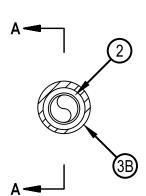
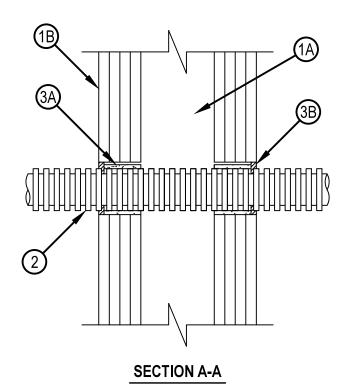


System No. W-L-2444

F Ratings -- 3 and 4 Hr (See Item 1) T Ratings -- 3 and 4 Hr (See Item 1)





- 1. Wall Assembly The 3 and 4 hr fire rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U400, V400 or W400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
 - A. Studs Wall framing shall consist of min 3-1/2 in. (89 mm) wide steel channel studs spaced max 24 in. (610 mm) OC.
 - B. Gypsum Board* Min 1/2 in. (13 mm) thick, 4 ft (1.22 m) wide with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual Wall and Partition Design in the UL Fire Resistance Directory. Max diam of opening is 3 in. (76 mm).

The hourly F and T Ratings of the firestop system are equal to the hourly fire rating of the wall assembly in which it is installed.

2. Through Penetrant — Nom 2 in. (51 mm) diam (or smaller) Electrical Nonmetallic Tubing+ formed from polyvinyl chloride (PVC) and installed in accordance with the National Electrical Code (NFPA No. 70). One tubing to be installed either concentrically or eccentrically within the firestop system. The annular space within the firestop system shall be min 3/16 in. (5 mm) to a max 7/16 in. (11 mm). Tubing to be rigidly supported on both sides wall.

See Electrical Nonmetallic Tubing (FKHU) category in the Electrical Construction Materials Directory for names of manufacturers.

- 3. Firestop System The firestop system shall consist of the following:
 - A. Fill, Void or Cavity Material* Wrap Strip Single layer of nom 3/16 in. (5 mm) thick by 1-3/4 in. (45 mm) wide intumescent wrap strip wrapped around through penetrant with butted end seam and secured with aluminum foil tape. Wrap strip recessed from each surface of wall to accommodate the required thickness of fill material. Wrap strip shall be installed on both sides of wall.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 648E Firestop Wrap Strip

- B. Fill, Void or Cavity Material* Sealant Min 1/4 in. (6 mm) thickness of fill material applied within annulus, flush with each surface of wall. HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC FS-ONE Sealant or FS-ONE MAX Intumescent Sealant
- * Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.
- + Bearing the UL Listing Mark

