

XHEZ - Through-penetration Firestop Systems

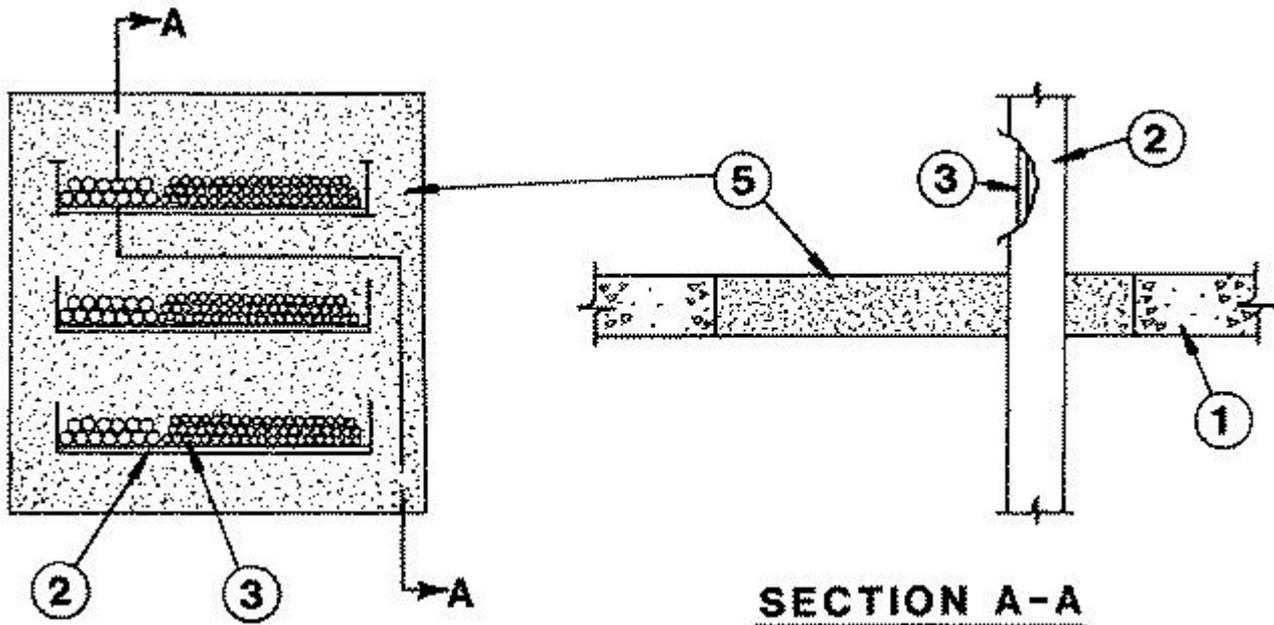
See General Information for Through-penetration Firestop Systems

System No. C-AJ-4021

December 09, 2009

F Rating — 3 Hr

T Rating — 0 Hr



1. **Floor or Wall Assembly** — Min 2-1/2 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max area of opening is 1024 sq in. with max dimension of 32 in.

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

2. **Cable Tray*** — The following types of cable trays may be used:

A. Max 24 in. wide by max 4 in. deep open ladder cable tray with channel-shaped side rails formed of min 0.050 in. thick steel with A-shaped rungs spaced 9 in. OC.

B. Max 24 in. wide by max 4-3/16 in. deep open ladder cable tray formed of min 0.097 in. aluminum with 7/8 in. wide by 1 in. deep rungs spaced 9 in. OC.

A max of three cable trays to be installed in the opening. Of the three cable tray only one may be aluminum. The annular space between the cable trays shall be a min 5-1/4 in. The annular space between the cable tray and the periphery of the opening shall be min 1 in. Cable tray to be rigidly supported on both sides of floor or wall assembly.

3. **Cables** — Aggregate cross-sectional area of cables in cable tray shall be max 30 percent of the cross-sectional area of steel cable tray and max 20 percent of the cross-sectional area of aluminum cable tray, based on a max 3 in. cable loading depth within the cable tray. Any combination of the following types and sizes of copper conductor cables may be used:

A. Max 350 kcmil single-conductor power cables with polyvinyl chloride (PVC) insulation and jacket.

B. 7/C No. 12 AWG copper conductor cable with PVC insulation and jacket.

C. Max 100 pair No. 24 AWG cable with PVC insulation and jacket.

4. **Forms** — (Not Shown) — Used as a form to prevent leakage of fill material during installation. Forms to be a rigid sheet material, cut to fit the contour of the penetrating item and positioned as required to accommodate the required thickness of fill materials. Forms may be removed after fill material has cured.

5. **Fill, Void or Cavity Material* — Firestop Mortar** — Min 2-1/2 in. thickness of fill material applied within the annulus. Fill material is mixed at a rate of 2.5 parts dry mix to one part water by weight in accordance with the installation instructions supplied with fill material.

ARABIAN VERMICULITE INDUSTRIES — Type HP-M