System No. W-L-1419
XHEZ.W-L-1419
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

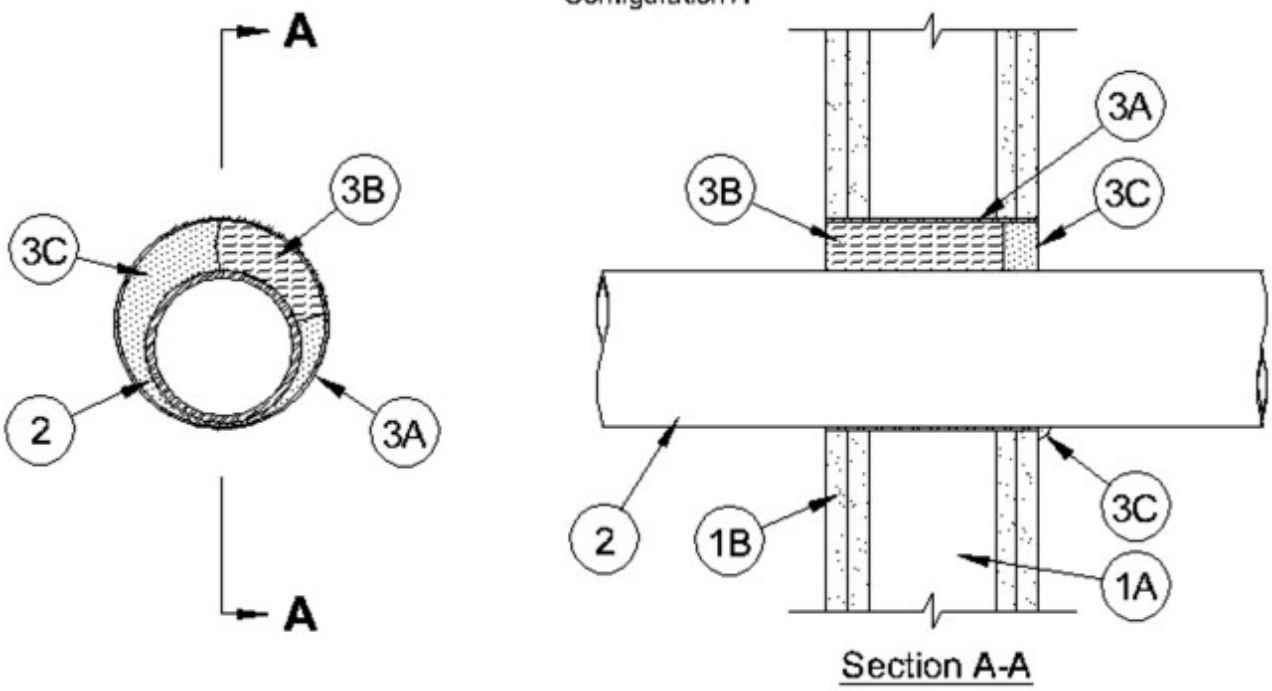
See General Information for Through-penetration Firestop Systems Certified for Canada

System No. W-L-1419

May 31, 2016

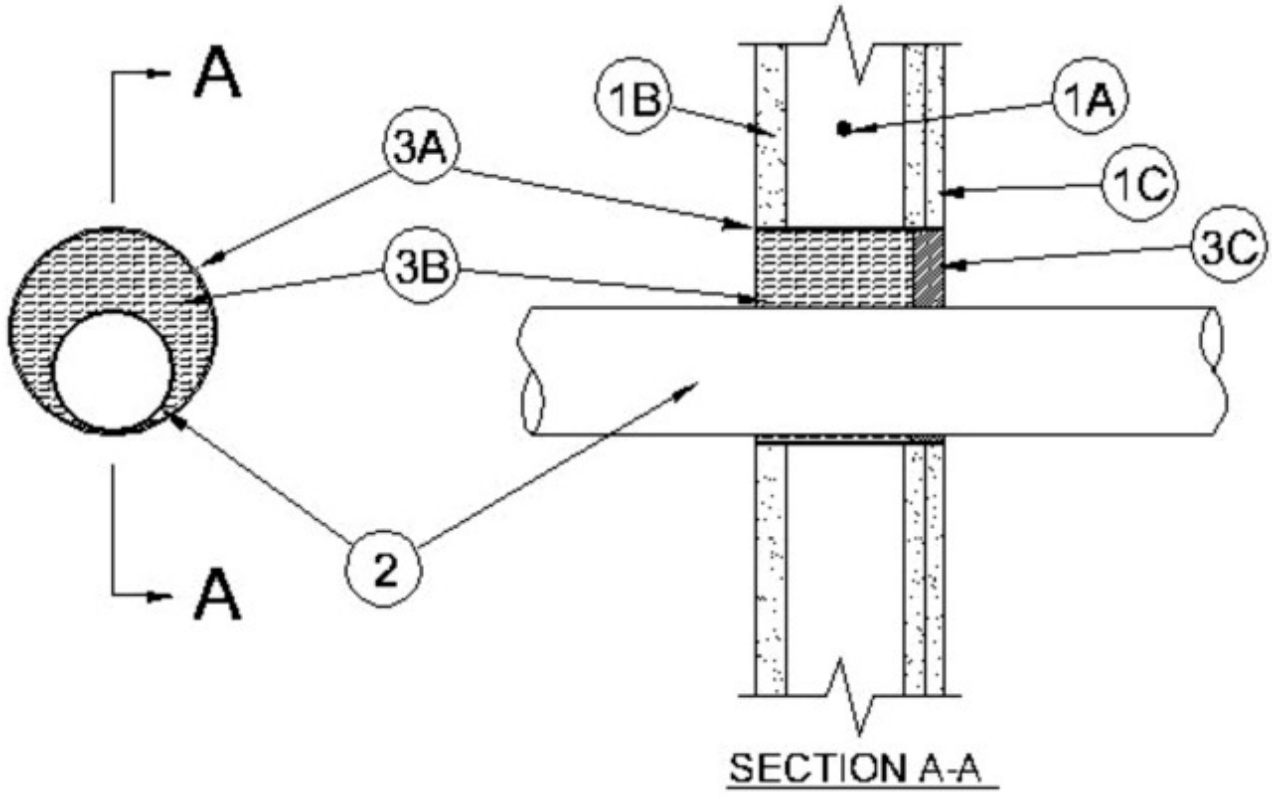
ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Ratings — 1 and 2 Hr (See Item 1)	F Ratings — 1 and 2 Hr (See Item 1)
T Rating — 0 Hr	FT Rating —0 Hr
	FH Ratings —1 and 2 Hr (See Item 1)
	FTH Rating —0 Hr

Configuration A



Section A-A

Configuration B



SECTION A-A

1. **Wall Assembly —** See Configuration A. The 1 or 2 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300, U400 or V400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features:

A. **Studs —** Wall framing to consist of either wood or steel channel studs. Wood studs to be nom 2 by 4 in. (51 by 102 mm) lumber spaced max 16 in. (406 mm) OC. Steel studs to be min 3-5/8 in. (92 mm) wide spaced max 24 in. (610 mm) OC.

B. **Gypsum Board* —** 5/8 in. (16 mm) thick, 4 ft (122 cm) wide with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual design in the UL Fire Resistance Directory. Circular cutout in wall to be min 1 in. (25 mm) larger than outside diam of through penetrant. Max diam of opening is 10 in. (254 mm).

The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.

1A. **Wall Assembly —** See Configuration B. The 1 or 2 hr fire-rated gypsum board/stud shaft wall assembly shall be constructed of the materials and in the manner specified in the individual U400 and V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall incorporate the following construction features:

A. **Steel Studs —** "C-H" shaped studs, min 2-1/2 in. (64 mm) wide by 1-1/2 in. (38 mm) deep, fabricated from min No. 25 gauge galv steel, spaced max 24 in. (610 mm) OC.

B. **Gypsum Board* —** 1 in. (25 mm) thick, 24 in. (610 mm) wide gypsum liner panels installed vertically. Max diam of opening is 10 in. (254 mm).

C. **Gypsum Board* —** One or two layers of nom 1/2 or 5/8 in. (13 or 16 mm) thick gypsum board as specified in the individual Wall and Partition Design. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 10 in. (254 mm).

The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.

2. **Through Penetrant —** One metallic pipe, conduit or tube to be installed either concentrically or eccentrically within the firestop system. Annular space to be min 0 in. (point contact) to max 2 in. (51 mm) for Configuration A or min 1/4 in. (6 mm) to max 2 in. (51 mm) for Configuration B. Pipe to be located near the center of the stud cavity width and to be rigidly supported on both sides of wall assembly. The following types and sizes of pipe, conduit and tubing may be used:

A. **Steel Pipe —** Nom 8 in. (203 mm) diam (or smaller) Sch 10 (or heavier) steel pipe.

B. **Iron Pipe —** Nom 8 in. (203 mm) diam (or smaller) cast or ductile iron pipe.

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

D. **Copper Tube —** Nom 4 in. (102 mm) diam (or smaller) Type L (or heavier) copper tubing.

E. **Copper Pipe —** Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper pipe.

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

A. **Steel Sleeve —** Cylindrical sleeve fabricated from min No. 30 gauge (0.016 in. (0.4 mm)) to max No. 16 gauge (0.056 in. (1.4 mm)) thick galv steel and having a min 2 in. (51 mm) lap along the longitudinal seam. Sleeve installed by coiling the sheet steel to a diam smaller than the through openings, inserting the coil through the openings, and releasing the coil to let it uncoil against the circular cutouts in the gypsum board layers. Ends of sleeve to be flush with or recessed max 1/8 in. (3 mm) from wall surfaces.

B. **Packing Material —** Min 4 pcf (64 kg/m^3) density mineral wool batt insulation firmly-packed into steel sleeve as a permanent form. Packing material to be recessed from one side of wall as required to accommodate the required thickness of fill material. Packing material installed flush with one side of wall (Configuration A) or with the gypsum liner panels (Configuration B) and recessed 5/8 in. (16 mm) from the opposite side of wall to accommodate the required thickness of fill material.

C. **Fill, Void or Cavity Material* — Caulk —** Min 1 in. (25 mm) thickness of fill material applied within the annulus, flush with one surface of wall (Configuration A) or with finished surface of wall (Configuration B). Min 3/8 in. (10 mm) diam bead of caulk to be applied at point contact location. Edge of steel sleeve to be covered with caulk such that no gap is present between the steel sleeve and the cutout in the gypsum board.

A/D FIRE PROTECTION SYSTEMS INC — A/D FIREBARRIER Intumescent Sealant, A/D FIREBARRIER Intumescent Sealant II

*** 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 2016-05-31