



System No. C-AJ-1497
XHEZ.C-AJ-1497
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.
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XHEZ - Through-penetration Firestop Systems

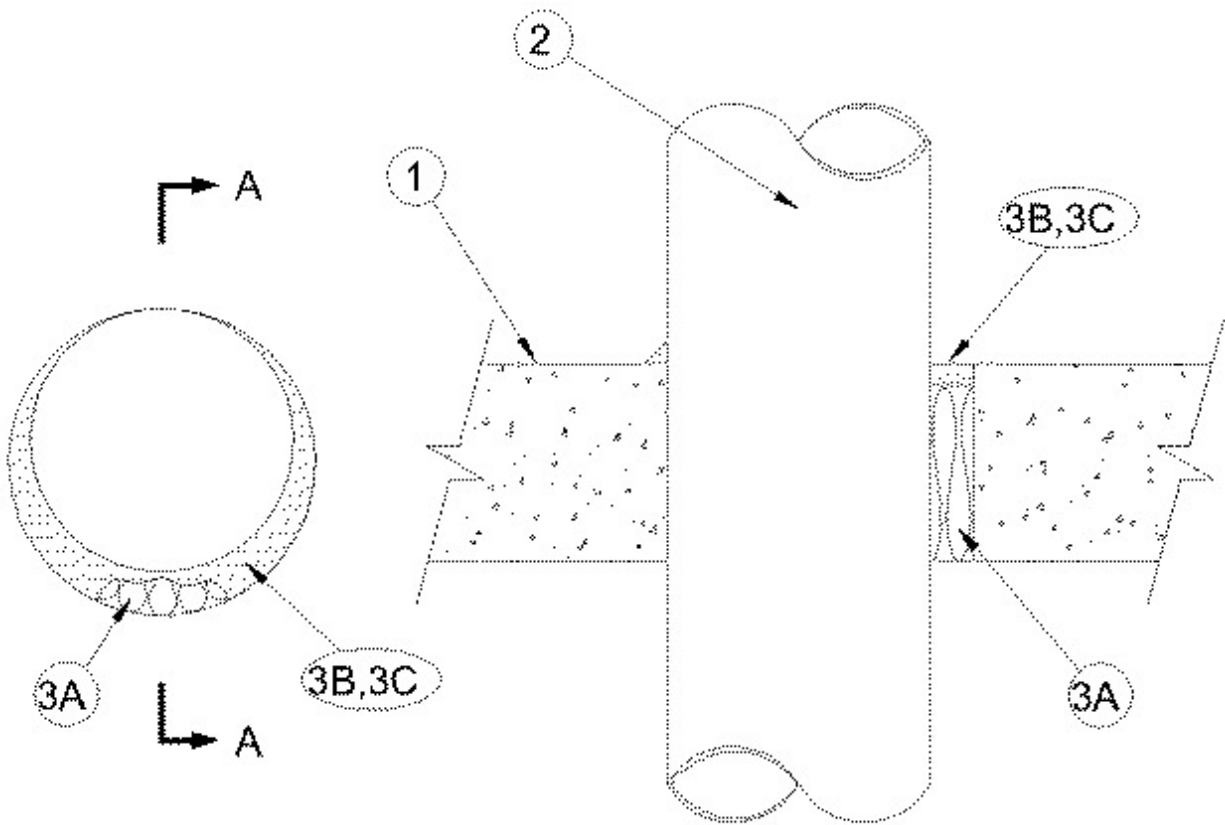
[See General Information for Through-penetration Firestop Systems](#)

System No. C-AJ-1497

November 19, 2003

F Rating — 3 Hr

T Rating — 0 Hr



SECTION 'A-A'

1. **Floor or Wall Assembly** — Min 4-1/2 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete. Floor may also be constructed of any min 6 in. thick hollow-core **Precast Concrete Units***. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max diam of opening is 1-1/8 in. larger than diam of through-penetrant (Item 2). Max diam of opening in floors constructed of hollow-core precast concrete units is 7 in.

See **Concrete Blocks** (CAZT) or **Precast Concrete Units** (CFTV) categories in the Fire Resistance Directory for names of manufacturers.

2. **Through-Penetrant** — One metallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the firestop system. Pipe, conduit or tubing to be rigidly supported on both sides of floor or wall assembly. The annular space shall be min 0 in. (point contact) to max 1-1/8 in.. The following types and sizes of pipes, conduits or tubing may be used:

- A. **Steel Pipe** — Nom 24 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.
- B. **Iron Pipe** — Nom 24 in. diam (or smaller) cast or ductile iron pipe.
- C. **Conduit** — Nom 6 in. diam (or smaller) steel electrical metallic tubing or steel conduit (EMT).
- D. **Copper Pipe or Tubing** — Nom 6 in. diam (or smaller) Type L (or heavier) copper tubing.

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

A. **Packing Material** — Min 4 in. thickness of 4.0 pcf mineral wool batt insulation firmly packed into the opening as a permanent form. Packing material to be recessed from top surface of floor or both surfaces of wall and hollow-core precast concrete floor as required to accommodate the required thickness of fill material.

B. **Fill, Void or Cavity Material* - Sealant** — Min 1/2 in. thickness of fill material applied within the annulus, flush with the top surface of floor or both surfaces of wall and hollow-core precast concrete floor. At the point contact location between through penetrant and concrete, a min 1/2 in. diam bead of fill material applied at the concrete/through penetrant interface on the top surface of floor and on both surfaces of wall and hollow-core precast concrete floor.

A/D FIRE PROTECTION SYSTEMS INC — A/D FIREBARRIER Silicone Sealant

C. **Fill, Void or Cavity Materials* - Sealant** — Min 1/2 in. thickness of fill material applied within the annulus, flush with top surface of floor only. (For horizontal installations only, excluding hollow-core precast concrete floors). At the point contact location between through penetrant and concrete, a min 1/2 in. diam bead of fill material (item 3B.) applied at the concrete/through penetrant interface on the top surface of floor.

*** 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 2003-11-19

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