



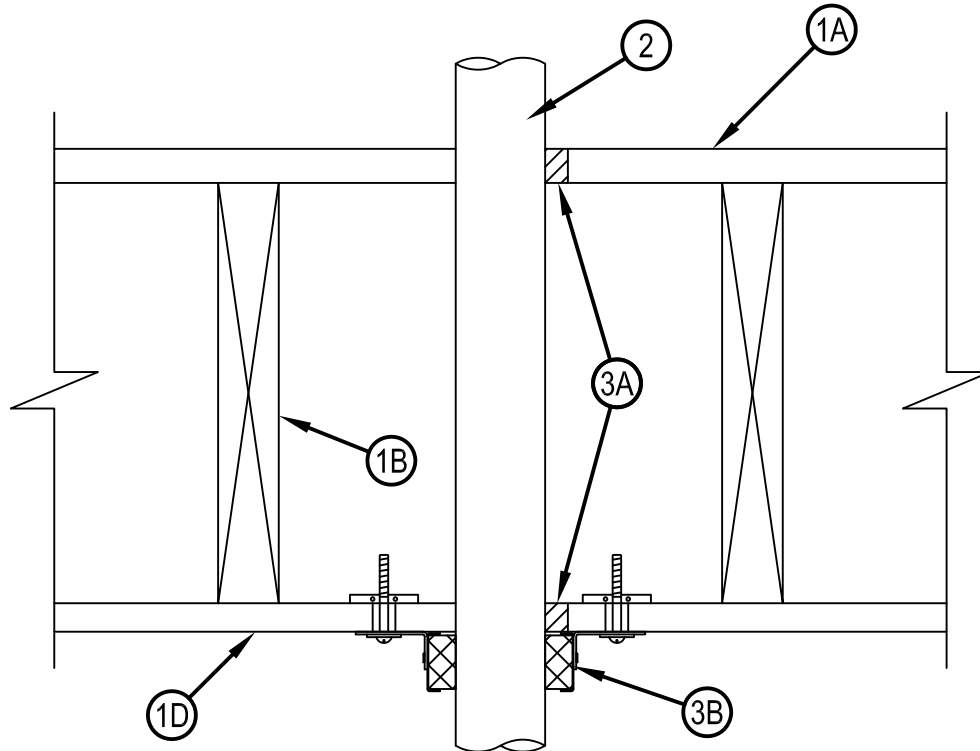
Classified by
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to CAN/ULC-S115

System No. F-C-2035

F Rating — 1 Hr
FT Rating — 1 Hr
FH Rating — 1 Hr
FTH Rating — 1 Hr



FC 2035



System tested with a pressure differential of 2.5 Pa between the exposed and the unexposed surfaces with the higher pressure on the exposed side.

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 individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory. The general construction details 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 floor opening is 57 mm (2-1/4 in.).
- B. Wood Joists — Nom 254 mm (10 in.) 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. Furring Channels — (Not shown) — Resilient galv steel furring installed perpendicular to wood joists (Item 1B) between board (Item 1D) and wood joists as required in the individual Floor-Ceiling Design.
- D. Gypsum Board* — Nom 122 cm (4 ft) wide by 16 mm (5/8 in.) thick as specified in the individual Floor-Ceiling Design. Max diam of ceiling opening is 57 mm (2-1/4 in.).

1.1 Chase Wall — (Not shown, Optional) — The through penetrants (Item 2) may be routed through a fire-rated single, double or staggered wood stud/gypsum board 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 51 by 102 mm (2 by 4 in.) lumber studs.
- B. Sole Plate — Nom 51 by 102 mm (2 by 4 in.) lumber studs.
- C. Top Plate — The double top plate shall consist of two nom 51 by 102 mm (2 by 4 in.) lumber plates. Max diam of opening is 57 mm (2-1/4 in.).
- 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. Through Penetrants — One nonmetallic pipe to be installed eccentrically or concentrically within the firestop system. The annular space between the through penetrant and the periphery of the opening shall be a min. 0 mm (point contact) to a max of 8 mm (5/16 in.). Pipe to be rigidly supported on both sides of the floor-ceiling assembly. The following types and sizes of nonmetallic pipes may be used:
 - A. Polypropylene (PP) Pipe — Nom 50 mm (2 in.) diam (or smaller) PP pipe for use in closed (process or supply) piping systems.
AQUATHERM — Fusiotherm SDR 7.4 w/ Faser and SDR 11
 - B. Polypropylene (PP) Pipe — Nom 50 mm (2 in.) diam (or smaller) PP pipe for use in closed (process or supply) piping systems.
AQUATHERM — Climatherm SDR 11 w/ Faser
3. Firestop System — The firestop system shall consist of the following
 - A. Fill, Void or Cavity Material* — Sealant — Min 19 mm (3/4 in.) thickness of fill material applied within the annulus on top surface of floor or sole plate. Min 16 mm (5/8 in.) thickness of fill material applied within annulus between penetrant and gypsum ceiling board or lower top plate
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-One Sealant or FS-ONE MAX Intumescent Sealant.
 - B. Firestop Device* — Galvanized steel collar lined with an intumescent material sized to fit the specific diam of through-penetrant. Device shall be installed around the through-penetrant in accordance with the accompanying installation instructions. Device secured to bottom surface of floor-ceiling assembly at each anchor tab by means of 3 mm (1/8 in.) diam by 76 mm (3 in.) long toggle bolts to gypsum ceiling board or 38 mm (1-1/2 in.) long wood screws to lower top plate.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP643 50/1.5"N or CP643 63/2"N Firestop Collar

* 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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