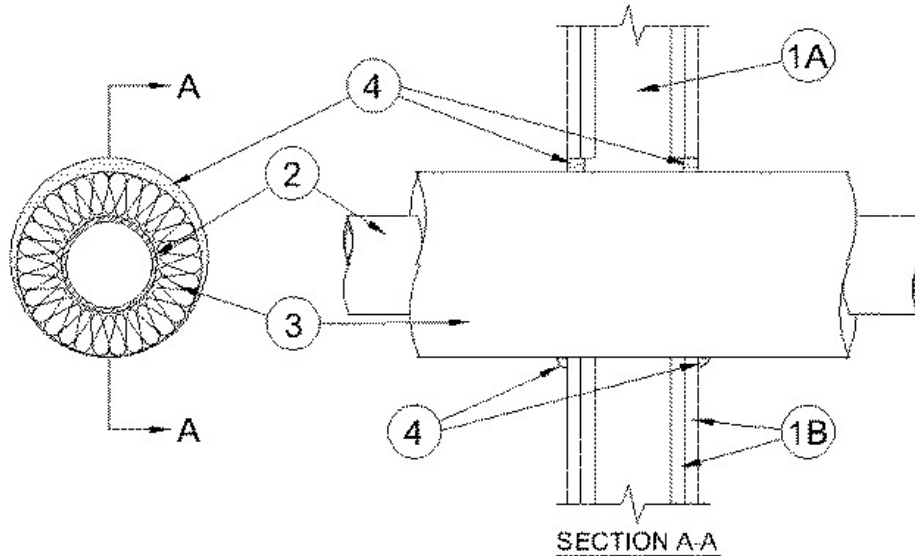


F Rating — 2 Hr  
T Rating — 1 Hr



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

**A. Studs** — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced 16 in. OC. Steel studs to be min 2-1/2 in. wide and spaced max 24 in. OC.

**B. Gypsum Board\*** — 5/8 in. thick, 4 ft 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. Max diam of opening is 9 in.

**2. Through Penetrants** — One metallic pipe or tubing to be centered within the firestop system. Pipe or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes or tubing may be used:

**A. Steel Pipe** — Nom 4 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.

**B. Copper Tubing** — Nom 4 in. diam (or smaller) Type L (or heavier) copper tubing.

**C. Copper Pipe** — Nom 4 in. diam (or smaller) Regular (or heavier) copper pipe.

**3. Pipe Covering\*** — Nom 1-1/2 or 2 in. thick hollow cylindrical glass fiber units 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. The annular space shall be min 0 in. (point contact) to max 1/2 in.

See **Pipe and Equipment Covering Materials** (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering 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.

**4. Fill, Void or Cavity Material\* - Caulk** — Min 1/2 or 3/4 in. thickness of fill material applied within the annulus, flush with both surfaces of wall. When 1-1/2 in. thick pipe covering is used, thickness of fill material shall be 1/2 in. depth. When pipe covering is 2 in. thick, thickness of fill material shall be 3/4 in. A min 1/4 in. diam bead of fill material shall be applied at the pipe covering/gypsum board interface on both surfaces of wall.

**RECTORSEAL** — [Metacaulk 1000](#)

\*,+ 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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