

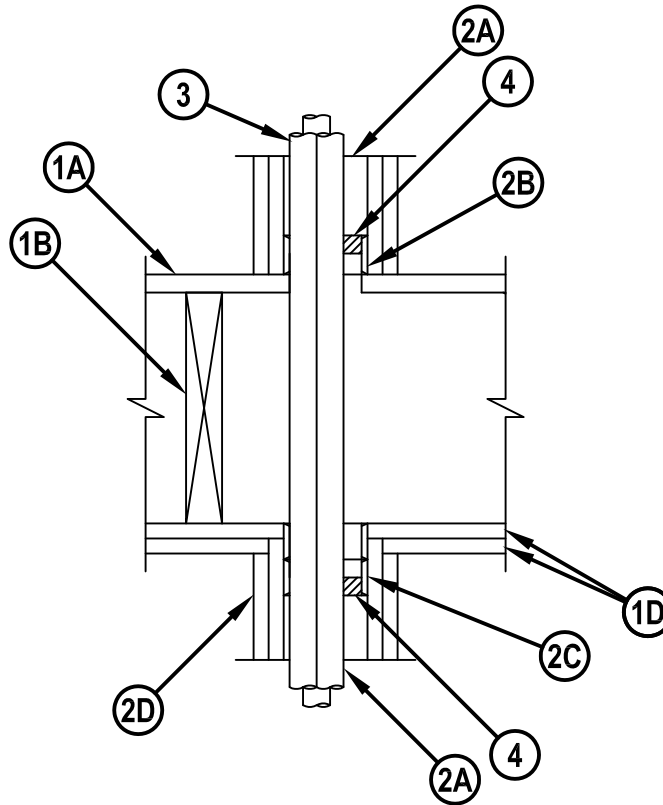


Classified by  
Underwriters Laboratories, Inc.  
to UL 1479

## System No. F-C-2310

F Ratings — 1 and 2 Hr (See Item 1)  
T Ratings — 1 and 1-1/2 Hr (See Item 1)

FC 2310



1. Floor-Ceiling Assembly — The 1 or 2 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 F Rating of the firestop system is equal to the rating of the floor-ceiling and wall assemblies. The T Rating of the firestop system is 1 hr for 1 hr rated floor-ceiling and wall assemblies and 1-1/2 hr for 2 hr rated floor-ceiling and wall assemblies. The general construction features of the floor-ceiling assembly are summarized below:
  - A. Forming Material — Lumber or plywood subfloor with finish floor or lumber, plywood or Floor Topping Mixture\* as specified in the individual Floor-Ceiling Design. Max diam of floor opening is 3 in. (76 mm).
  - B. Wood Joists\* — For 1 hr fire-rated floor-ceiling assemblies 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. For 2 hr fire-rated floor-ceiling assemblies, nom 2 by 10 in. (51 by 254 mm) lumber joists spaced 16 in. OC with nom 1 by 3 in. (25 by 76 mm) lumber bridging and with ends firestopped.
  - C. Furring Channels — (Not Shown) — (As required) - Resilient galvanized steel furring installed in accordance with the manner specified in the individual L500 Series Designs in the Fire Resistance Directory.
  - D. Gypsum Board\* — Thickness, type, number of layers and fasteners shall be as specified in the individual Floor-Ceiling Design. Max diam of opening is 3 in. (76 mm).
2. Chase Wall — (Optional) - The 1 or 2 hr fire-rated single wood stud/gypsum wallboard 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) lumber studs.
  - B. Sole Plate — Nom 2 by 4 in. (51 by 102 mm) lumber plates.
  - C. Top Plate — The double top plate shall consist of two nom 2 by 4 in. (51 by 102 mm) lumber plates. Max diam of opening is 3 in. (76 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 — Nom 1 in. (25 mm) diam (or smaller) SDR 9 (or heavier) cross-linked polyethylene (PEX) tubing for use in closed (process or supply) piping systems. A max of three tubes may be installed in the opening. The annular space between the tubing and the periphery of the opening shall be a min of 3/16 in. (5 mm) to a max of 1 in. (25 mm). The space between the tubes shall be a min of 0 in. (point contact) to a max of 1/4 in. (6 mm). Tubing to be rigidly supported on both sides of the floor-ceiling assembly.
4. Fill, Void or Cavity Material\* — Sealant — Min 3/4 in. (19 mm) thickness of fill material applied within the annulus, flush with top surface of floor or sole plate and a min 3/4 in. (19 mm) thickness of fill material applied within the annulus, flush with the bottom surface of the lower top plate. Min 5/8 in. (16 mm) thickness of fill material applied within the annulus, flush with the bottom surface of the ceiling 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.



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