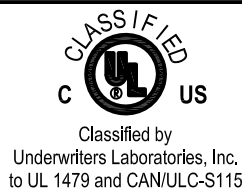
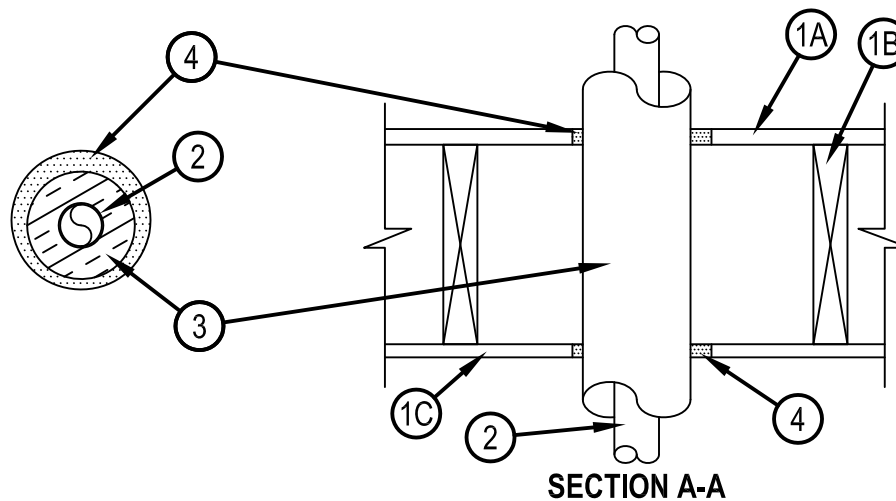


System No. F-C-5036



ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 1 Hr	F Rating — 1 Hr
T Rating — 1 Hr	FT Rating — 1 Hr
	FH Rating — 1 Hr
	FTH Rating — 1 Hr



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 6-7/8 in. (175 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 (1.2 m) wide by 5/8 in. (16 mm) thick as specified in the individual Floor-Ceiling Design. Max diam of opening shall be 6-7/8 in. (175 mm).
- 1.1 Chase Wall — (Not Shown, Optional) The through penetrants (Item 2) may be routed through a 1 hr fire-rated single, double or staggered wood stud/gypsum wallboard chase wall having a fire rating consistent with that of the floor-ceiling assembly. 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 8 (51 by 203 mm) lumber or double nom 2 by 4 in. (51 by 102 mm) lumber studs.
 - B. Sole Plate — Nom 2 by 8 in. (51 by 203 mm) lumber or parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Max diam of opening shall be 6-7/8 in. (175 mm).
 - C. Top Plate — The double top plate shall consist of two nom 2 by 8 in. (51 by 203 mm) lumber plates or two sets of nom 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Max diam of opening is 6-7/8 in. (175 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 within the firestop system. Tube or pipe to be rigidly supported on both sides of floor-ceiling assembly. The following types and sizes of metallic tubes or pipes may be used:
 - A. Copper Tubing — Nom 2 in. (51 mm) diam (or smaller) Type L (or heavier) copper tubing.
 - B. Copper Pipe — Nom 2 in. (51 mm) diam (or smaller) Regular (or heavier) copper pipe.
 - C. Steel Pipe — Nom 2 in. (51 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.



Hilti Firestop Systems

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January 20, 2015

3. Pipe Covering — Nom 1-1/2 in. (38 mm) thick hollow cylindrical heavy density (min 3.5 pcf (56 kg/m³)) glass fiber units jacketed on the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory-applied self-sealing tape. Traverse joints secured with metal fasteners or with butt tape supplied with the product. The annular space shall be min 1/2 in. (13 mm) and max 1 in. (25 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 annular space, flush with top surface of subfloor or sole plate. Min 5/8 in. (16 mm) thickness of sealant applied within the annular space, flush with bottom surface of gypsum wallboard or lower top plate.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE Sealant or FS-ONE MAX Intumescent Sealant
- * Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

