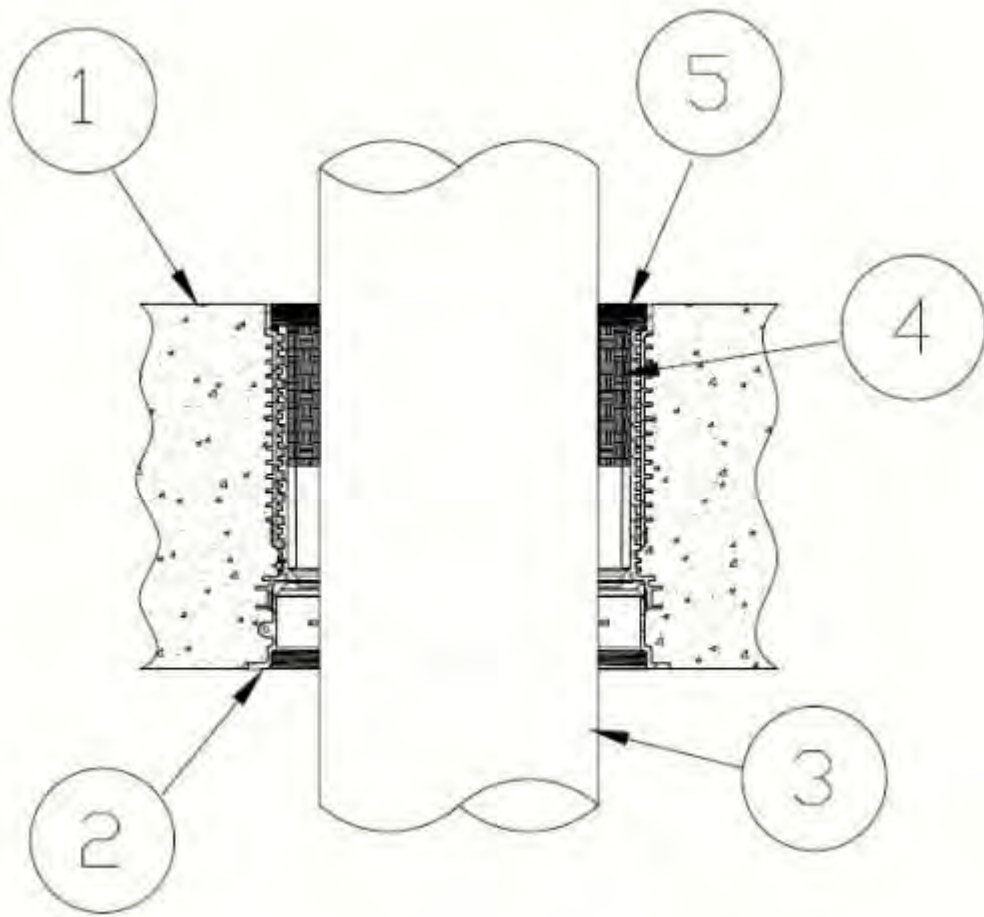
System No. F-A-1122

June 24, 2020

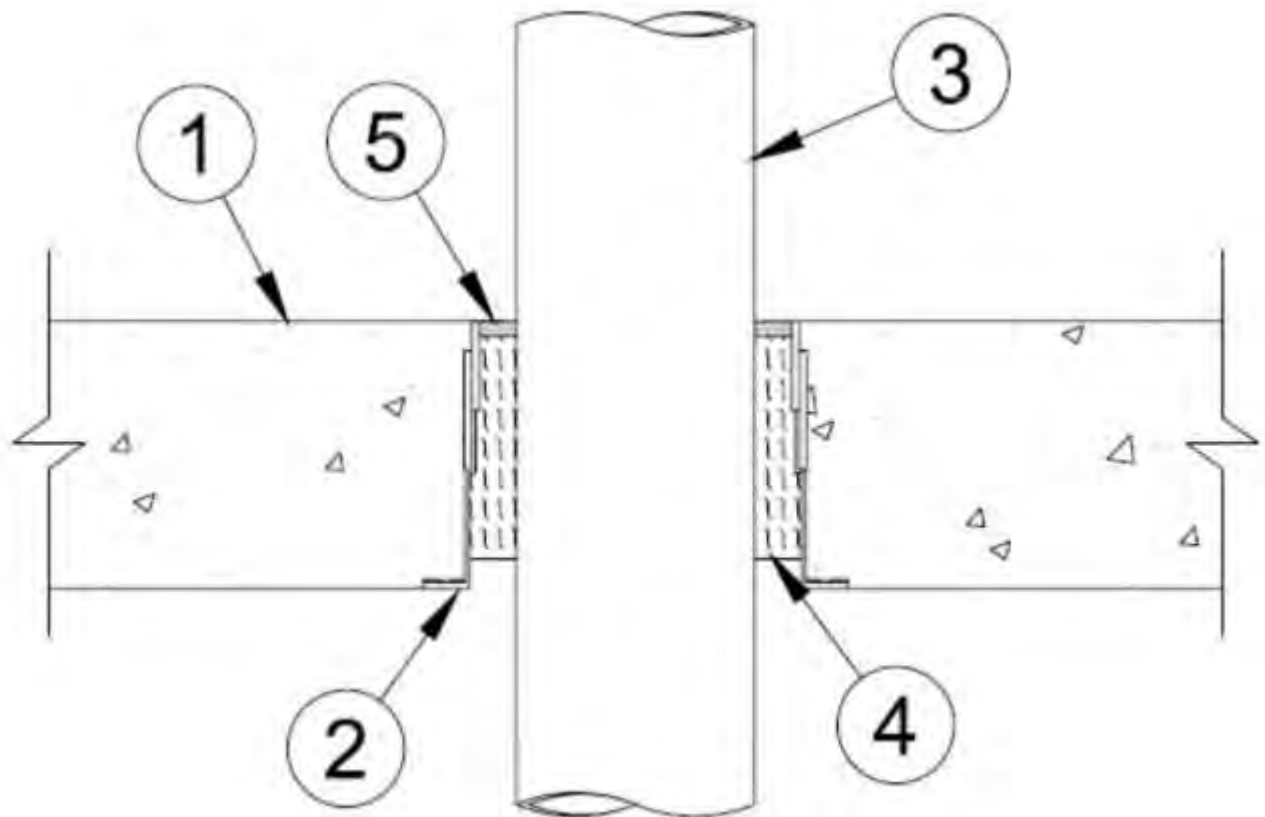
ANSI/UL1479 (ASTM E814)

CAN/ULC S115

F Rating — 2 Hr	F Rating — 2 Hr
T Rating — 0 Hr	FT Rating — 0 Hr
L Rating At Ambient — Less Than 1 CFM/sq ft	FH Rating — 2 Hr
L Rating At 400°F — 2 CFM/sq ft	FTH Rating — 0 Hr
W Rating — Class 1	L Rating At Ambient — Less Than 5.1 L/s/m ³
	L Rating At 400°F — 10.2 L/s/m ³



Configuration A



Configuration B

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

1A. **Alternate Floor Assembly** — (Optional, Not Shown) — The fire rated unprotected concrete and steel 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 summarized below:

A. **Concrete** — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight 100-150 pcf (1600-2400 kg/m³) concrete, measured above the base of the device.

B. **Steel Floor and Form Units*** — Composite or non-composite max 3 in. (76 mm) deep galv steel fluted units as specified in the individual Floor-Ceiling Design.

Configuration A

2. **Firestop Device*** — Cast in place firestop device permanently embedded during concrete placement or grouted in concrete assembly in accordance with accompanying installation instructions. The device shall be installed flush with top and bottom surfaces of floor. Optional accessories (not shown) includes sleeve extension, water module, water dam, deck adapter, mid body seal and/or aerator adapter installed in accordance with installation instructions.

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

Nom Pipe Diam in. (mm)	Devices for Concrete Slab	Devices for Fluted Deck (Not Shown)
1/4 to 1-1/4 (6 to 32)	HFP-H2, HFP-H2B	add HFPCD1
1 to 2 (25 to 51)	HFP-H3, HFP-H3B	add HFPCD2
1-1/4 to 3 (32 to 76)	HFP-H4, HFP-H4B	add HFPCD3
2-1/2 to 4 (64 to 102)	HFP-H5, HFP-H5B	add HFPCD4
4 to 5(102 to 127)	HFP-H6, HFP-H6B	add HFPCD5
5 to 6 (127 to 152)	HFP-H7, HFP-H7B	add HFPCD6

HOLDRITE — HydroFlame, HFP-Hx, HFP-HxB

3. **Through-Penetrant** — One metallic pipe, conduit or tubing installed concentrically within the firestop system. The annular space shall be min 1/2 in. (13 mm) to max 2-3/8 in. (60 mm). Pipe, conduit or tubing to be 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. **Conduit** — Nom 6 in. (152 mm) diam (or smaller) steel electrical metallic tubing (EMT) or steel conduit.

C. **Copper Tubing** — Nom 6 in. (152 mm) diam (or smaller) Type M (or heavier) copper tubing.

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

4. **Packing Material** — Min 3-3/4 in. (95 mm) thickness of min 4 pcf (64 kg/m³) mineral wool batt insulation firmly packed into opening as a permanent form so that the width of the wool is compressed at least 50 percent. 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** — Min 1/4 in. (6 mm) thickness of sealant applied within the annulus, flush with the top surface of floor to attain W Rating.

RELIANCE WORLDWIDE CORPORATION DBA HOLDRITE HYDROFLAME — HydroFlame 100, HydroFlame 200, HydroFlame 300SL, HydroFlame 300 CG

6. **Pipe Tee Fitting System** — (Optional, Not Shown) — For use with Iron Pipe (Item 3D) 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 3D) 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 3D) 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 assembly.

Configuration B

2. **Firestop Device*** — Max 8 in. (203 mm) diam cast in place firestop device permanently embedded during concrete placement or grouted in concrete 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.

HOLDRITE — HydroFlame WD, CD Sleeve

When HydroFlame WD 0600 Sleeve is used, the nominal 1 by 0.3 in. (25 by 7.6 mm) void created by the stepped base within the sleeve shall be tightly-packed with mineral wool batt insulation (Item 4) during firestop installation if concrete floor assembly is less than 7 in. (178 mm) thick.

3. **Through-Penetrant** — One metallic pipe, conduit or tubing installed concentrically within the firestop system. The annular space shall be min 1/2 in. (13 mm) to max 2-3/8 in. (60 mm). Pipe, conduit or tubing to be rigidly supported on both sides of floor assembly. The following types of pipe, conduit or tubing may be used:

A. **Steel Pipe** — Nom 4 in. (102 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.

B. **Conduit** — Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing (EMT) or steel conduit.

C. **Copper Tubing** — Nom 4 in. (102 mm) diam (or smaller) Type M (or heavier) copper tubing.

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

4. **Packing Material** — Min 3-3/4 in. (95 mm) thickness of min 4 pcf (64 kg/m³) mineral wool batt insulation firmly packed into opening as a permanent form so that the width of the wool is compressed at least 50 percent. 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** — Min 1/4 in. (6 mm) thickness of sealant applied within the annulus, flush with the top surface of floor. A Min 1/2 in. (13 mm) thickness of sealant applied within the annulus, flush with the top surface of floor to attain W-Rating. Sealant must lap onto top surface of concrete floor around entire perimeter of firestop device to attain W Rating.

RELIANCE WORLDWIDE CORPORATION DBA HOLDRITE HYDROFLAME — HydroFlame 100, HydroFlame 200, HydroFlame 300SL, HydroFlame 300 CG

6. **Pipe Tee Fitting System** — (Optional, Not Shown) — For use with Iron Pipe (Item 3D) 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 3D) 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 3D) 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 assembly.

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

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL's Follow-Up Service. Only those products bearing the UL Mark should be considered to be Certified and covered under UL's Follow-Up Service. Always look for the Mark on the product.

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