

System No. C-AJ-8005

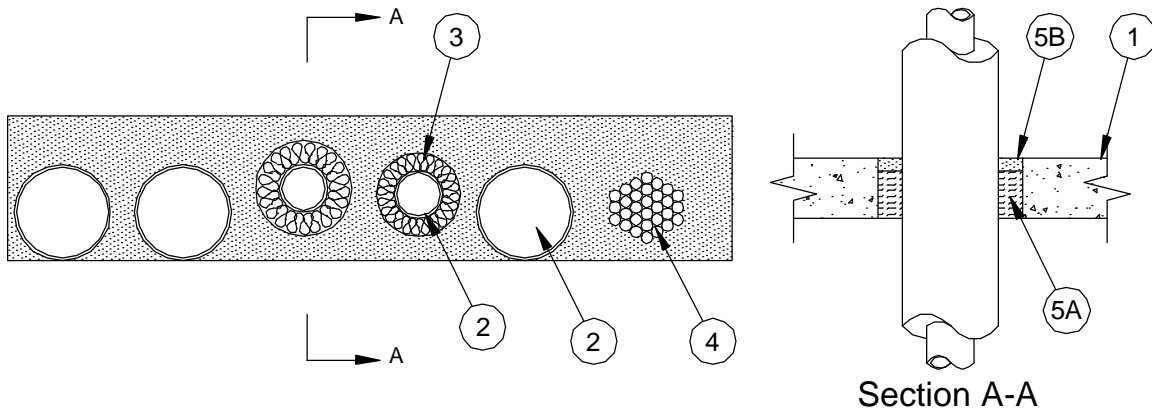
August 2008

F Rating - 2 Hr

FT Rating - 0 and 3/4 Hr (See Item 2)

FH Rating - 0 Hr

FTH Rating - 0 Hr
(cUL)



1. **Floor or Wall Assembly** – Min 64 mm (2-1/2 in.) thick reinforced lightweight or normal weight (1600-2400 kg/cu meter (100-150 pcf)) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max area of opening is 1161 sq cm (180 sq in.) with max dimension of 762 mm (30 in.).

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

2. **Through-Penetrant** – A maximum of five metallic pipes, conduit or tubing to be installed within the opening. The annular space between metallic penetrants and the periphery of the opening shall be min 0 mm (point contact) to max 48 mm (1-7/8 in.). The annular space between metallic penetrants shall be min 19 mm (3/4 in.) to max 38 mm (1-1/2 in.). Pipe, conduit or tubing to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:

- A. **Steel Pipe** – Nom 102 mm (4 in.) diam (or smaller) Schedule 10 (or heavier) steel pipe.
- B. **Iron Pipe** – Nom 102 mm (4 in.) diam (or smaller) cast or ductile iron pipe.
- C. **Conduit** – Nom 102 mm (4 in.) diam (or smaller) electrical metallic tubing or rigid steel conduit.
- D. **Copper Tubing** – Nom 102 mm (4 in.) diam (or smaller) Type L (or heavier) copper tubing.
- E. **Copper Pipe** – Nom 102 mm (4 in.) diam (or smaller) Regular (or heavier) copper pipe.

The FT Rating is 3/4 hr except that the FT Rating is 0 hr when metallic penetrants are used without pipe covering.

3. **Pipe Coverings*** – One of the following pipe coverings may be used on metallic through-penetrants A, B, D and E (Item 2) having a nom diam of 51 mm (2 in.) (or smaller). The annular space between pipe covering and periphery of opening shall be min 25 mm (1 in.) to max 35 mm (1-3/8 in.). The annular space between penetrants shall be min 19 mm (3/4 in.) to max 38 mm (1-1/2 in.).

- A. **Pipe Covering*** – Nom 1 in. thick hollow cylindrical heavy density (min 3.5 pcf) glass fiber units jacketed on the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product.

See **Pipe and Equipment Covering – Materials** (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.

- B. **Tube Insulation – Plastics+** – Nom 3/4 in. thick acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing.
- See **Plastics** (OMFZ2) category in the Plastics Recognized Component Directory for names of manufacturers. Any Recognized Component tube insulation material meeting the above specifications and having a UL 94 Flammability Classification of 94-5VA may be used.
4. **Cables** – A max 38 mm (1-1/2 in.) diam tight bundle of cables to be installed within the opening and rigidly supported on both sides of floor or wall assembly. The annular space between cable bundle and periphery of the opening shall be min 25 mm (1 in.) to max 57 mm (2-1/4 in.). Any combination of the following types and sizes of copper conductor cables may be used:
- A. Max 3/C, No. 2/0 AWG (or smaller) copper conductor, PVC jacketed steel metal clad cable.
 - B. Max 4 pair No. 24 AWG (or smaller) copper conductor cable with polyvinyl chloride (PVC) jacketing and insulation. .
 - C. Max 62.5/48 fiber optic cable with PVC insulation and jacketing.
 - D. Max 3/C with ground No. 8 AWG (or smaller) copper conductor NM cable (Romex) with PVC insulation and jacket.
 - E. RG/U coaxial cable with fluorinated ethylene insulation and jacket.
5. **Firestop System** - The firestop system shall consist of the following:
- A. **Packing Material** – Min 51 mm (2 in.) thickness of min 64 kg/cu meter (4 pcf) mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed 13 mm (1/2 in.) from top surface of floor or both surfaces of wall to accommodate the required thickness of fill material.
 - B. **Fill, Void or Cavity Material*** – Sealant – Min 13 mm (1/2 in.) thickness of fill material applied within annulus, flush with top surface of floor or both surfaces of wall assembly. At the point contact location between pipes and concrete, a min 10 mm (3/8 in.) diam bead of sealant shall be applied at the concrete/pipe interface on the top surface of floor and on both surfaces of wall assembly.

TREMCO INC – TREMstop Intumescent Acrylic, TREMstop IA+

*Bearing the UL Classification Mark



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