



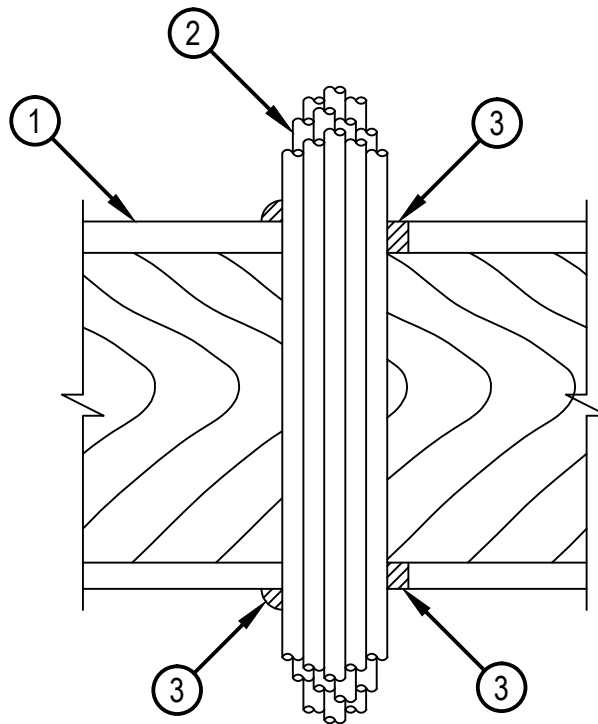
Classified by
Underwriters Laboratories, Inc.
to UL 1479 and CAN/ULC-S115

System No. F-C-3074

F Rating — 1 Hr

T Ratings — 0 and 1 Hr (See Item 2)

FC 3074



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 3 in. (76 mm).
 - 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 m) 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.
- 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 3 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.



Hilti Firestop Systems

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2. Cables — Aggregate cross-sectional area of cable in opening to be max 50 percent of the cross-sectional area of the opening. The annular space between the cable bundle and the periphery of the opening to be min 0 in. (point contact) to max 1 in. (25 mm). Cables to be rigidly supported on both sides of the floor-ceiling assembly. Any combination of the following types and sizes of copper conductor cables may be used:

- A. Max 150 pair No. 24 AWG telephone cable with PVC insulation and jacket.
- B. Max 2/C No. 10 AWG with ground Type NM nonmetallic sheathed (Romex) cable with PVC insulation and jacket.
- C. Max 3/C with ground No. 2/0 AWG aluminum SER cable with PVC insulation and jacket.
- D. Max 3/C No. 10 AWG copper conductor steel clad cable.
- E. Max 24 fiber optic cable.
- F. RG 59U coaxial cable.
- G. CAT 5 data cable.
- H. Max 4/C with ground No. 300 kcmil (or smaller) aluminum SER cable with PVC insulation and jacket.
- I. Through Penetrating Product* - Any cables, Metal-Clad Cable+ or Armored Cable+ currently Classified under the Through Penetrating Products category.

See Through Penetrating Product (XHLY) category in the Fire Resistance Directory for names of manufacturers.

The T Rating is 1 hr for cables 2A through 2G. The T Rating is 0 hr for cables 2H and 2I.

3. 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 cable bundle/subflooring or sole plate interface and the cable bundle/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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