

XHEZ.W-J-8076 - 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](#)

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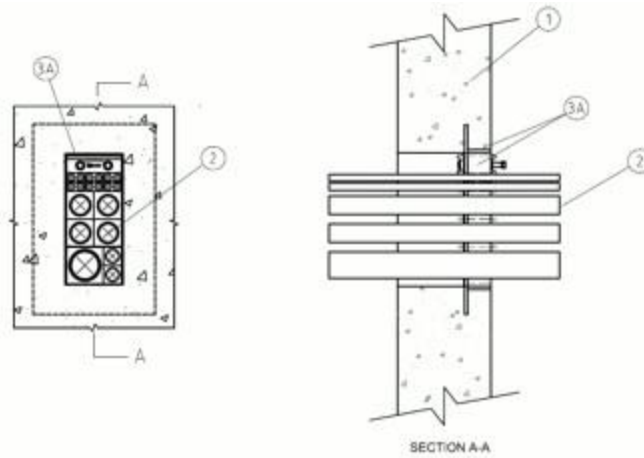
System No. W-J-8076

July 30, 2018

ANSI/UL1479 (ASTM E814)

CAN/ULC S115

F Rating — 2 Hr	F Rating — 2 Hr
T Ratings — 1/4, 1/2 and 1 Hr (See Items 2 and 2A)	FT Ratings — 1/4, 1/2 and 1 Hr (See Item 2 and 2A)
	FH Rating — 2 Hr
	FTH Ratings — 1/4, 1/2 and 1 Hr (See Item 2 and 2A)



1. **Wall Assembly** — Min 4-1/2 in. (114 mm) thick lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks***. Size of opening in concrete wall to be 5 mm (0.2 in.) larger on each side than the outside dimensions of the device frame (Item 3A). Max area of opening within device frame is 52-1/4 in² (337 cm²) with max dimension of 11 in. (279.4 mm).

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

2. **Cables** — Within the loading area for each firestop device module the cables may represent a 0 to 100 percent visual fill. Cables to be rigidly supported on both sides of wall assembly. Any combination of the following types and sizes of cables may be used:

A. Max 750 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 of the firestop system shall not exceed 1/2 hr when this penetrant is used.**

B. Max 250 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 of the firestop system shall not exceed 1/2 hr when this penetrant is used.**

C. Max 4 pr 24 AWG (or smaller) Cat 5E cables with PVC jacket and insulation. **The T, FT and FTH Ratings of the firestop system shall not exceed 1 hr when this penetrant is used.**

D. Max 4 pr 23 AWG (or smaller) Cat 6 cables with PVC jacket and insulation. **The T, FT and FTH Ratings of the firestop system shall not exceed 1 hr when this penetrant is used.**
The T, FT and FTH Ratings of the firestop system are 1 hr when no penetrants are installed within the device.

2A. **Metallic Penetrant** — Within the loading area for each firestop device module, the metallic penetrant specified below may be used. Penetrant to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic penetrants may be used:

A. Nom 2 in. (51 mm) diam (or smaller) rigid steel conduit. **The T, FT and FTH Ratings of the firestop system shall not exceed 1/4 hr when this penetrant is used in a diam exceeding 1/2 in. (13 mm). For 1/2 in. (13 mm) diam or smaller penetrants, the T, FT and FTH Ratings shall not exceed 1 hr.**
The T, FT and FTH Ratings of the firestop system are 1 hr when no penetrants are installed within the device.

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

A. **Firestop Devices*** — Firestop devices each consist of a rectangular steel frame, multi diameter elastomeric sealing modules, steel stay plates and a compression unit consisting of a Roxtec Wedge. The firestop device frame with integral frame flange shall be cast in place flush with either side of wall in accordance with manufacturer installation instructions. The rectangular opening(s) of each device frame shall be filled with multiple rows of multi diameter elastomeric sealing modules with a max of one cable in each sealing module. The sheets of the multi diameter sealing modules 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 multi diameter 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 firestop devices shall be installed in accordance with the accompanying installation instructions.

ROXTEC INTERNATIONAL AB — B-2x1, B-4x1, B-6x1, B-8x1, G-2x1, G-4x1, G-6x1, G-8x1, GH-2x1, GH-4x1, GH-6x1, GH-8x1, GH BG-2X1, GH BG-4X1, GH BG-6X1, GH BG-8X1, GHM-2x1, GHM-4x1, GHM-6x1, GHM-8x1, GHM BG-2X1, GHM BG-4X1, GHM BG-6X1, GHM BG-8X1, GOH-2x1, GOH-4x1, GOH-6x1, GOH-8x1, GKOH-2x1, GKOH-4x1, GKOH-6x1, GKOH-8x1, SF-2x1, SF-4x1, SF-6x1, SF-8x1

ROXTEC INC — B-2x1, B-4x1, B-6x1, B-8x1, G-2x1, G-4x1, G-6x1, G-8x1, GH-2x1, GH-4x1, GH-6x1, GH-8x1, GH BG-2X1, GH BG-4X1, GH BG-6X1, GH BG-8X1, GHM-2x1, GHM-4x1, GHM-6x1, GHM-8x1, GHM BG-2X1, GHM BG-4X1, GHM BG-6X1, GHM BG-8X1, GOH-2x1, GOH-4x1, GOH-6x1, GOH-8x1, GKOH-2x1, GKOH-4x1, GKOH-6x1, GKOH-8x1, SF-2x1, SF-4x1, SF-6x1, SF-8x1

*** 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 2018-07-30

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