# XHEZ.C-AJ-8304 - 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

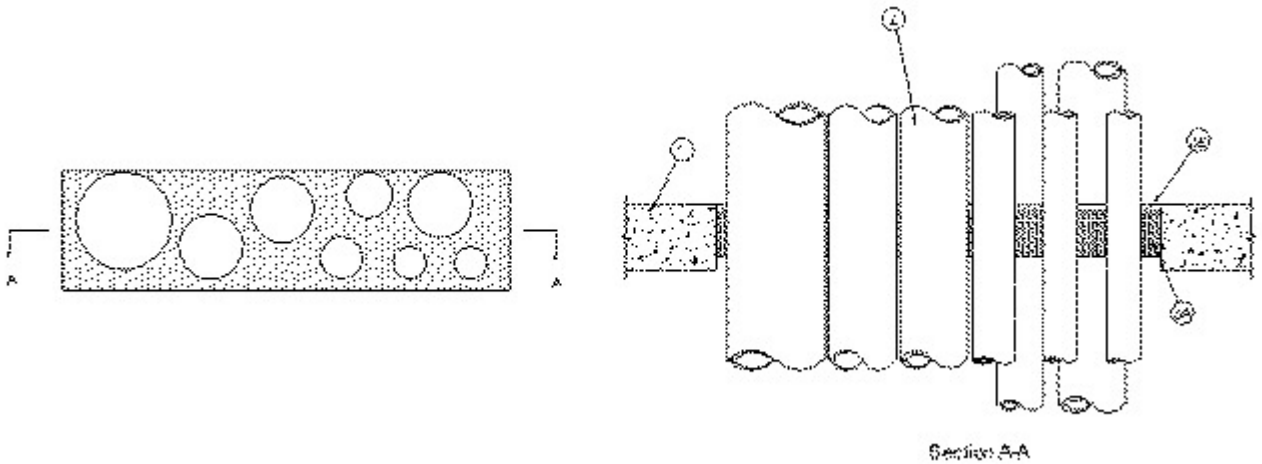
See General Information for Through-penetration Firestop Systems Certified for Canada

### System No. C-AJ-8304

June 21, 2019

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

| | |
|---|---|
| | L Rating At 204°C- Less Than 5.1 L/s/m$^2$ |




1. **Floor or Wall Assembly —** Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m$^3$) concrete floor. Wall may also be constructed of any UL classified **Concrete Blocks***. Max area of opening is 240 sq in. (0.15 m$^2$) with max dimension of 30 in. (762 mm).

See **Concrete Blocks** (CAZT) category in the Fire Resistance Directory for names of manufacturers.

2. **Through-Penetrants —** Max eight pipes, conduits or tubing to be installed within the opening. The space between pipes, conduits or tubing shall be a min 1/2 in. (13 mm) to max 2-3/4 in. (70 mm). The space between pipes, conduits or tubing and periphery of opening shall be min 0 in. (point contact) to max 3-1/4 in. (83 mm). When W Rating applies, min annular space is 1/2 in. (13 mm). Pipe, conduit or tubing to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of pipes, conduits or tubing may be used:

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

B. **Copper Pipe —** Nom 3 in. (76 mm) diam (or smaller) regular (or heavier) copper pipe.

C. **Copper Tubing —** Nom 3 in. (76 mm) diam (or smaller) Type L (or heavier) copper tubing.

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

E. **Through Penetrating Product* — Flexible Metal Piping —** Nom. 2 in. (51 mm) diam (or smaller) corrugated stainless steel tubing with plastic outer jacket.
**GASTITE, DIV OF TITEFLEX** — CSST or FlashShield CSST

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

A. **Packing Material —** Min 3 in. (76 mm) thickness of min 4 pcf (64 kg/m$^3$) mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or both surfaces of wall 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 and both surfaces of wall. When min 4 in. (102 mm) of min 4 pcf (64 kg/$m^3$) mineral wool batt insulation is used as described above, thickness of fill material may be reduced to 1/4 in. (6 mm). A min 1/4 in. (6 mm) diam bead of caulk shall be applied to the penetrant/opening interface at the point contact location on the top surface of floor or both surfaces of wall.

**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 2019-06-21