



XHEZ.C-AJ-2376 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 Listed or Classified 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 as Classified, Listed, or Recognized.

Through-penetration Firestop Systems

See General Information for Through-penetration Firestop Systems

System No. C-AJ-2376

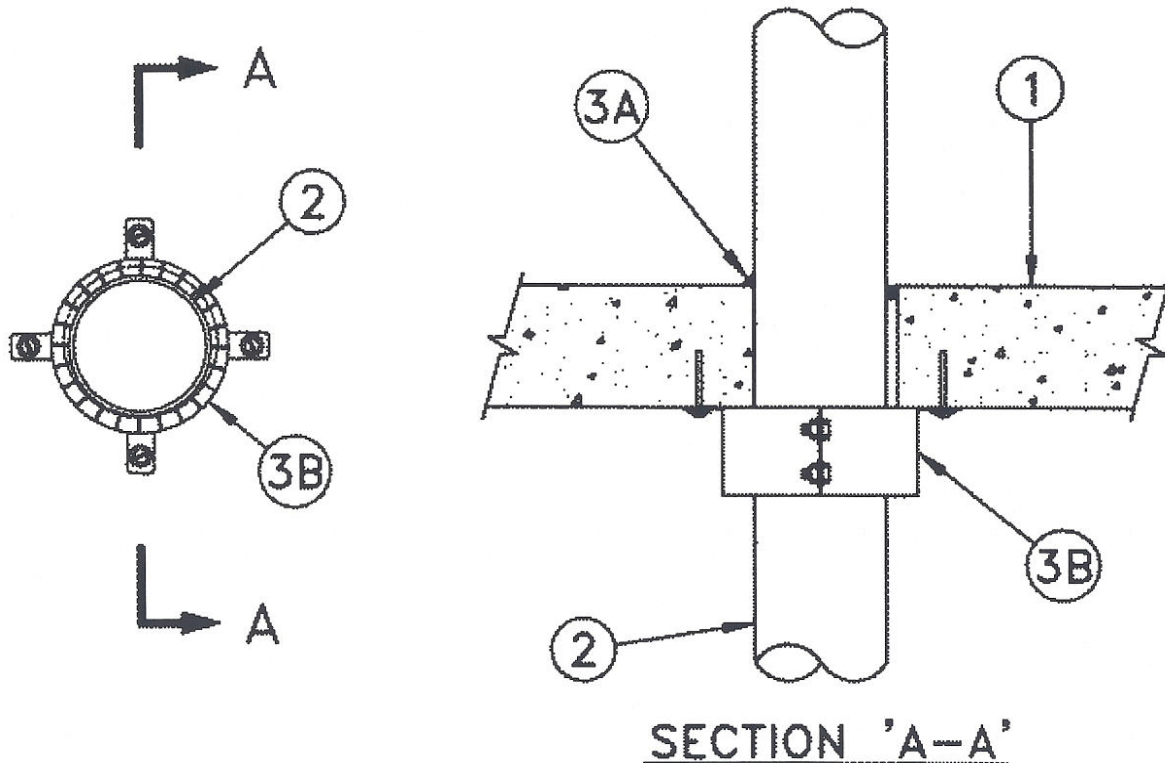
January 11, 2010

F Rating – 2 Hr

T Rating – 2 Hr

L Rating at Ambient – Less than 1 CFM/sq ft

L Rating at 400° F – Less than 1 CFM/sq ft



1. **Floor or Wall Assembly** — Min 4-1/2 in. (114 mm) thick reinforced light weight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. Wall may also be constructed of any min 6 in. (152 mm) thick UL Classified hollow-core **Precast Concrete Units***. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max diam of opening is 11 in. (279 mm). If the firestop system is installed within a hollow-core precast concrete unit, max dimension of opening shall be 7 in. (178 mm).

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

2. **Through Penetrants** — One nonmetallic pipe or conduit, to be installed concentrically or eccentrically within the firestop system. The annular space between pipe or conduit and periphery of opening shall be min 0 in. (point of contact) to max 1/4 in. (6 mm). Pipe or conduit to be rigidly supported on both sides of floor or wall. The following types and sizes of pipes and conduits may be used:

A. **Polyvinyl Chloride (PVC) Pipe** — Nom 10 in. (254 mm) diam (or smaller) Schedule 40 solid core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

B. **Chlorinated Polyvinyl Chloride (CPVC) Pipe** — Nom 10 in. (254 mm) diam (or smaller) SDR 13.5 CPVC pipe for use in closed (process or supply) piping systems.

C. **Rigid Nonmetallic Conduit+** — Nom 6 in. (152 mm) diam (or smaller) Schedule 40 PVC conduit installed in accordance with the National Electrical Code, (NFPA No. 70).

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

A. **Fill, Void, or Cavity Materials* - Sealant** — Min 1/4 in. (6 mm) thickness of fill material applied within the annulus, flush with top surface of floor. In wall applications, 1/2 in. (13 mm) thickness of the fill material shall be applied and made flush with both surfaces. In floor applications, a min 1/4 in. (6 mm) crown of the fill material shall also be applied around the penetrant at the top concrete surface.

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B. **Firestop Device*** — One galv steel collar lined with an intumescent material, sized to fit specific diam of the through-penetrant. The device is to be installed around through-penetrant in accordance with accompanying installation instructions. The device incorporates four anchor tabs for securement to bottom surface of floor or both surfaces of wall by means of 5/16 in. (8 mm) diam by 2-1/2 in. (64 mm) long steel concrete anchors in conjunction with 1/4 in. (6 mm) by 1-1/4 in. (32 mm) diam steel fender washers. For penetrants greater than 8 in. (203 mm) diam, use two galv steel collars, sized and fastened together to fit specific diam of the through penetrant.

RECTORSEAL — FSD Device

*Bearing the UL Classification Mark

+Bearing the UL Listing Mark

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