

XHEZ.C-AJ-2921 - 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.

Through-penetration Firestop Systems XHEZ - Through-penetration Firestop Systems

XHEZ7 - Through-penetration Firestop Systems Certified for Canada

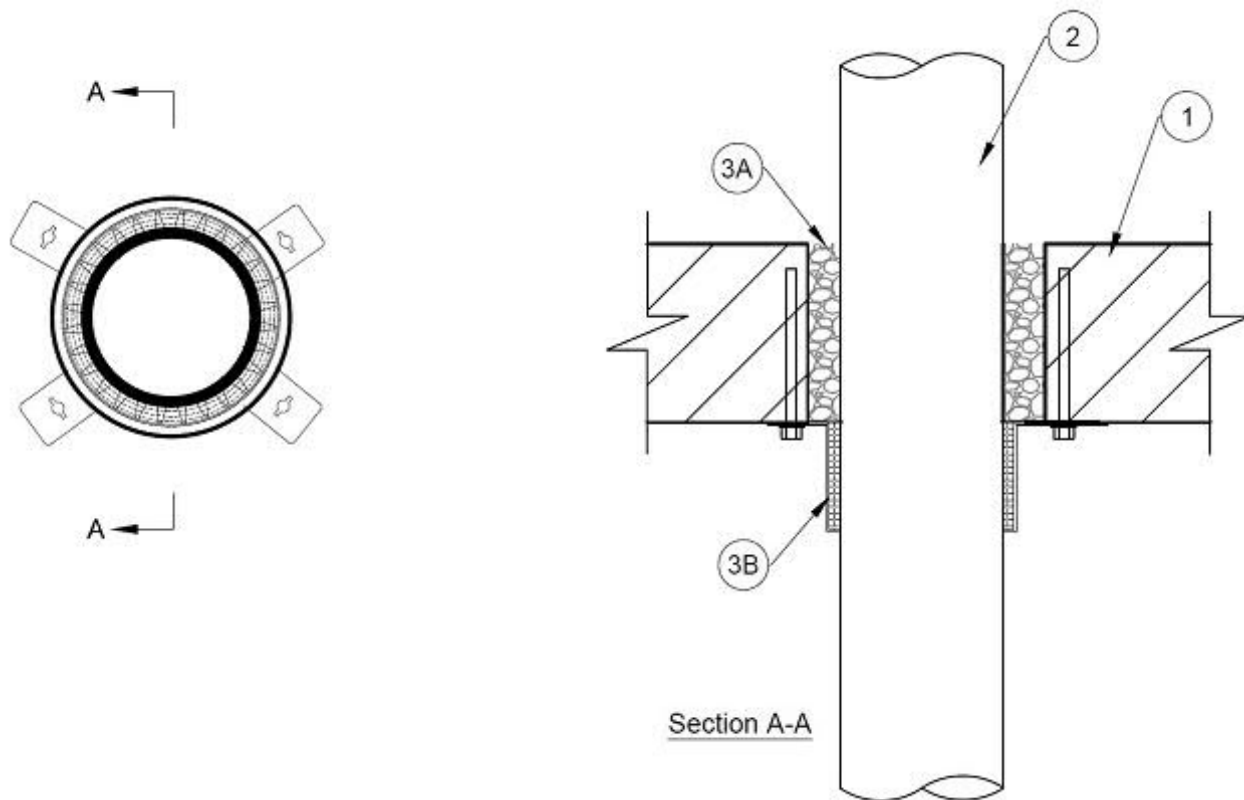
[See General Information for Through-penetration Firestop Systems](#)

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

System No. C-AJ-2921

May 28, 2021

ANSI/UL 1479 (ASTM E814)	CAN/ULC S115
F Rating — 2 Hr	F Rating — 2 Hr
T Rating — 2 Hr	FT Rating — 2 Hr
	FH Rating — 2 Hr
	FTH Rating — 2 Hr



1. **Floor or Wall Assembly** — Min 4-1/2 in. (114 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***. The diam of opening shall be max 8 in.

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

2. **Through Penetrants** — One or more nonmetallic pipes, conduits or tubes as described in a single line item below, may be installed concentrically or eccentrically within each firestop device (Item 3B). Through penetrants to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of through penetrants may be used:

A. **Polyvinyl Chloride (PVC) Pipe** — One nom 6 in. diam (or smaller) Schedule 40 cellular or solid core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

B. **Rigid Nonmetallic Conduit+** — One nom 6 in. diam (or smaller) Schedule 40 PVC conduit installed in accordance with the National Electrical Code (NFPA No. 70).

See Rigid Nonmetallic, Schedule 40 and 80 PVC Conduit (DZYZ) category in the Electrical Construction Equipment Directory for names of manufacturers.

C. **Chlorinated Polyvinyl Chloride (CPVC) Pipe** — One nom 6 in. diam (or smaller) SDR13.5 CPVC pipe for use in closed (process or supply) piping systems.

D. **Acrylonitrile Butadiene Styrene (ABS) Pipe** — Nom 6 in. diam (or smaller) Schedule 40 solid core or cellular core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

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

A. **Mortar** — Min. 4-1/2 in. thickness of hydraulic cement applied within the annulus, flush with bottom surface of floor or with both surfaces of wall. When floor is constructed out of hollow-core precast concrete units, mortar to be installed flush with both surfaces of floor. At the point contact location between through penetrant and concrete, additional mortar forced between through penetrant and concrete to max extent possible on both surfaces of floor and wall.

B. **Firestop Device*** - Firestop device sized for nom diam of penetrant (ie, ZZ 460-6 for nom 6 in. diam (or smaller) pipes, ZZ 460-4 for nom 4 in. diam (or smaller) pipes, ZZ 460-1.5 for nom 1.5 in. diam (or smaller) pipes and ZZ 460-1 for nom 1 in. diam (or smaller) pipes) shall be used.

Firestop device to be installed in accordance with the accompanying installation instructions to the underside of floor or both sides of wall. Device incorporates anchor tabs for securement to the concrete by means of nom. 3/16 in. (5 mm) diam by min. 2-3/4 in. (70 mm) concrete screw anchors in conjunction with min 1 in. (25 mm) diam washers.

ZAPP-ZIMMERMANN GMBH — Fire Protection Collar ZZ 460

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

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.

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