



System No. F-C-3113 XHEZ.F-C-3113 Through-penetration Firestop Systems

[Page Bottom](#)

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

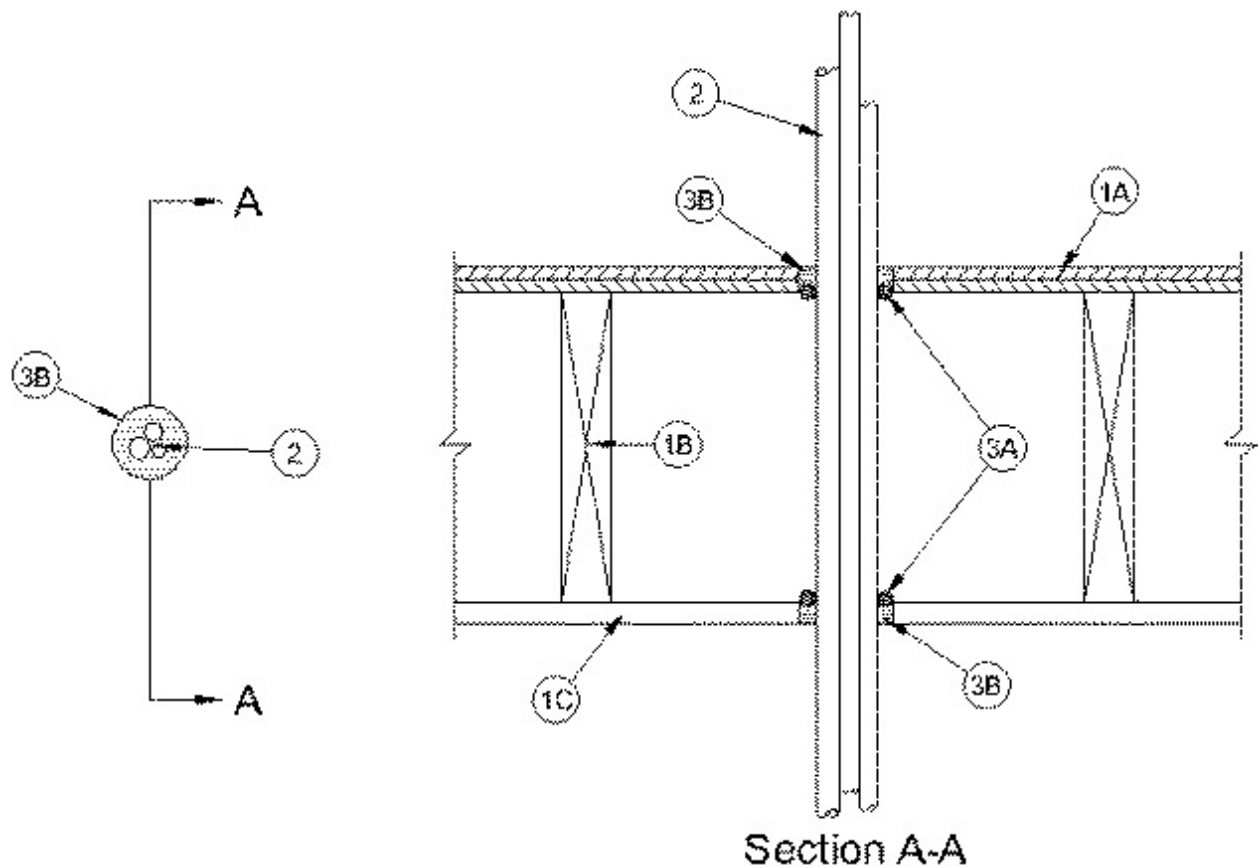
[See General Information for Through-penetration Firestop Systems](#)

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

System No. F-C-3113

June 01, 2016

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating - 1 Hr	F Rating - 1 Hr
T Ratings - 0 and 3/4 Hr (See Item 2)	FT Ratings - 0 and 3/4 Hr (See Item 2)
	FH Rating - 1 Hr
	FTH Ratings - 0 and 3/4 Hr (See Item 2)



1. Floor-Ceiling Assembly — The fire-rated wood joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory, as summarized below:

A. Flooring System — Lumber or plywood subfloor with finish floor of lumber, plywood or **Floor Topping Mixture*** as specified in the individual Floor-Ceiling Design. Max diam of floor opening is 2-3/8 in. (60 mm).

B. Wood Joists — Nom 2 by 10 in. (51 by 254 mm) lumber joists spaced 16 in. (406 mm) OC with nom 1 by 3 in. (25 by 76 mm) lumber bridging and with ends firestopped. As an alternate to lumber joists, nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or **Structural Wood Members*** with bridging as required with ends firestopped.

C. Gypsum Board* — Nom 4 ft (1.22 m) wide by 5/8 in. (16 mm) thick as specified in the individual Floor-Ceiling Design. Gypsum board nailed to wood joists. Max diam of ceiling opening is 2-3/8 in. (60 mm).

1.1 Chase Wall — (Not Shown, Optional) — The through penetrant (Item 2) may be routed through a 1 hr fire-rated single, double or staggered wood stud/gypsum wallboard chase wall constructed of the materials and in the manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. Studs — Nom 2 by 4 in. (51 by 102 mm) lumber studs.

B. Sole Plate — Nom 2 by 4 in. (51 by 102 mm) lumber plates. Max diam of opening is 2-3/8 in. (60 mm).

C. Top Plate — The double top plate shall consist of two nom 2 by 4 in. (51 by 102 mm) lumber plates. Max diam of opening is 2-3/8 in. (60 mm).

D. Gypsum Board* — Thickness, type, number of layers and fasteners shall be as specified in individual Wall and Partition Design.

2. Cables — One or more cables to be centered within the firestop opening. The annular space between the cable or cable bundle and the edge of the opening shall be 1/2 in. (13 mm). Cables to be rigidly supported on both sides of floor assembly. The following types and sizes of copper conductor cables may be used:

A. Seven max three conductor with ground No. 10 AWG (or smaller) cables with polyvinyl chloride (PVC) insulation and jacket.

B. One max 100 pair No. 24 AWG (or smaller) cables with polyvinyl chloride (PVC) insulation and jacket.

C. Through Penetrating Product* — Nom 3/4 in. diam (or smaller) aluminum or steel Flexible Metal Conduit+ with electrical conductors as permitted by the National Electrical Code (NFPA

70).

ALFLEX CORP

D. Max four aluminum conductor No. 2/0 AWG (or smaller) Type SER service entrance cable with cross-linked polyethylene insulation and PVC jacket.

The T Rating of the firestop system is 3/4 Hr except that when the penetrants in Item 2C and/or 2D above are used, the T Rating is 0 hr.

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

A. **Packing Material** — (Optional) — Foam backer rod firmly packed into opening as a permanent form. Packing material to be recessed from top surface of subfloor or sole plate and bottom surface of ceiling or lower top plate of chase wall assembly as required 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 the subfloor or sole plate and bottom surface of ceiling or lower top plate of chase wall assembly. Caulk to be forced into interstices of cable group to max extent possible. Additional fill material to be installed such that a min 1/16 in. (2 mm) crown is formed around the penetrating item and lapping 1/2 in. (13 mm) beyond the periphery of the opening.

A/D FIRE PROTECTION SYSTEMS INC — A/D FIREBARRIER Intumescent Sealant or 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.**

+Bearing the UL Listing Mark

Last Updated on 2016-06-01

[Questions?](#)

[Print this page](#)

[Terms of Use](#)

[Page Top](#)

© 2017 UL LLC

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

UL permits the reproduction of the material contained in the Online Certification Directory subject to the following conditions: 1. The Guide Information, Assemblies, Constructions, Designs, Systems, and/or Certifications (files) must be presented in their entirety and in a non-misleading manner, without any manipulation of the data (or drawings). 2. The statement "Reprinted from the Online Certifications Directory with permission from UL" must appear adjacent to the extracted material. In addition, the reprinted material must include a copyright notice in the following format: "© 2017 UL LLC".