



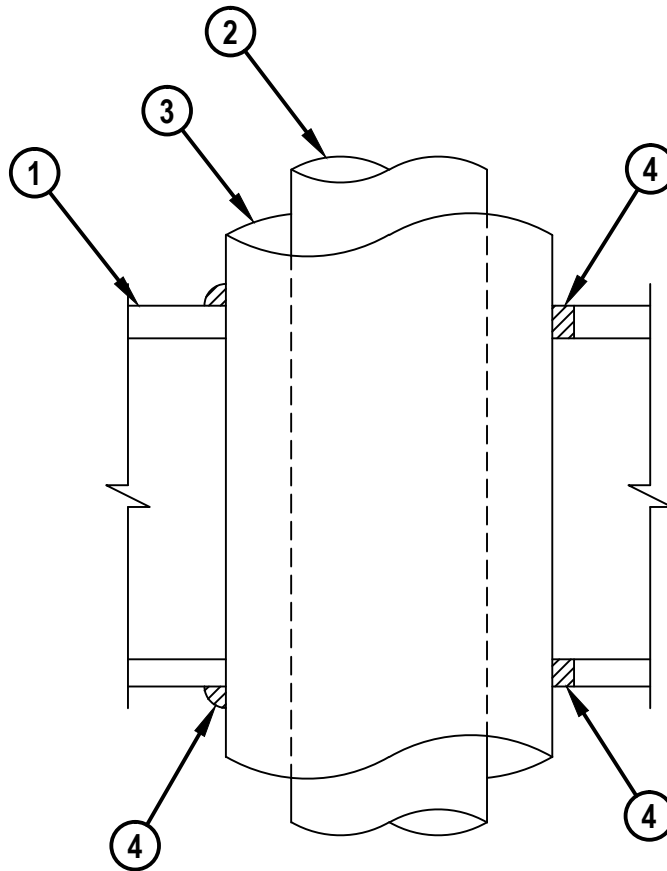
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Underwriters Laboratories, Inc.  
to UL 1479 and CAN/ULC-S115

## System No. F-C-5066

F Rating — 1 Hr

T Rating — 1 Hr

FC 5066



1. Floor-Ceiling Assembly — The 1 hr fire-rated solid or trussed lumber joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory. The general construction features of the floor-ceiling assembly are 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 opening shall be 8 in.
- B. Wood Joists\* — Nom 10 in. (254 mm) 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 4 ft (1.22) wide by 5/8 in. (16 mm) thick as specified in the individual Floor-Ceiling Design. Gypsum board secured to wood joists or furring channels as specified in the individual Floor-Ceiling Design.



**Hilti Firestop Systems**

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- 1A. Chase Wall — (Optional, Not Shown) — The through penetrants (Item 2) may be routed through a 1 hr fire rated single, double or staggered wood stud/gypsum board chase wall. Depth of chase wall stud cavity to be min 1/2 in. (13 mm) greater than diameter of opening cut in sole and top plates to accommodate the through penetrant (Item 2). The chase wall shall be 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 4 in. (51 by 102 mm), 2 by 6 in. (51 by 152 mm), 2 by 8 in. (51 by 203 mm) or double nom 2 by 4 in. (51 by 102 mm) lumber studs.
  - B. Sole Plate — Nom 2 by 4 in. (51 by 102 mm), 2 by 6 in. (51 by 152 mm) or 2 by 8 in. (51 by 203 mm) lumber plates or double nom 2 by 4 in. (51 by 102 mm) lumber plates tightly butted together. Circular opening to be centered in sole plate. Sole plate to be min 1 in. (25mm) wider than diam of opening. Max diam of opening in sole plate is 8 in. (140 mm).
  - C. Top Plate — The double top plate shall consist of two nom 2 by 4 in. (51 by 102 mm), 2 by 6 in. (51 by 152 mm) or 2 by 8 in. (51 by 203 mm) lumber plates or double nom 2 by 4 in. (51 by 102 mm) lumber plates tightly butted together. Circular opening to be centered in top plate. Top plate to be min 1 in. (25mm) wider than diam of opening. Max diam of opening in top plate is 5-1/2 in. (140 mm).
  - D. Gypsum Board\* — Thickness, type, number of layers and fasteners shall be as specified in individual Wall and Partition Design.
2. Through Penetrants — One metallic tube or pipe to be installed concentrically or eccentrically within the opening. Tube or pipe to be rigidly supported on both sides of floor-ceiling assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
  - A. Copper Tube — Nom 4 in. (102 mm) diam (or smaller) Type L (or heavier) copper tube.
  - B. Copper Pipe — Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper pipe.
  - C. Steel Pipe — Nom 4 in. (102 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
  - D. Iron Pipe — Nom 4 in. (102 mm) diam (or smaller) cast or ductile iron pipe.
3. Pipe Covering\* — Nom 1-1/2 in. (38 mm) thick hollow cylindrical heavy density (min 3.5 pcf or 56 kg/m<sup>3</sup>) glass fiber units, jacketed on the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory-applied SSL tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product. The diam of opening shall be 4 in. (102 mm) larger than the nom diam of penetrant. The annular space between the insulated pipe and the periphery of the opening shall be min 0 in. (point contact) to max 7/8 in. (22 mm). See Pipe and Equipment Covering-Materials (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material 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 Materials\*-Sealant — Min 3/4 in. (19 mm) thickness of sealant applied within the annulus flush with the top surface of the floor or sole plate and min 5/8 in. (16 mm) thickness of sealant applied within the annulus flush with the bottom surface of gypsum board or lower top plate. A min 1/2 in. (13 mm) diameter bead of sealant applied at the insulation/subflooring or sole plate interface and the insulation/gypsum board or top plate interface at point contact locations.  
HILTI CONSTRUCTION CHEMICALS, DIV OF  
HILTI INC — CP 606 Flexible Firestop Sealant

\*Bearing the UL Classification Mark



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