

## System No. W-J-4053

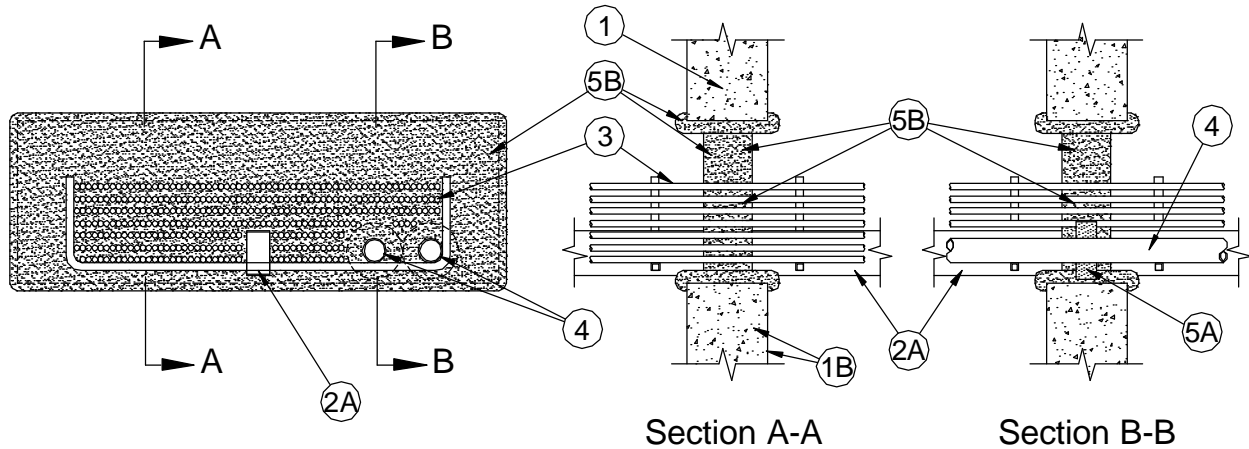
August 2008

F Rating - 2 Hr

T Ratings — 0 and 1/2 (See Item 2)

L Rating At Ambient — 16 CFM/sq ft

(UL/cUL)



1. **Wall Assembly** — Min 5 in. (127 mm) thick reinforced lightweight or normal weight (100-150 pcf (1600-2400 kg/cu meter)) structural concrete. Wall may also be constructed of any UL Classified **Concrete Blocks\***. Max size of opening is 300 sq in. (1935 sq cm) with max dimension of 30 in. (762 mm).

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

2. **Through-Penetrants** — One cable tray to be installed within the firestop system. Cable tray to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of cable tray may be used:
  - A. **Cable Tray\*** — Max 24 in. (610 mm) wide by max 6 in. (152 mm) deep center spline cable tray with max 2-3/4 by 1-1/2 in. (70 by 38 mm) center tube and nom 1/2 by 1/2 in. (13 by 13 mm) tube-shaped rungs spaced 9 in. (229 mm) OC, both formed of min 0.062 in. (1.6 mm) thick aluminum or min 0.040 in. (1 mm) thick (No. 20 MSG) galvanized steel. The annular space between the ends of the cable tray and the periphery of the opening shall be a nom 3 in. (76 mm). The annular space between the long sides of the cable tray and the periphery of the opening shall be a min of 1/2 in. (13 mm) and a max of 3-1/2 in. (89 mm). **The T rating is 1/2 hr for aluminum cable trays and 0 hr for steel cable trays.**
3. **Cables** — Aggregate cross-sectional area of cables in cable tray to be max 31 percent of the cross-sectional area of the cable tray based on a max 6 in. (152 mm) cable loading depth within the cable tray. Any combination of the following types and sizes of copper conductor cables may be used:
  - A. Max 24-62.5/125 micron fiber optic (F.O.) cable with PVC insulation and jacket.
  - B. RG59/U (or smaller) coaxial cable with fluorinated ethylene (FE) or PVC insulation and jacket.
  - C. Max 4 pair No. 24 AWG (or smaller) copper conductor data cable with Hylar jacket and insulation.
  - D. Max 3/C with ground No. 10 AWG (or smaller) copper conductor NM cable with PVC insulation and jacket materials.
  - E. Through Penetrating Product\* — Max 4/C plus grd No. 14 AWG (or smaller) Metal-Clad Cable+.

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  - F. Through Penetrating Product\* — Max 4/C plus grd No. 12 AWG (or smaller) copper conductor Metal-Clad Cable+ with aluminum armor.

**ALFLEX CORP.**
4. **Optical Fiber Raceway+** — One or more max 1-1/2 in. (38 mm) diam (or smaller) optical fiber raceways (innerduct) formed from polyvinyl chloride (PVC) or polyvinylidene fluoride (PVDF) with fiber optic cable fill. Raceways installed in accordance with Article 770 of the National Electrical Code (NFPA No. 70). Raceways may be used in addition to the cable types listed in Item 3.

See **Optical Fiber Raceway** (OAZM) category in the Electrical Construction Equipment Directory for names of manufacturers.

5. **Firestop System** – The firestop system consists of the following items:

- A. **Fill, Void or Cavity Material\*** – Ring of sealant to be applied around the outer diameter of each optical fiber raceway (Item 4) at center of wall thickness. Sealant to be min 1 in. (25 mm) thick by min 1-1/4 in. (32 mm) depth. To aid in installation of sealant, a sheet steel or equivalent form may be used. Form to be removed after sealant sets.

**TREMCO INC** – TREMstop Intumescent Acrylic, FyreCaulk, or TREMstop IA+

- B. **Fill, Void or Cavity Material\*** - Putty – Min 3/4 in. (19 mm) thick fill material to be tightly packed against all four sides of opening for the entire thickness of wall and lapping nom 1/2 in. (13 mm) around periphery of opening onto both faces of wall. Min 3/4 in. (19 mm) thickness by min 3 in. (76 mm) depth of fill material firmly packed in opening between each layer of cables. Fill material to be centered in thickness of wall and packed to the max extent possible between and around the cables and between cables and center tube of center spline cable tray. Min 3 in. (76 mm) depth of fill material centered in the wall thickness and tightly packed between cables/cable tray and periphery of opening to fill remaining annular space.

**TREMCO INC** – TREMstop Putty

\*Bearing the UL Classification Mark

+ Bearing UL Listing Mark



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