

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

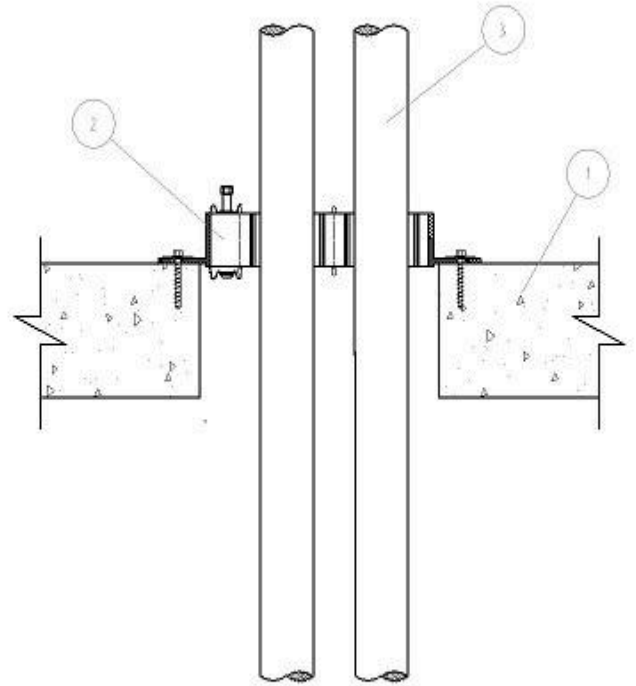
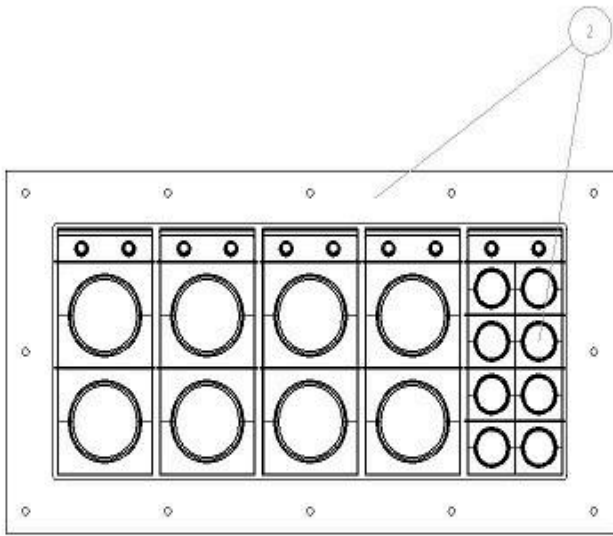
[See General Information for Through-penetration Firestop Systems](#)

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

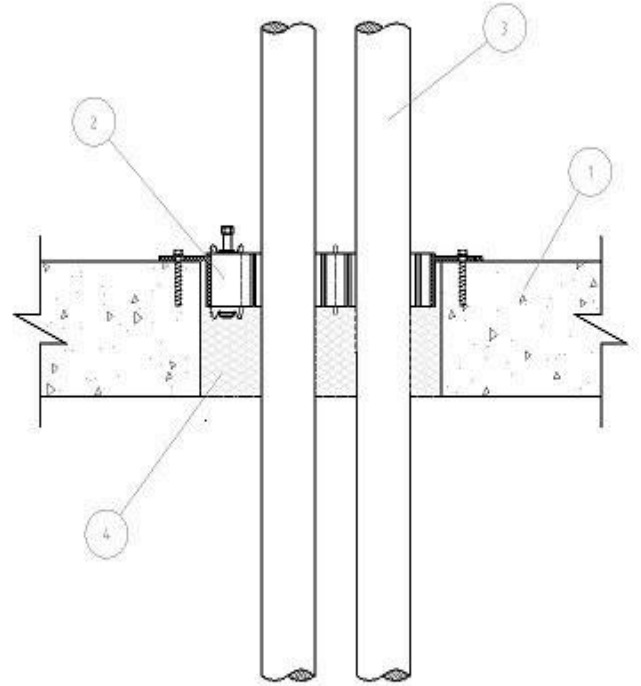
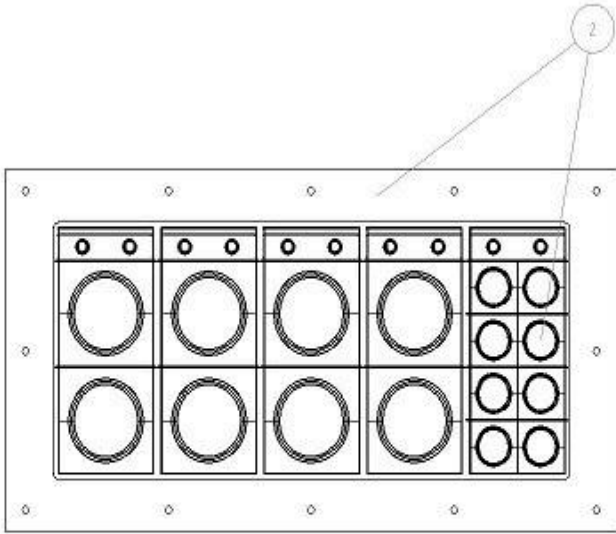
**System No. C-AJ-3388**

April 1, 2024

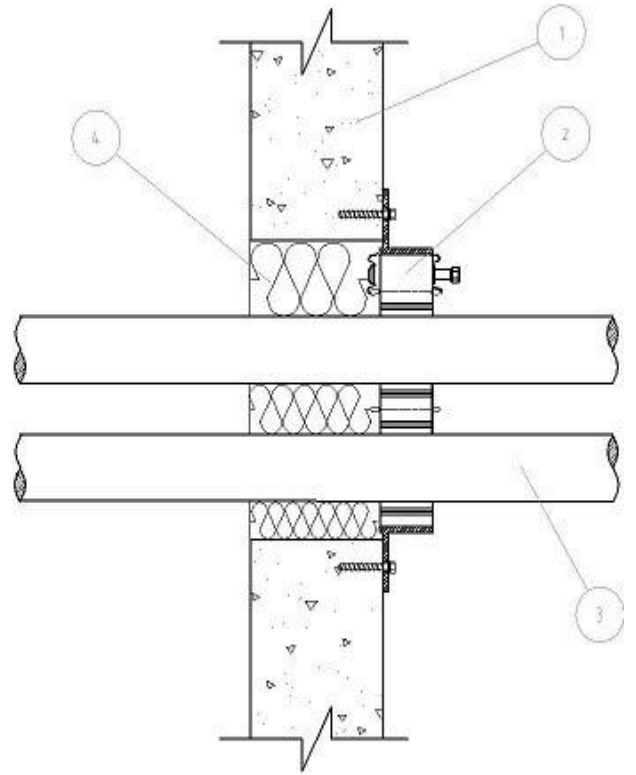
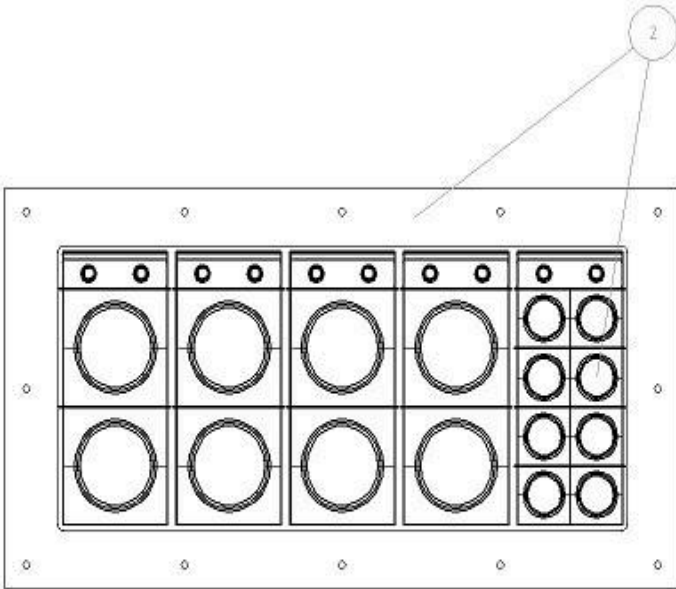
<b>ANSI/UL1479 (ASTM E814)</b>	<b>CAN/ULC S115</b>
F Rating - 2 Hr	F Rating - 2 Hr
T Ratings - 0, 1/2 and 1 Hr (See Item 4)	FT Ratings - 0, 1/2 and 1 Hr (See Item 4)
L Rating At Ambient — Less Than 1 CFM/sq ft	FH Rating - 2 Hr
L Rating At 400 F — Less Than 1 CFM/sq ft	FTH Ratings - 0, 1/2 and 1 Hr (See Item 4)
	L Rating At Ambient — Less Than 5.1 L/s/m2
	L Rating At 204°C — Less Than 5.1 L/s/m2



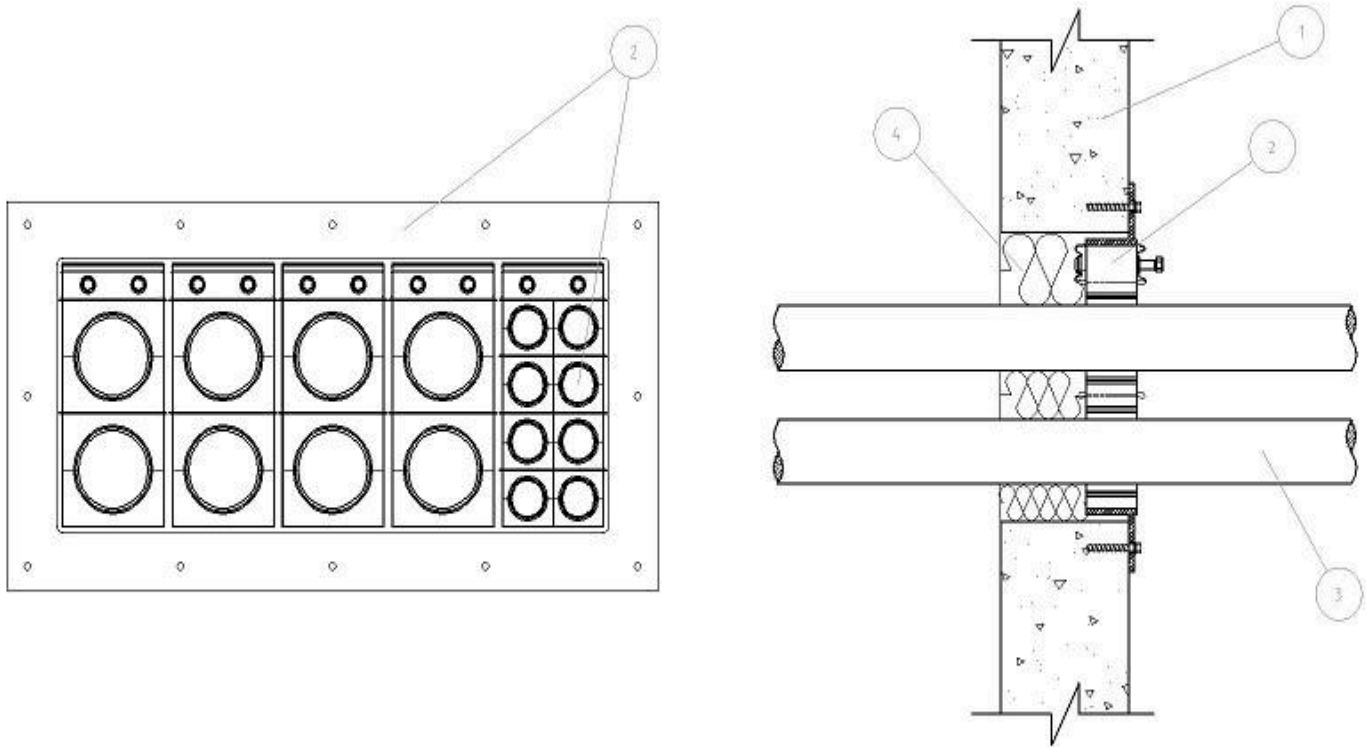
Configuration A



Configuration B



Configuration C



Configuration D

1. **Floor or Wall Assembly** — Min 6 in. (152 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m<sup>3</sup>) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks**\*. Max area of opening 316.8 in.<sup>2</sup> (2042 cm<sup>2</sup>) with max dimension 26.4 in. (669.5 mm).

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

2. **Firestop Device**\* — Firestop device consists of rectangular steel frame with integral mounting flange, multi diameter elastomeric sealing modules, steel stay plates and a compression unit consisting of a Roxtec Wedge. The firestop device shall be installed on the top surface of the floor or either side of the wall assembly as shown in Configuration A and Configuration C, respectively. The firestop device shall be recessed into the floor or either side of the wall assembly as shown in Configuration B and Configuration D, respectively. The rectangular packing area of each frame shall be filled with multiple rows of multi diameter elastomeric sealing modules with a max of one cable in each sealing module. The layers of the multi diameter sealing module halves are removed one by one until a max gap of 0.04 in. (1 mm) is formed between the two module halves. When the number of sealing modules exceeds the number of cables, the solid cylindrical cores of the unpenetrated sealing modules shall be left in place or "blank" (solid) sealing modules shall be used. During installation of the elastomeric sealing modules, thin steel stay plates shall be used to separate the rows of sealing modules and to retain the sealing modules within the steel frame. After installation of the modules, the bolts of the compression unit are tightened to form an effective seal around the through penetrants and insert modules. The steel frame shall be secured to the floor or wall surfaces with 3/8 in. (10 mm) diam steel anchor bolts and steel washers through holes in the frame mounting flange and spaced max 8 in. (203 mm) OC. The device shall be installed in accordance with the accompanying installation instructions.

**ROXTEC INTERNATIONAL AB** — G, GH, GH BG, GHM, GHM BG, GH FL 100, GH BG FL 100, GOH, GKO/GKOH, SF series frames with a max size 8x5

3. **Through-Penetrants** — Within the loading area for each firestop device (Item 4), any combination of the following types and sizes of through penetrants may be installed. Penetrants to be rigidly supported on both sides of floor or wall assembly. The T, FT and FTH Ratings for the firestop system are dependent upon the type of cables used with the firestop as described below:

A. One or more cable(s) may be installed. The cables may be used for a 0 to 100 percent visual fill, with max one cable per sealing module.

A1. Max 1000 kcmil (or smaller) copper conductor shielded or unshielded power cable with polyvinyl chloride (PVC) jacket and ethylene-propylene rubber (EPR) insulation. The T, FT and FTH Ratings for the firestop system shall not exceed 1 hr when this cable type is used.

A2. Max 12 pair No. 22 AWG copper conductor communication cable with polyvinyl chloride insulation and jacket materials. The T, FT and FTH Ratings for the firestop system shall not exceed 1 hr when this cable type is used.

A3. Multiple fiber optic communication cables jacketed with polyvinyl chloride and having a max outside diameter of 1/4 in. (6 mm). The T, FT and FTH Ratings for the firestop system shall not exceed 1 hr when this cable type is used.

A4. Max 100 pair No. 24 AWG copper conductor communication cable with polyvinyl chloride insulation and jacket materials. The T, FT and FTH Ratings for the firestop system shall not exceed 1/2 hr when this cable type is used.

A5. Max 3/C with ground - No. 6 AWG (or smaller) cable with cross-linked polyethylene insulation and PVC jacket. The T, FT and FTH Ratings for the firestop system are 0 hr when this cable type is used.

A6. Max 4/C with Ground - No. 8 AWG (or smaller) cable with cross-linked polyethylene insulation and PVC The T, FT and FTH Ratings for the firestop system are 0 hr when this cable type is used.

A7. Max 4/C No. 750 kcmil (or smaller) TC-ER type copper conductor with ground power cable with Polyvinyl Chloride (PVC) with nylon layer Type THHN and Polyvinyl Chloride (PVC) jacket. The T, FT and FTH Ratings for the firestop system shall not exceed 1 hr when this cable type is used.

4. **Packing Material** — Min 4 pcf (64 kg/m<sup>3</sup>) mineral wool batt insulation shall be firmly packed within the wall cavity, including between and around cables and made flush with wall surface. Insulation shall also be firmly packed into the floor cavity when the frame is inserted into the floor opening. The packing material is optional for Configuration A when mounted on top surface of floor. The packing material is required for Configurations B, C and D.

5. **Fill, Void or Cavity Materials\* — Sealant** — (Not Shown) A min 1/4 in. (6 mm) diam bead of sealant shall be applied as a gasket between the plate (Item 3) and concrete around entire perimeter of through opening, at the top surface of floor or wall surface.

See **Fill, Void or Cavity Material** (XHHW) category in the Fire Resistance Directory for names of manufacturers.

6. **Butyl Rubber Gasket** — (Not Shown) As an alternate to the sealant (Item 5), a nom 5/16 in. (8 mm) thick by 5/16 in. (8 mm) wide butyl rubber gasket with self-adhesive may be installed around the mounting flange. The gasket shall be recessed in approx 1/2 in. (13 mm) and 2 in. (51 mm) from the perimeter of the device frame mounting flange such that the continuous gasket brackets the line of fasteners along each side of the device.

**\* 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 2024-04-01

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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 Solutions' Follow - Up Service. Only those products bearing the UL Mark should be considered to be Certified and covered under UL Solutions' Follow - Up Service. Always look for the Mark on the product.

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