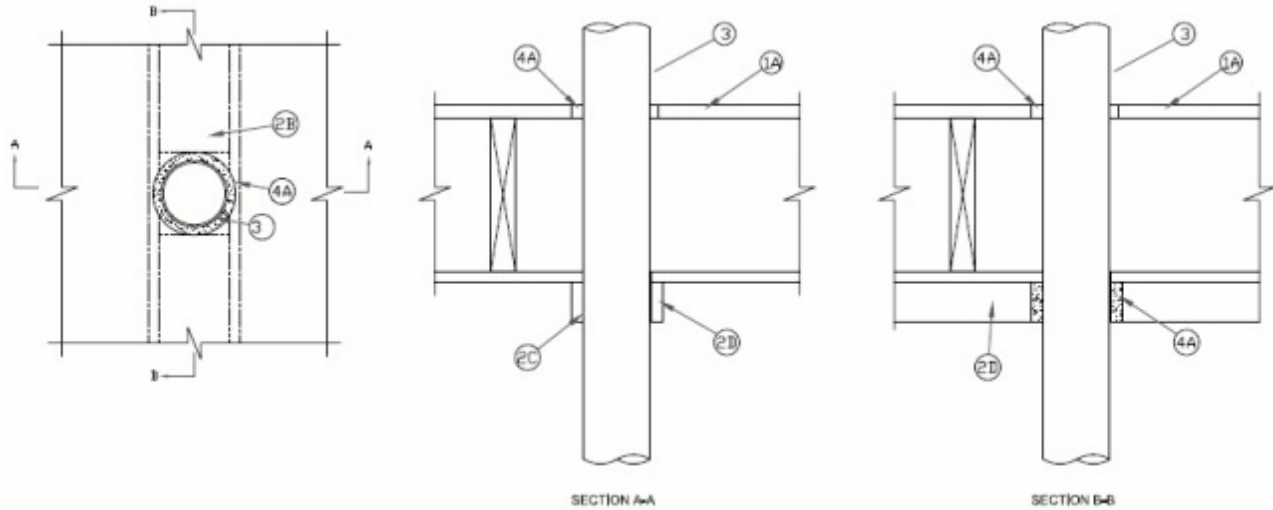




### System No. F-C-2418

March 27, 2014

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



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 the 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. Diam of floor opening shall be 1/2 in. (13 mm) larger than the outside diam of the through-penetrant (Item 3).

B. **Wood Joists** — Nom 2 by 10 in. (51 by 254 mm) lumber joists spaced 16 in. (406 mm) OC with nom 1 by 3 in. (25 by 76 mm) lumber bridging and with ends firestopped. As an alternate to lumber 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 with ends firestopped.

C. **Furring Channels** — (Not shown) — Resilient galv steel furring installed perpendicular to wood joists (Item 1B) between wallboard (Item 1D) and wood joists as required in the individual Floor-Ceiling Design.

D. **Gypsum Board\*** — Nom 4 ft (1.2 m) wide by 5/8 in. (16 mm) thick as specified in the individual Floor-Ceiling Design.

2. **Chase Wall** — The through penetrant (Item No. 3) shall be routed through a wood stud/gypsum board chase wall and shall include the following construction features:

A. **Studs** — Nom 2 by 4 in. (51 by 102 mm) lumber studs.

B. **Top Plate** — The single or double top plate shall consist of one or two nom 2 by 4 in. (51 by 102 mm) lumber plates. Plates are to be discontinued from one side of opening to another. The separation between plates is 3/4 in. (19 mm) wider than the Diam of the penetrant.

C. **Steel Straps** — The top plates are to be secured to each other with the use of 1-1/2 in. or 3 in. wide by 8 in. long (38 mm or 76 mm wide by 203 mm long) 20 ga steel strap for single or double top plates respectively.

D. **Gypsum Board** — Min 5/8 in. (16 mm) thick rated gypsum board wrapping the top plate and steel strap. (See Item 1D).

3. **Through Penetrant** — One nonmetallic pipe to be concentric or eccentric within the opening. The annular space between the through penetrant and the periphery of the opening shall be point contact (0 mm) to 1/2 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. **Polyvinyl Chloride (PVC) Pipe** — Nom 3 in. (76 mm) diam (or smaller) Schedule 40 solid or cellular core PVC for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

B. **Chlorinated Polyvinyl Chloride (CPVC) Pipe** — Nom 3 in. (76 mm) diam (or smaller) SDR 13.5 CPVC pipe for use in closed (process or supply) piping systems.

C. **Acrylonitrile Butadiene Styrene (ABS) Pipe** — Nom 3 in. (76 mm) diam (or smaller) Schedule 40 solid or cellular core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

4. **Firestop System** — The firestop system shall consist of the following:

A. **Fill, Void or Cavity Material\* - Sealant** — Min 5/8 in. (16 mm) of fill material applied in the annulus, flush with top surface of floor. Min 3/4in. (19 mm) thickness of fill material applied within the annulus, flush with bottom surface of lower top plate.

**RECTORSEAL** — Metacaulk 1000, Metacaulk 350i, Biostop 500+, Biostop 350i.

\*Bearing the UL Classification Mark