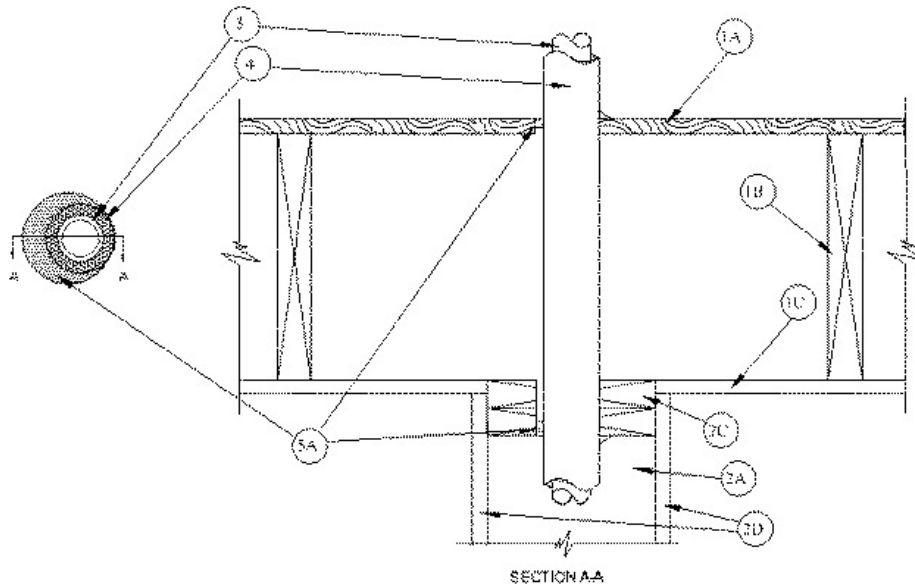


F Rating — 1 Hr  
T Rating — 1 Hr



**1. Floor-Ceiling Assembly** — The 1 hr fire-rated wood joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Designs in the UL Fire Resistance Directory, as summarized below:

**A. Flooring System** — Lumber or plywood subfloor with finish floor of lumber, plywood or **Floor Topping Mixture\*** as specified in the individual Floor-Ceiling Design. Max diam of floor opening is 5 in.

**B. Wood Joists** — Nom 10 in. deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or **Structural Wood Members\*** with bridging as required and with ends firestopped.

**C. Gypsum Board\*** — Nom 5/8 in. thick as specified in the individual Floor-Ceiling Design. Gypsum board secured to joists as specified in the individual Floor-Ceiling Design.

**2. Chase Wall** — The through penetrant (Item 3) shall be routed through a 1 hr fire-rated single, double or staggered wood stud/gypsum board chase wall constructed of the materials and in the manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

**A. Studs** — Nom 2 by 6 in. lumber or double nom 2 by 4 in. lumber studs.

**B. Sole Plate** — Nom 2 by 6 in. lumber or parallel 2 by 4 in. lumber plates, tightly butted.

**C. Top Plate** — The double top plate shall consist of two nom 2 by 6 in. lumber plates or two sets of nom 2 by 4 in. lumber plates, tightly butted. Max diam of opening is 5 in.

**D. Gypsum Board\*** — Thickness, type, number of layers and fasteners shall be as specified in individual Wall and Partition Design.

**3. Through Penetrant** — One metallic penetrant to be installed either concentrically or eccentrically within the firestop system. Pipe or tubing to be rigidly supported on both sides of floor-ceiling assembly. The following types and sizes of metallic pipes or tubing may be used:

**A. Steel Pipe** — Nom 2 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.

**B. Iron Pipe** — Nom 2 in. diam (or smaller) cast or ductile iron pipe.

**C. Copper Pipe** — Nom 2 in. diam (or smaller) Regular (or heavier) copper pipe.

**D. Copper Tubing** — Nom 2 in. diam (or smaller) Type L (or heavier) copper tubing.

**4. Tube Insulation — Plastics+** — Nom 1 in. thick acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing. The annular space between insulation and the periphery of the opening shall be min 0 in. (point contact) to max 7/8 in

See **Plastics+** (QMFZ2) category in the Plastics Recognized Component Directory for names of manufacturers. Any Recognized tube insulation material meeting the above specifications and having a min UL94 Flammability Classification of 94-5VA may be used.

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

A. **Fill, Void or Cavity Material\* — Caulk** — Min 1/4 in. thickness of fill material applied within annulus, flush with top surface of subfloor. Min 1/2 in. thickness of fill material applied within annulus flush with bottom surface of lower top plate. At point contact location, a min 1/2 in. diam bead of fill material shall be applied to the penetrant/opening interfaces on top surface of subfloor and bottom surface of lower top plate

**RECTORSEAL** — MC 150+

\*,+ 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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