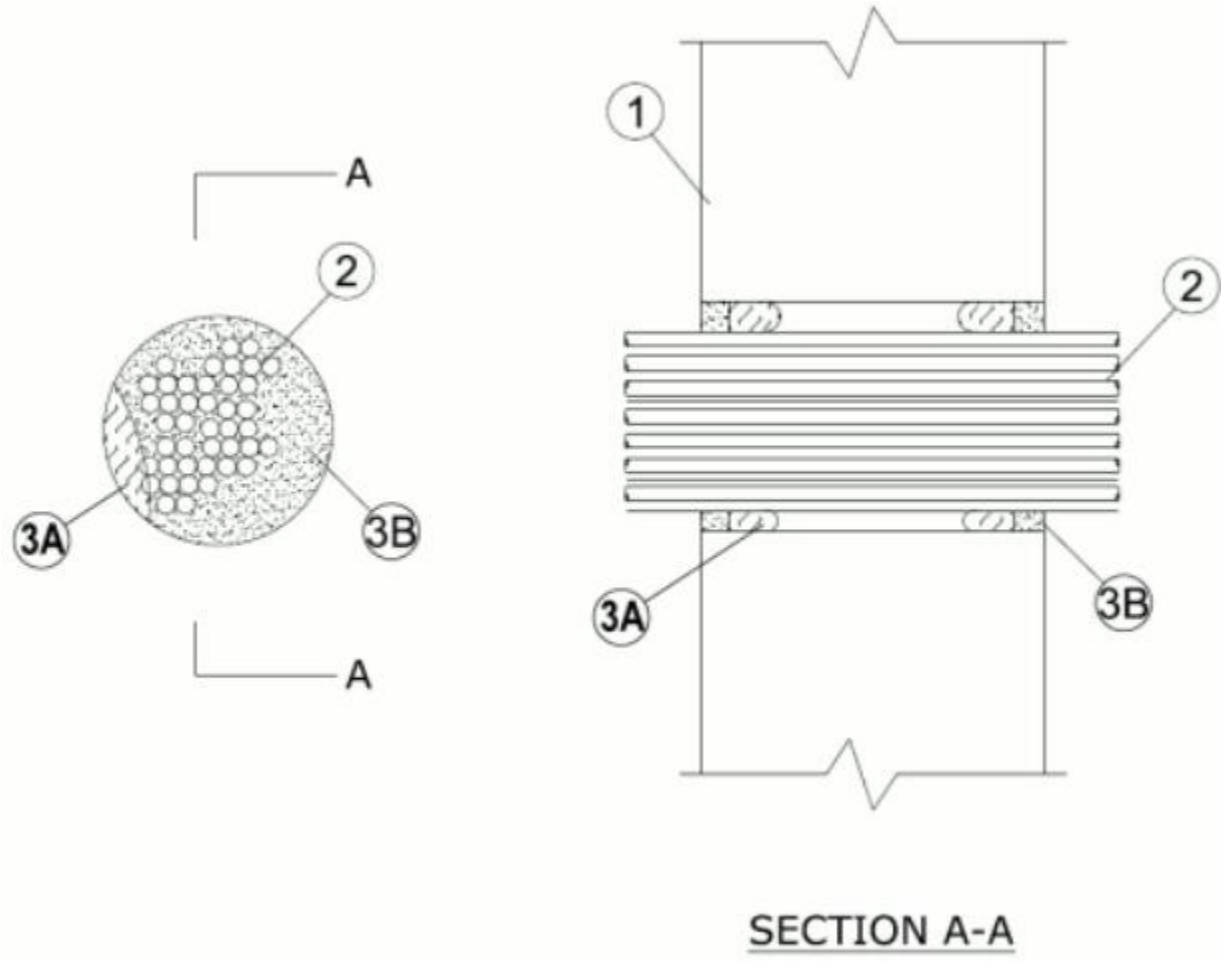
Through-penetration Firestop Systems

System No. W-J-3203

November 13, 2013

F Rating- 2Hr

T Rating- 1/2 Hr



SECTION A-A

1. **Wall Assembly —** Min 6 in. (152 mm) thick 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 4 in. (102 mm).

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

2. **Cables —** Cables installed in a tight bundle having a max bundle diam of 2-1/2 in. (64 mm). The aggregate cross-sectional area of cables in opening to be max 40 percent of the cross-sectional area of the opening. The annular space between cable bundle and the periphery of the opening shall be min 1/2 in. (13 mm) to max 1 in. (25 mm). Cables to be rigidly supported on both sides of 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 Cat5e or No. 22 AWG Cat 3 and Cat 6e copper conductor telephone cable with PVC insulation and jacket materials.
C. Max RG/U (or smaller) coaxial cable with high density polyethylene insulation and 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 60 pair No. 22 AWG copper conductor telephone cable with PVC insulation and jacket.
F. Max 30 pair No. 24 copper conductor shielded switchboard cable with PVC insulation and jacket materials.
G. Max RG/6 (or smaller) coaxial cable with fluorinated ethylene (FE) or PVC insulation and jacket materials.
H. Max 1/C, No. 14 AWG (or smaller) Type MTW or THHN or THWN or gas & oil res II 600V (UL) or AWM VW-1 power cable.

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

A. **Fill, Void or Cavity Materials* — Foam —** Min 5/8 in. (16 mm) thickness of fill material applied within the annulus between concrete and cable bundle and recessed from both surfaces of wall to accommodate the required thickness of caulk fill material (Item 3B).

ACCUMETRIC L L C — Boss 813 FR Expanding Foam

A1. **Packing Material —** As an alternate to Item 3A, min 5/8 in. (16 mm) thickness of min 4 pcf (64 kg/m^3) mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from both surfaces of wall to accommodate the required thickness of fill material (Item 3B).

B. **Fill, Void or Cavity Material* — Caulk —** Min 5/8 in. (16 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall.

ACCUMETRIC L L C — Boss 814 Sealant or Boss 816 Sealant

*Bearing the UL Classification Mark