

System No. W-L-2412

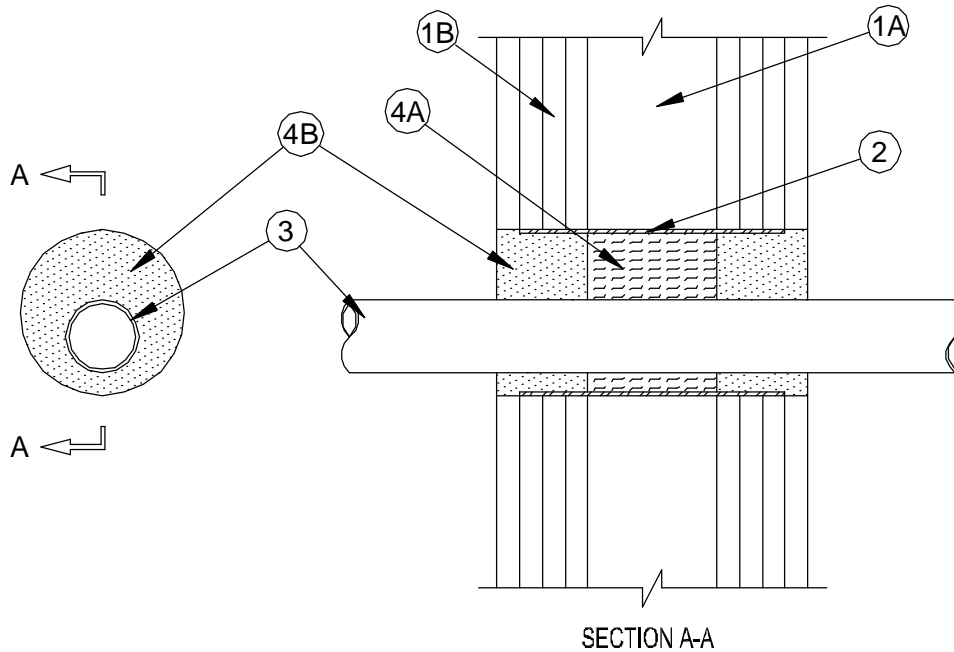
August 2008

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

T Rating - 0 Hr

L Rating at Ambient - Less Than 1 CFM/sq ft

(UL/cUL)



- Wall Assembly** — The 3 or 4 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U400 or V400 Series Wall or Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
 - Studs** — Wall framing shall consist of steel channel studs. Steel studs to be min 1-5/8 in. (41 mm) wide for 4 hr rated walls and min 2-1/2 in. (64 mm) wide for 3 hr rated walls. Studs to be spaced max 24 in. (610 mm) OC.
 - Gypsum Board*** — Multiple layers of min 1/2 in. (13 mm) thick gypsum board. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U400 or V400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 4-1/2 in. (114 mm).
- Steel Sleeve** — Cylindrical sleeve fabricated from min 0.013 in. (0.330 mm) thick (No. 30 gauge) to max 0.056 in. (1.42 mm) (No. 16 gauge) galv steel sheet and having a min 2 in. (51 mm) lap along the longitudinal seam. Length of sleeve to be nom 1 in. (25 mm) less than thickness of wall. Sleeve to be installed by coiling the sheet metal to a diam smaller than the through opening, inserting the coil through the opening and releasing the coil to let it uncoil against the circular cutouts in the gypsum board layers. Sleeve to be centered within thickness of wall.
- Through Penetrants** — One nonmetallic pipe to be installed within the opening. The annular space between the through penetrant and periphery of the opening shall be min 1/2 in. (13 mm) to max 1-5/8 in. (41 mm). Pipe to be rigidly supported on both sides of wall assembly. The following types and sizes of pipes may be used:
 - Polyvinyl Chloride (PVC) Pipe** — Nom 2 in. (51 mm) diam (or smaller) Schedule 40 cellular or solid core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
 - Acrylonitrile Butadiene Styrene (ABS) Pipe** — Nom 2 in. (51 mm) diam Schedule 40 cellular or solid core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
 - Chlorinated Polyvinyl Chloride (CPVC) Pipe** — Nom 2 in. (51 mm) diam (or smaller) SDR 13.5 CPVC pipe for use in closed (process or supply) piping systems.
- Firestop System** — The firestop system shall consist of the following:

- A. **Packing Material** — Min 1-1/2 in. (38 mm) thickness of min 4 pcf (64 kg/cu meter) mineral wool batt insulation firmly packed into the opening as a permanent form. Packing material to be recessed from both surfaces of wall as required to accommodate the required thickness of fill material.
- B. **Fill, Void or Cavity Material*** — Min 2 in. (51 mm) thickness of fill material applied within the annular space, flush with both surfaces of wall.

TREMCO INC — TREMstop Intumescent Acrylic, TREMstop IA+

*Bearing the UL Classification Mark



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