



System No. W-J-5164
XHEZ.W-J-5164
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

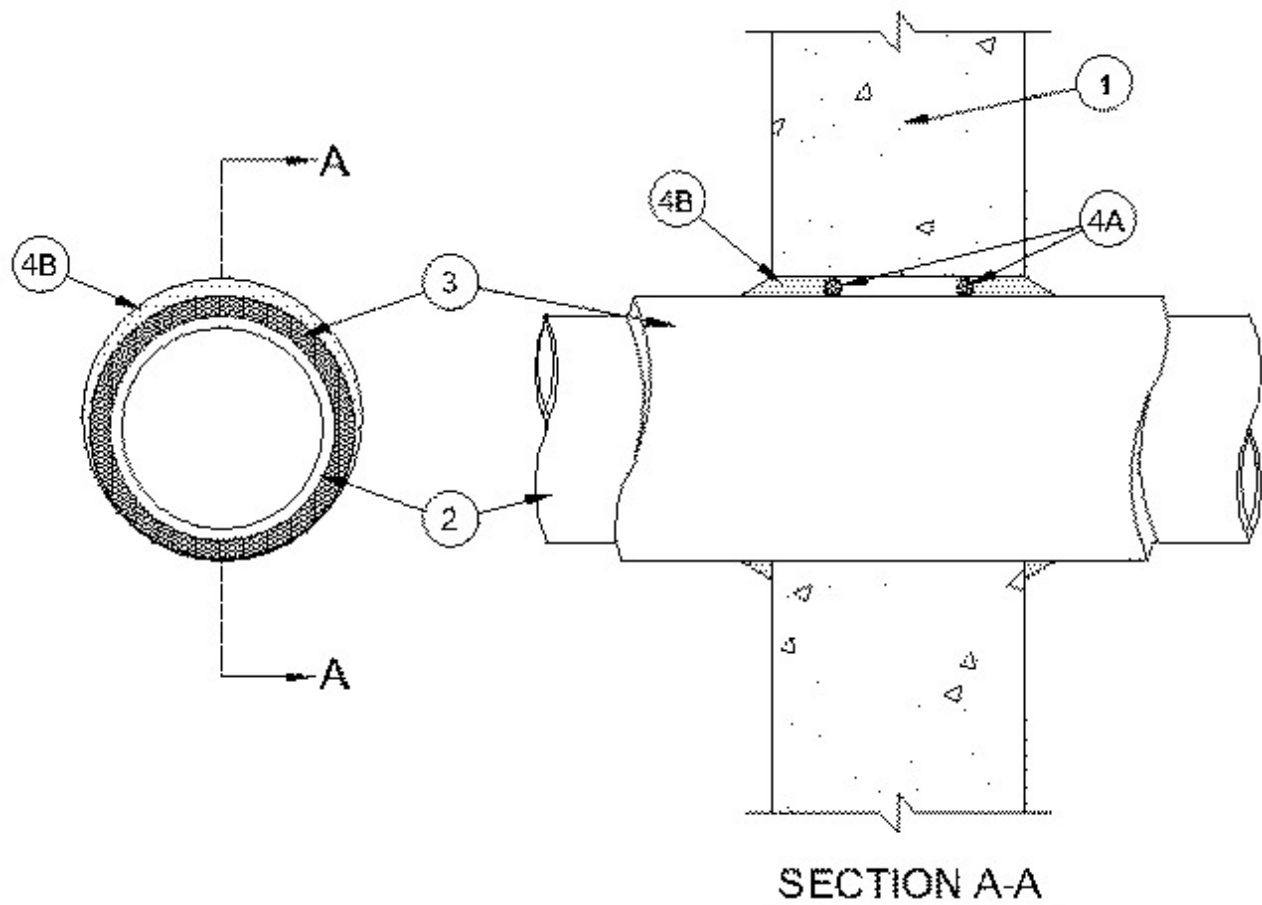
[See General Information for Through-penetration Firestop Systems](#)

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

System No. W-J-5164

June 01, 2016

| ANSI/UL1479 (ASTM E814) | CAN/ULC S115 |
|---|--|
| F Rating — 2 Hr | F Rating —2 Hr |
| T Rating — 1/2 Hr | FT Rating —1/2 Hr |
| L Rating at Ambient — Less Than 1 CFM/sq ft | FH Rating —2 Hr |
| | FTH Rating —1/2 Hr |
| | L Rating at Ambient —Less Than 1 CFM/sq ft |



1. Wall Assembly — Min 6 in. (152 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of opening is 7 in. (178 mm).

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

1A. Steel Sleeve — (Optional, Not Shown) Cylindrical sleeve fabricated from min 0.013 in. (0.330 mm) thick to max 0.056 in. (1.42 mm) galv steel sheet and having a min 1 in. (25 mm) lap along the longitudinal seam. Ends of sleeve to be flush with both surfaces of wall. Sleeve to be installed by coiling the sheet metal to a diam smaller than the through opening, inserting the coil through the opening and releasing the coil to let it uncoil against the circular cutouts in the gypsum board layers.

2. Through Penetrants — One metallic pipe or tubing to be installed either concentrically or eccentrically within the firestop system. Pipe or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes or tubing may be used:

- A. **Steel Pipe** — Nom 4 in. (102 mm) diam (or smaller) Schedule 40 (or heavier) steel pipe.
- B. **Iron Pipe** — Nom 4 in. (102 mm) diam (or smaller) cast or ductile iron pipe.
- C. **Copper Tubing** — Nom 4 in. (102 mm) diam (or smaller) Type L (or heavier) copper tubing.
- D. **Copper Pipe** — Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper pipe.

3. Tube Insulation — Plastics+ — Nom 3/4 in. (19 mm) thick acrylonitrile butadiene /polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing. The diameter of the opening shall be 1-3/8 in. (35 mm) larger than the penetrant. The annular space shall be min 0 in. (point contact) to max 1-3/8 in. (35 mm).

See **Plastics+** (QMFZ2) category in the Plastics Recognized Component Directory for names of manufacturers. Any Recognized Component tube insulation material meeting the above specifications and having a UL 94 Flammability Classification of 94-5VA may be used.

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

A. **Packing Material** — (Optional) — Foam backer rod firmly packed into the opening as a permanent form. Packing material to be recessed from both surfaces of wall as required to accommodate the required thickness of fill material.

B. **Fill, Void or Cavity Material* — Caulk** — Min 5/8 in. (16 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall, or overlapping min 1/4 in. (6 mm) onto wall surfaces when the steel sleeve is used. Additional fill material to be installed such that a min 3/8 in. (10 mm) crown is applied at the insulated penetrant/wall interface at the point contact location.

+Bearing the UL Listing Mark

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

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