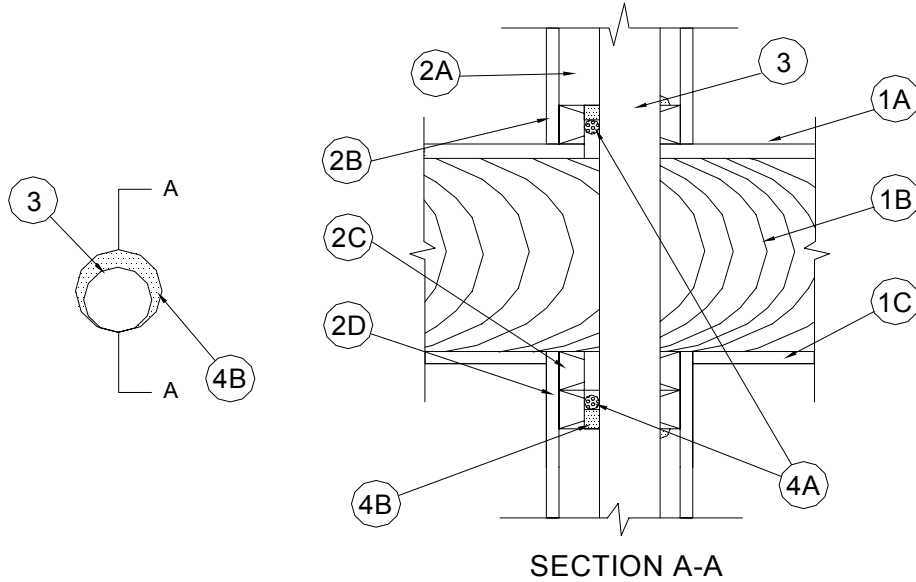


Through-penetration Firestop Systems
UL System No. F-C-1150
F Rating - 1Hr
T Rating - 1 Hr



1. **Floor-Ceiling Assembly** - The 1 hr fire-rated wood joist floor-ceiling assembly shall be constructed of the materials and in the manner described in the individual L500 Series Design 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. dia. of opening is 5 in. (127 mm).
 - B. **Wood Joists*** - Nom. 10 in. (254 mm) deep (or deeper) lumber joists spaced max. 24 in. (610 mm) OC with bridging as required and with ends firestopped.
 - C. **Gypsum Board*** - Nom. 4 ft (122 cm) wide by 5/8 in. (16 mm) thick as specified in the individual Floor-Ceiling Design. Gypsum board nailed to wood joists.
2. **Chase Wall** - The through penetrants (Item 3) shall be routed through a 1 hr fire-rated single, double or staggered wood stud/gypsum board chase wall constructed of the material 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. (51 by 152 mm) or double 2 by 4 in. (51 by 102 mm) lumber studs.
 - B. **Sole Plate** - Nom. 2 by 6 in. (51 by 152 mm) or parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Max. dia. of opening is 5 in. (127 mm).
 - C. **Top Plate** - The double top plate shall consist of two 2 by 6 in. (51 by 152 mm) or two sets of parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Max. dia. of opening is 5 in. (127 mm).
 - D. **Gypsum Board*** - Thickness, type, number of layers and fasteners shall be as specified in individual Wall and Partition Design.

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3. **Through Penetrants** - One metallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the firestop system. The annular space between pipe, conduit or tubing and periphery of opening shall be min. 0 in. (point contact) to max. 7/8 in. (22 mm). Pipe, conduit or tubing to be rigidly supported on both sides of floor assembly. The following types and sizes of metallic pipe, conduit or tubing may be used:
- A. **Steel Pipe** - Nom. 4 in. (102 mm) dia. (or smaller) Schedule 10 (or heavier) steel pipe.
 - B. **Iron Pipe** - Nom. 4 in. (102 mm) dia. (or smaller) cast or ductile iron pipe.
 - C. **Conduit** - Nom. 4 in. (102 mm) dia. (or smaller) steel electrical metallic tubing or rigid steel conduit.
 - D. **Copper Tubing** - Nom. 4 in. (102 mm) dia. (or smaller) Type L (or heavier) copper tubing.
 - E. **Copper Pipe** - Nom. 4 in. (102 mm) dia. (or smaller) Regular (or heavier) copper pipe.
4. **Firestop System** - The firestop system shall consist of the following:
- A. **Packing Material** - Foam backer rod firmly packed into opening as a permanent form. Packing material to be recessed from top surface of subfloor or sole plate, and bottom surface of the lower top plate as required to accommodate the required thickness of fill material.
 - B. **Fill, Void or Cavity Material* - Caulk** - Min. 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with top surface of floor or sole plate. Min. 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with bottom surface of lower top plate. Min 1/4 in. (6 mm) diam bead of fill material applied at the penetrant/plate interfaces at point contact locations on both sides of assembly.
A/D FIRE PROTECTION SYSTEMS INC - A/D FIREBARRIER Intumescent Sealant or
A/D FIREBARRIER Acrylic Sealant

*Bearing the UL Classification Mark