

THROUGH-PENETRATION FIRESTOP SYSTEM

Assembly Usage Disclaimer

Search Parameters

Manufacturer

Holdrite

XHEZ - Through-penetration Firestop Systems

XHEZ7 - Through-penetration Firestop Systems Certified for Canada

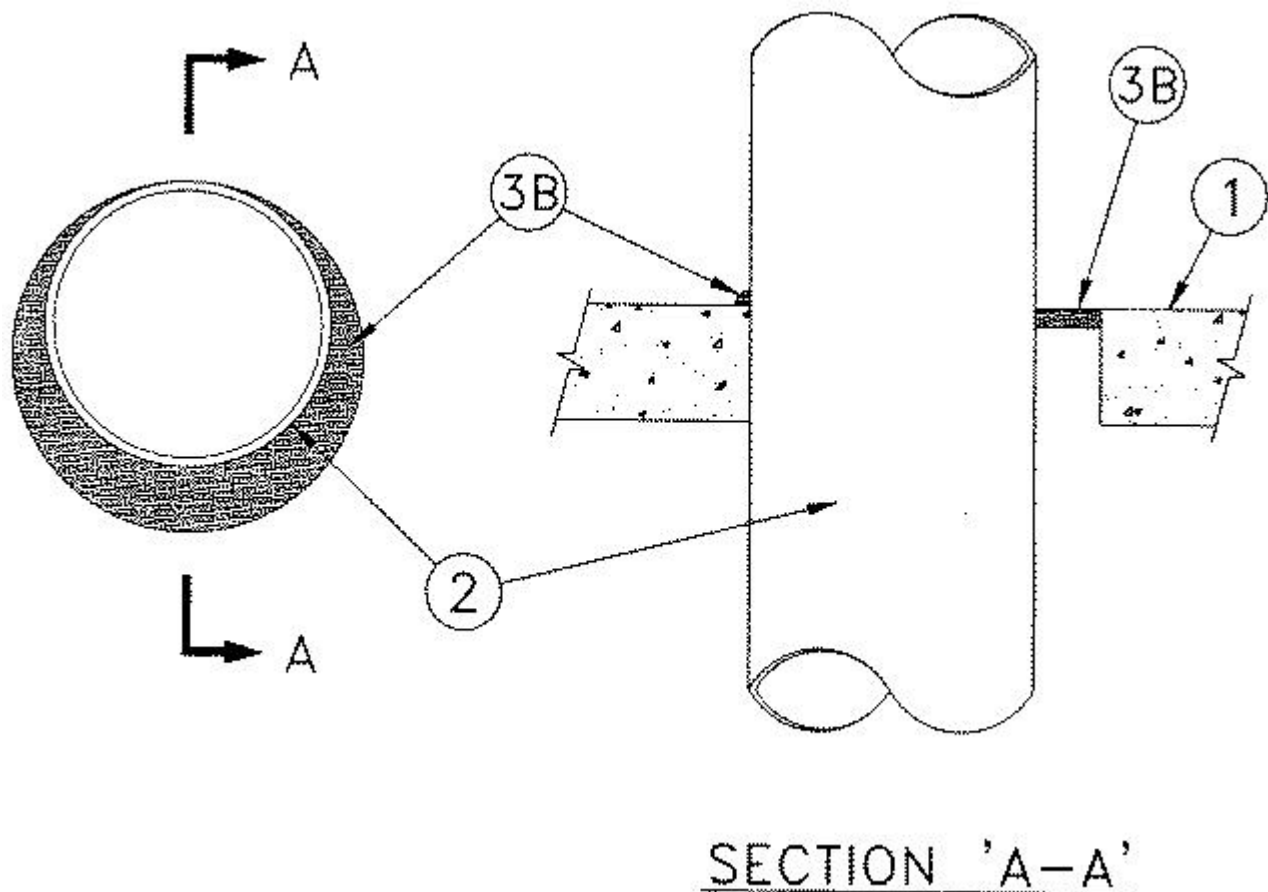
[See General Information for Through-penetration Firestop Systems](#)

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

System No. C-AJ-1696

January 25, 2019

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



SECTION 'A-A'

1. Floor or Wall Assembly — Min 4-1/2 in. (114 mm) thick reinforced normal weight (140-150 pcf or 2200-2400 kg/m³) concrete. Floor may also be constructed of any min 6 in. (152 mm) thick UL Classified hollow-core **Precast Concrete Units***. **Wall may also be constructed of any UL Classified Concrete Blocks***. Max diam of opening is 26 in. (660 mm). If the firestop system is installed within a hollow-core hollow-core precast concrete unit, max diam of opening shall be 7 in. (178 mm). See **Concrete Block (CAZT)** and **Precast Concrete Units (CFTV)** categories in the Fire Resistance Directory for names of manufacturers.

1A. Metallic Sleeve — (Not shown, Optional) — Nom 8 in. (203 mm) diam (or smaller) Schedule 10 (or heavier) steel sleeve cast or grouted into floor or wall assembly, flush with floor or wall surfaces. The use and the max diam of the steel sleeve is dependent upon the type and max diam of the through penetrant (Item 3) and type and min fill material thickness as tabulated in Item 3B.

2. Through Penetrants — One metallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the firestop system. The annular space between the pipe, conduit or tubing and the periphery of the opening shall be min 0 in. (point contact) to a max 1-7/8 in. (48 mm). Pipe, conduit or tubing to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:

A. Steel Pipe — Nom 24 in. (610 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.

B. Iron Pipe — Nom 24 in. (610 mm) diam (or smaller) cast or ductile iron pipe.

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

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.

3. Firestop System — The firestop system shall consist of the following:

A. **Packing Material** — Min 4 pcf (64 m³) mineral wool batt insulation firmly packed into opening or min 1 in. (25 mm) diam backer rod friction fitted into the opening as a form. Packing material to be recessed from top surface of floor or from both surfaces of wall as required to accommodate the required thickness of fill material. When the floor is constructed of hollow-core precast concrete units, packing material shall be recessed from both surfaces of floor to accommodate the required thickness of fill materials. In floors, the packing material may be removed after the fill material cures.

B. **Fill, Void or Cavity Material* — Sealant** — Fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall. At the point contact location between through penetrant and concrete, a min 3/8 in. (10 mm) diam bead of fill material shall be applied at the concrete/through penetrant interface on the top surface of floor and on both surfaces of wall. When the floor is constructed of hollow-core precast concrete units, fill material shall be installed symmetrically on both sides of floor, flush with both floor surfaces. The F Rating of the firestop system is dependent upon the use and the max diam of the steel sleeve, type and max diam of the through penetrant and type and min fill material thickness as tabulated below:

Use of Steel Sleeve	Max Diam of Steel Sleeve In.	Type of Through Penetrant	Max Diam of Through Penetrant In.	Type of Fill Mtl	Min Fill Mtl Thkns In.
Not permitted	-	Steel or Iron Pipe	24 (610)	HydroFlame 200	1 (25)
Permitted	8 (203)	Steel or Iron Pipe	6 (152)	HydroFlame 200	1 (25)
Permitted	8 (203)	Copper Pipe,	6 (152)	HydroFlame 200	1 (25)
		Copper			

		Tube or			
		Steel Conduit			
Permitted	6 (152)	Steel EMT	4 (102)	HydroFlame 200	1 (25)
Permitted	6 (152)	Steel or Iron Pipe	4 (102)	HydroFlame 200	1/2 (13)
Permitted	6 (152)	Copper Pipe,	4 (102)	HydroFlame 200	1/2 (13)
		Copper Tube or			
		Steel Conduit			
Permitted	6 (152)	Steel EMT	4 (102)	HydroFlame 200	1/2 (13)
Not permitted	-	Steel or Iron Pipe	24 (610)	HydroFlame 100	1/2 (13)
Permitted	8 (203)	Steel or Iron Pipe	6 (152)	HydroFlame 100	1/2 (13)
Permitted	8 (203)	Copper Pipe,	6 (152)	HydroFlame 100	1/2 (13)
		Copper Tube or			
		Steel Conduit			
Permitted	6 (152)	Steel EMT	4 (102)	HydroFlame 100	1/2 (13)

**RELIANCE WORLDWIDE CORPORATION DBA HOLDRITE
HYDROFLAME — HydroFlame 100, HydroFlame 200**

*** 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 2019-01-25

- 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.

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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