

Through-penetration Firestop Systems

System No. C-AJ-3295

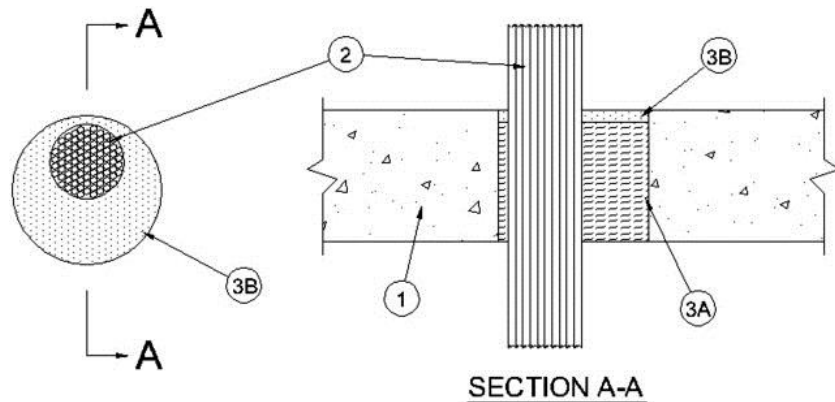
April 10, 2008

F Rating — 2 Hr

T Rating — 0 Hr

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

L Rating at 400° F — 1.4 CFM/sq ft



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 floor or min 5 in. (127 mm) thick reinforced lightweight or normal weight wall. Wall may also be constructed of any UL Classified **Concrete Blocks***. Floor may also be constructed of any min 6 in. (152 mm) thick UL Classified hollow-core **Precast Concrete Units***. Max diam of the opening is 6 in. (152 mm).

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

2. **Cables** — Aggregate cross-sectional area of cables in opening to be max 25 percent of the cross-sectional area of the opening. Cables installed individually or in bundles having a max bundle diam of 3 in. (76 mm). The annular space between cable bundle and the periphery of the opening shall be min 3/8 in. (10 mm) to max 2-5/8 in. (67 mm). Cables to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of cables may be used:

- A. Max 100 pair No. 24 AWG (or smaller) copper conductor cable with polyvinyl chloride (PVC) jacketing and insulation.
- B. Max 3/C No. 2/0 AWG (or smaller) aluminum conductor service entrance cable with PVC insulation and jacket.
- C. Max 3/C with ground No. 12 AWG (or smaller) nonmetallic sheathed (Romex) cable with copper conductors, PVC insulation and jacket.
- D. Max 1/C No. 350 kcmil (or smaller) copper conductor power cable with XLPE (cross-linked polyethylene) or PVC insulation and XLPE or PVC jacket.
- E. Max RG59/U (or smaller) copper conductor coaxial cable with fluorinated ethylene insulation and jacketing.
- F. Max 62.5/125 fiber optic cable with PVC insulation and jacketing.

G. Max RG/6 No. 18 AWG Type copper conductor CATV coaxial cable with PVC insulation and jacket.

H. Max 7/C No. 12 AWG (or smaller) copper conductor cable with XLPE or PVC insulation and jacket.

2A. **Through Penetrating Product*** — (Not Shown) As an alternate to Item 2, max 3/C No. 2/0 AWG (or smaller) copper conductors aluminum or steel **Metal Clad Cable+**. One or more cables to be installed either concentrically or eccentrically within the firestop system. Aggregate cross-sectional area of cables in opening to be max 25 percent of the aggregate cross-sectional area of the opening. Cables installed individually or in bundles having a max bundle diam of 3 in. (76 mm). The annular space between the cable bundle and the periphery of the opening shall be a min 3/8 in. (10 mm) to a max 2-5/8 in. (67 mm). Cables to be rigidly supported on both sides of floor or wall assembly.

AFC CABLE SYSTEMS INC

ALFLEX CORP

KAF-TECH INC

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

A. **Packing Material** — Min 4 in. (102 mm) thickness of min 4 pcf (64 kg/m³) mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of wall and hollow-core precast concrete units as required to accommodate the required thickness of fill material.

B. **Fill, Void or Cavity Material* - Sealant** — Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall or hollow-core precast concrete units. Additional sealant shall be forced into interstices of cable bundle to max extent possible.

ACCUMETRIC L L C — Boss 816

*Bearing the UL Classification Mark

+Bearing the UL Listing Mark