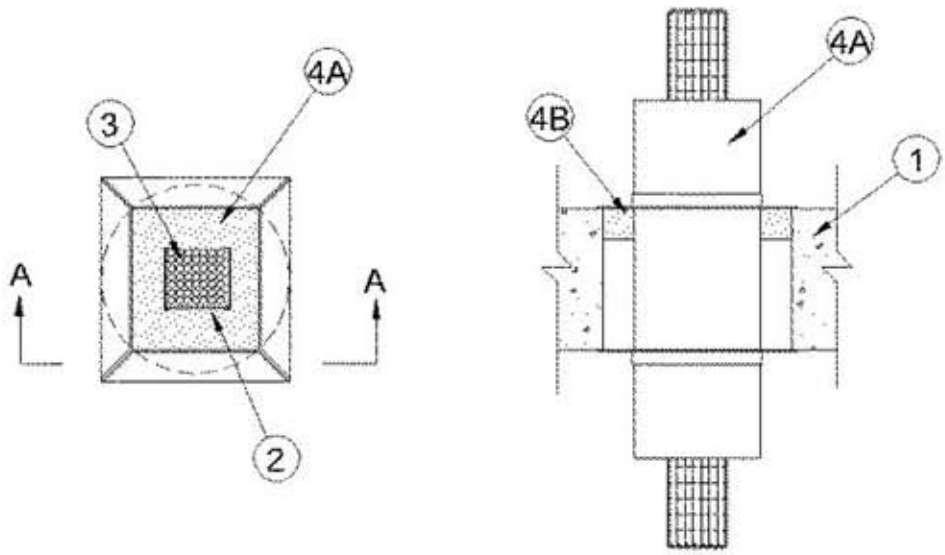
Through-Penetration Firestop System

System No - C-AJ-4081



Section A-A

F Rating - 3 Hr
T Rating - 0 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/m^3) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max diam of opening is 6 in. (152 mm).

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

2. **Cable Tray*** – Nom 2 in. (51 mm) wide by 2 in. (51 mm) high welded wire basket cable tray formed from min 0.23 in. (5.8 mm) thick steel wires in the longitudinal direction and 0.19 in. (4.8 mm) wires in the transverse direction. Transverse wires shall be spaced max 4 in. OC. One cable tray shall be centered within the firestop device (Item 4A). The annular space between the cable tray and the periphery of the device shall be a nom 1 in. (25 mm). Cable tray to be rigidly supported on both sides of floor or wall assembly.

3. **Cables** – Cable fill within cable tray shall be a min 0 in. (0 mm, 0% visual fill) to a max 2 in. (51 mm, 100% visual fill). Cable bundle to be rigidly supported on both sides of floor or wall assembly. Any combination of the following types and sizes of cables may be used:

A. Max 2/C No. 18 AWG copper conductor thermostat cable with polyvinyl chloride (PVC) insulation and jacket materials.
B. Max 4 pair No. 24 AWG copper conductor Cat5e or Cat 6 telephone cable with PVC insulation and jacket materials.
C. Max RG/U (or smaller) coaxial cable with foam high density polyethylene insulation and PVC jacket materials.
D. Max 3/C (with ground) No. 14 AWG (or smaller) nonmetallic sheathed (Romex) cable with PVC insulation and jacket materials.
E. Max 1/C No. 8 AWG copper conductor cable with PVC insulation and nylon jacket materials.
F. Max 12 core No. 26 AWG shielded multi coax cable with foam high density polyethylene insulation and PVC jacket.
G. Max 48MM62.5 micron fiber optic cables with having a min FT-6 rating.
H. Max 62.5/125 micron fiber optic cables with having a min Riser rating.
I. Max 1/C 3/0 AWG copper conductor cable with PVC insulation and jacket materials.

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J. Max three copper conductors (with ground) No. 12 AWG **Metal Clad Cable+.**
K. Max four copper conductors No. 2 AWG **Metal Clad Cable+.**

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L. Max 1/C 2/0 AWG non halogen copper conductor cable.
M. Max 300 pair No. 24 AWG copper conductor telephone cable with PVC insulation and jacket materials.
N. Max 30 pair No. 22 copper conductor shielded switchboard cable with PVC insulation and jacket materials.
O. Max RG/6 (or smaller) coaxial cable with fluorinated ethylene (FE) or PVC insulation and jacket materials.
P. Max RG/U (or smaller) coaxial cable with fluorinated ethylene (FE) or PVC insulation and jacket materials.
Q. Max 7/C No. 12 AWG copper conductors with PVC insulation and jacket materials.
R. Max 4 pair No. 23 AWG copper conductor Cat 6 telephone cable with PVC insulation and jacket materials.
S. Max three copper conductors (with ground) No. 12 AWG steel **Armored Cable+.**
T. Max 04-02 2 5M fiber optic cables having a max diameter of 0.450 in. (11.4 mm).
U. Max 1/C No. 750 kcmil copper conductors with PVC insulation and fabric jacket materials.
V. Max 3/C with ground No. 2/0 AWG aluminum conductor SER cable with cross linked polyethylene (XLPE) insulation and PVC jacket.

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

A. **Firestop Device* —** The firestop device consists of a nom 4 by 4 by 10 in. (102 by 102 by 254 mm) powder coated steel transit incorporating internal intumescent material, foam plugs and mounting flanges. Firestop device to be centered within opening and installed with ends projecting an equal distance beyond each surface of the floor or wall assembly in accordance with the accompanying installation instructions. The annular space between the firestop device and the periphery of the opening shall be nom 1 in. (25 mm). Firestop devices secured in place by means of fill material (Item 4B) and steel split mounting flanges sized to accommodate the firestop device. Steel split mounting flanges installed on both sides of floor or wall after installation of fill material and secured to together with supplied steel set screws. Nom 1 in. (25 mm) thick pre-cut foam plugs sized to accommodate the cable bundle and installed flush with each end of device on both sides of floor or wall assembly.

ABESCO LTD – CT120 Cable Transit

B. **Fill, Void or Cavity Materials* - Sealant —** Min 1 in. (25 mm) thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall prior to the installation of the mounting flanges.

ABESCO LTD – CP 310 FR Acrylic Intumescent Caulk

*Bearing the UL Classification Mark
+Bearing the UL Listing Mark