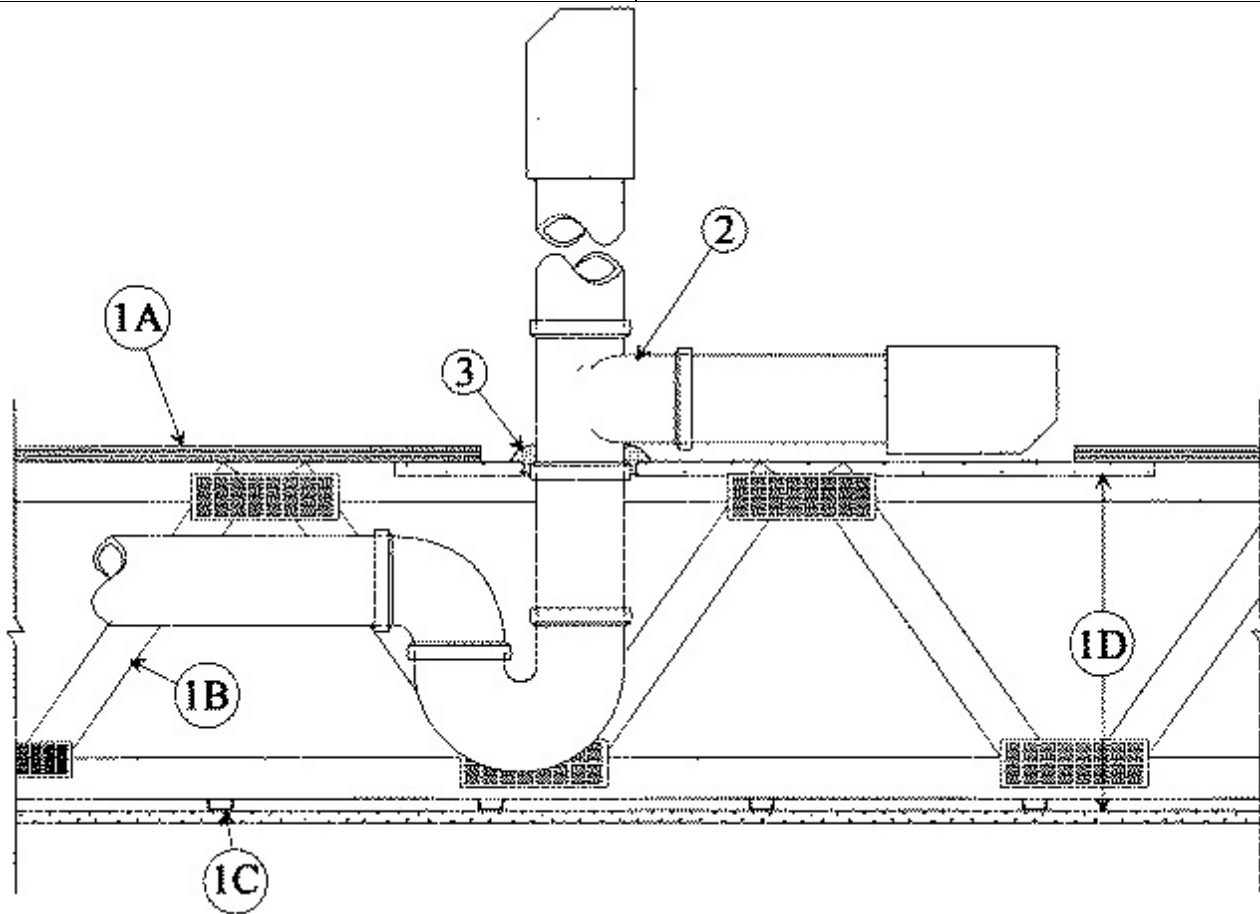




### System No. F-C-2089

July 15, 2014

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Ratings - 1 Hr	F Ratings - 1 Hr
T Ratings - 1 Hr	FT Ratings - 1 Hr
	FH Ratings - 1 Hr
	FTH Ratings - 1 Hr
L Rating At Ambient - Less Than 1 CFM/sq ft	L Rating At Ambient - Less Than 1 CFM/sq ft
L Rating At 400 F - Less Than 1 CFM/sq ft	L Rating At 400 F - Less Than 1 CFM/sq ft



**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, as 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. Rectangular cutout in flooring to accommodate the bathtub drain piping (Item 2) to be max 8 by 12 in. (203 by 305 mm).
- 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 gypsum board (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. Gypsum board secured to wood joists as specified in the individual Floor-Ceiling Design. One piece of gypsum board, min 4 in. (102 mm) longer and wider than the cutout in the flooring, screw-attached to bottom of flooring concentric with cutout by means of 1 in. (25 mm) long Type S steel screws spaced max 5 in. (127 mm) OC. Diam of opening hole-sawed through the gypsum board patch to be 1 in. (25 mm) larger than outside diam of bathtub drain piping (Item 2).

**2. Drain Piping** — Nom 1-1/2 in. (38 mm) diam Schedule 40 solid or cellular core polyvinyl chloride (PVC) or acrylonitrile butadiene styrene (ABS) pipe and drain fittings cemented together and provided with PVC bathtub waste/overflow fitting. Pipe to be installed either concentrically or eccentrically within the firestop system. The annular space within the firestop system shall be a min 3/8 in. (10 mm) to a max 5/8 in. (16 mm).

**3. Fill, Void or Cavity Material\* — Sealant** — Min 5/8 in. (16 mm) thickness of fill material to be applied within annulus between the tee of the drain fitting and gypsum board patch on the top surface of the floor. An additional 1/4 in. (6 mm) crown of fill material shall be applied around tee of drain fitting on top surface of the gypsum board patch.

**RECTORSEAL** — FlameSafe FS1900, FS1901, FS1905, FS1929, FS900+, Metacaulk MC 150+, Metacaulk 1000, Metacaulk 350i, Biostop BF150+, Biostop 350i or Biostop 500+

**\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**