

# XHEZ.C-AJ-1740 - 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

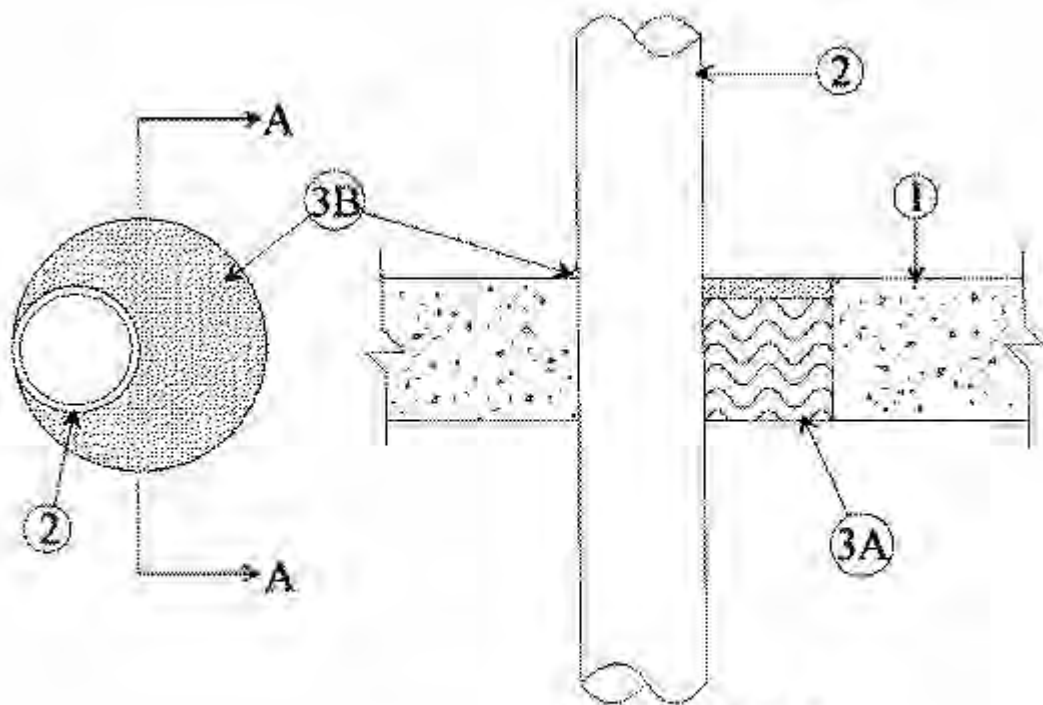
See General Information for Through-penetration Firestop Systems

See General Information for Through-penetration Firestop Systems Certified for Canada

### System No. C-AJ-1740

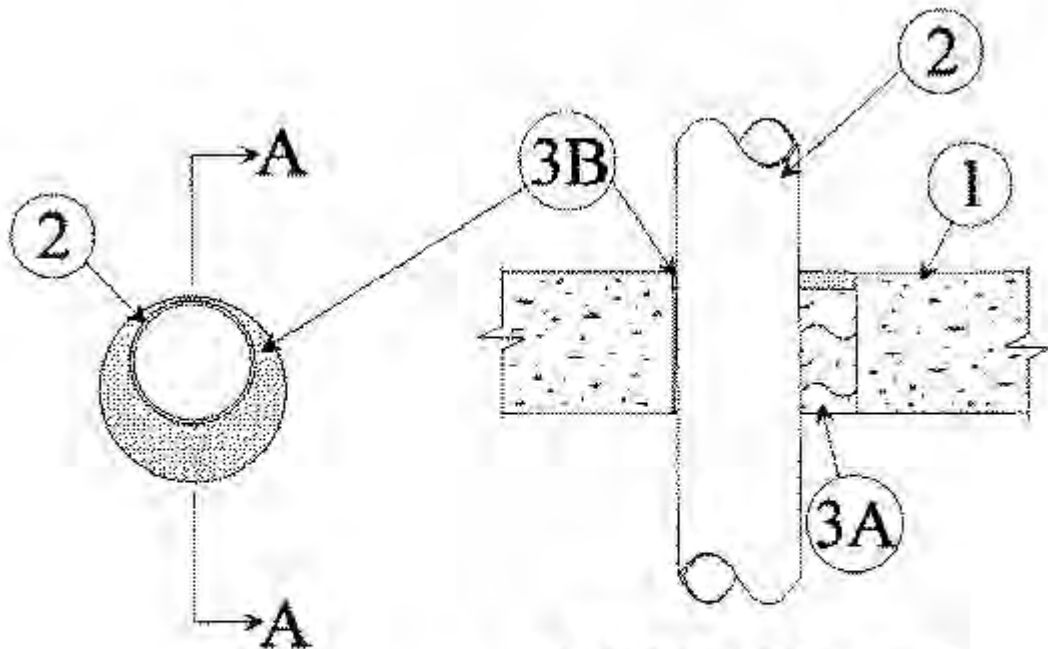
January 09, 2020

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating - 2 Hr	F Rating -2 Hr
	FH Rating -2 Hr
T Rating - 0 Hr	FT Rating - 0 Hr
	FTH Rating -0 Hr
L Rating at Ambient - Less than 1 CFM/sq ft— Less Than 1 CFM/Sq Ft	L Rating at Ambient - Less than L/s/m2. 1 CFM/ft2
L Rating at 400° F - Less than 1 CFM/sq ft— Less Than 1 CFM/Sq Ft	L Rating at 204 C- Less than L/s/m2. 1 CFM/ft2



**SECTION A-A**

**FIRESTOP CONFIGURATION A**



**SECTION A-A**

**FIRESTOP CONFIGURATION B**

1. **Floor or Wall Assembly** — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf (1600-2400 kg/cu meter) ) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks\***. Floor may also be constructed of any min 6 in. (152 mm) thick UL Classified hollow-core **Precast Concrete Units\***. If the firestop system is installed within a hollow-core precast concrete unit, max diam of opening shall be 7 in. (178 mm) .Otherwise, max diam of opening is 14 in. (356 mm).

See **Concrete Blocks** (CAZT) and **Precast Concrete Units** (CFTV) categories in the Fire Resistance Directory for names of manufacturers.

2. **Through Penetrants** — One metallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the firestop system. 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 12 in. (305 mm) diam (or smaller) Schedule 40 (or heavier) steel pipe. The annular space shall be min 0 in. to max 7/8 in. (22 mm) for pipes 4 in. (102 mm) diam (or smaller). The annular space shall be min 1/4 in. (6 mm) to max 1 in. (25 mm) for pipes 12 in. (305 mm) diam (or smaller).

B. **Iron Pipe** — Nom 12 in. (305 mm) diam (or smaller) cast or ductile iron pipe. The annular space shall be min 0 in. to max 7/8 in. (22 mm) for pipes 4 in. (102 mm) diam (or smaller). The annular space shall be min 1/4 in. (6 mm) to max 1 in. (25 mm) for pipes 12 in. (305 mm) diam (or smaller).

C. **Conduit** — Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing or steel conduit. The annular space shall be min 0 in. to max 7/8 in. (22 mm).

D. **Copper Tubing** — Nom 4 in. (102 mm) diam (or smaller) Type L (or heavier) copper tubing. The annular space shall be min 0 in. to max 7/8 in. (22mm).

E. **Copper Pipe** — Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper pipe. The annular space shall be min 0 in. to max 7/8 in. (22 mm).

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

A. **Packing Material** — Min 4 in. (102 mm) thickness of min 4.0 pcf (64 kg/cu meter) mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of wall and hollow-core precast concrete unit as required to accommodate the required thickness of fill material.

B. **Fill, Void or Cavity Material\* — Caulk** — Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall. At the point contact location between pipe and concrete, a min 1/4 in. (6 mm) diam bead of fill material shall be applied at the concrete/pipe interface on the top surface of floor and on both surfaces of wall or hollow-core precast concrete unit.

**RELIANCE WORLDWIDE CORPORATION DBA HOLDRITE HYDROFLAME** — HydroFlame 300 CG

#### Configuration B

1. **Floor or Wall Assembly** — Min 3-1/2 in. (89 mm) thick reinforced lightweight or normal weight (100-150 pcf (1600-2400 kg/cu meter) ) concrete floor or min 4 in. (102 mm) thick reinforced lightweight or normal weight concrete wall. Wall may also be constructed of any UL Classified **Concrete Blocks\***. If the firestop system is installed within a hollow-core precast concrete unit, max diam of opening shall be 7 in. (178 mm). Otherwise, max diam of opening is 10-1/2 in. (267 mm).

See **Concrete Blocks** (CAZT) and **Precast Concrete Units** (CFTV) categories in the Fire Resistance Directory for names of manufacturers.

2. **Through Penetrants** — One metallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the firestop system. 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 8 in. (203 mm) diam (or smaller) Schedule 40 (or heavier) steel pipe. The annular space shall be min 1/4 in. (6 mm) to max 1-5/8 in. (41 mm).

B. **Iron Pipe** — Nom 8 in. (203 mm) diam (or smaller) cast or ductile iron pipe. The annular space shall be min 1/4 in. (6 mm) to max 1-5/8 in. (41 mm).

C. **Conduit** — Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing or steel conduit. The annular space shall be min 1/4 in. (6 mm) to max 1-5/8 in. (41 mm).

D. **Copper Tubing** — Nom 4 in. (102 mm) diam (or smaller) Type L (or heavier) copper tubing. The annular space shall be min 1/4 in. (6 mm) to max 1-5/8 in. (41 mm).

E. **Copper Pipe** — Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper pipe. the annular space shall be min 1/4 in. (6 mm) to max 1-5/8 in. (41 mm).

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

A. **Packing Material** — Min 3 in. (76 mm) thickness of min 6.0 pcf (96 kg/cu meter) ceramic fiber blanket insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of wall and hollow-core precast concrete unit as required to accommodate the required thickness of fill material.

B. **Fill, Void or Cavity Material\* — Caulk** — Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall and hollow-core precast concrete unit.

**RELIANCE WORLDWIDE CORPORATION DBA HOLDRITE HYDROFLAME** — HydroFlame 300 CG

**\* 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 2020-01-09

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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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