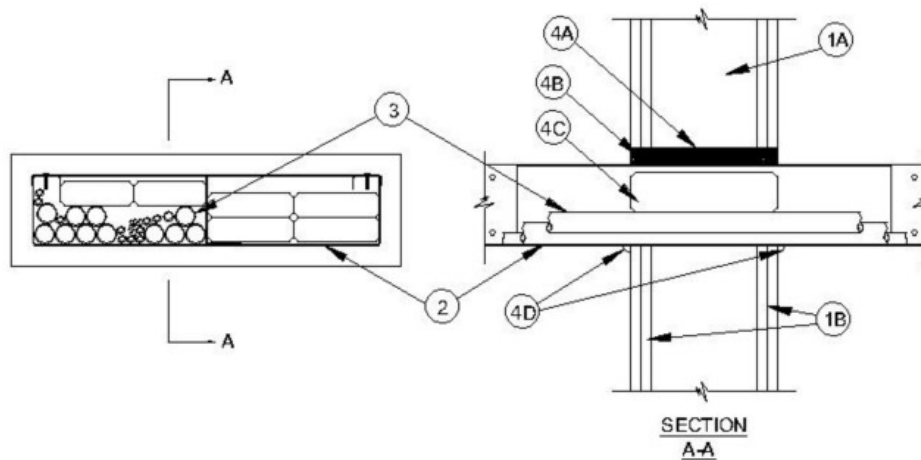


**F Ratings — 1 and 2 Hr (See Item 1)**  
**T Ratings — 0 and 1/2 Hr (See Item 1)**



**1. Wall Assembly** — The 1 and 2 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U400 or V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

**A. Studs** — Wall framing to consist of min 3-1/2 in. (89 mm) wide steel channel studs spaced max 24 in. (610 mm) OC. Additional framing members to be installed in stud cavity containing cable tray to completely frame the opening.

**B. Gypsum Board\*** — One or two layers of nom 5/8 in. (16 mm) thick gypsum board, as specified in the individual Wall and Partition Design. Max area of opening is 125 in.2 (806 cm<sup>2</sup>) with max dimension of 25 in. (635 mm).

**The F Rating is equal to rating of the wall assembly. The T Rating is 0 and 1/2 hr for 1 and 2 hr rated assemblies, respectively.**

**2. Cable Tray** — Max 24 in. (610) wide by max 4 in. (102 mm) deep cable tray with channel-shaped side rails formed from 0.080 in. (2.03 mm) thick aluminum with 0.050 in. (1.27 mm) thick aluminum cable tray cover screwed down to top flange of cable tray channel. The annular space between the cable tray and the periphery of the opening shall be min 0 in. to max 1 in. (25 mm). Cable tray to be rigidly supported on both sides of wall assembly.

**3. Cables** — Aggregate cross-sectional area of cables in cable tray to be min 0 percent to max 40 percent of the cross-sectional area of the cable tray based on a max 3 in. deep cable loading depth within the cable tray. Any combination of the following types and sizes of cables may be used:

**A.** Max 200 pair No. 22 AWG (or smaller) copper conductor with polyvinyl chloride (PVC) insulation and jacketing material.

**B.** Max 1/C No. 750 kcmil (or smaller) copper conductor cable with cross-linked polyethylene (XLPE) jacket.

**C.** Max 7/C No. 12 AWG (or smaller) copper conductor power and control cables with XLPE or PVC insulation with XLPE or PVC jacket.

**D.** Max 3/C No. 3/0 AWG (or smaller) copper or aluminum conductor SER cables with PVC insulation and jacket.

**E.** Max 3/C No. 2/0 AWG (or smaller) copper conductor PVC jacketed aluminum clad or steel clad TECK 90 cable.

**F.** Max 110/125 fiber optic (F.O.) cable with PVC insulation and jacket.

**G.** Max 3/C with ground No. 8 AWG (or smaller) copper conductor NM cable with PVC insulation and jacket.

**H.** RG/U coaxial cable with fluorinated ethylene (FE) or PVC insulation and jacket.

**I.** Max 4 pair No. 24 AWG (or smaller) copper conductor data cable with Hylar jacket and insulation.

**J.** Max three conductor No. 12 AWG (or smaller) MC (BX) copper cable with polyvinyl chloride insulation and jacket materials.

**K. Through Penetrating Product\*** - Any cables, Armored Cable+ or Metal Clad Cable+ currently Classified under the Through Penetrating Product category.

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

A. **Packing Material** — Min 4 pcf (64 kg/m<sup>3</sup>) mineral wool batt insulation compressed and firmly packed into opening as a permanent form. Packing material recessed from both surfaces of wall to accommodate the required thickness of fill material.

B. **Fill, Void or Cavity Material\* — Caulk** — Min 1 in. (25 mm) thickness of fill material applied over mineral wool on both surfaces of wall. At point contact location between penetrant and periphery of opening, a min 1/2 in. (13 mm) diam bead of fill material shall be applied at the gypsum board/cable tray interface on both surfaces of wall.

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C. **Fill, Void or Cavity Material\* — Pillows** — Nom 9 in. (229 mm) long by 6 in. (152 mm) wide by 3 in. (76 mm) thick pillows tightly packed within enclosed cable tray to fill the void between cable tray and cables and to completely fill any sections within the cable tray where no cables are used. Pillows to be inserted lengthwise with the 9 in. (229 mm) dimension centered in wall

**RECTORSEAL** — [Metacaulk Pillows](#)

\*,+ Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

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