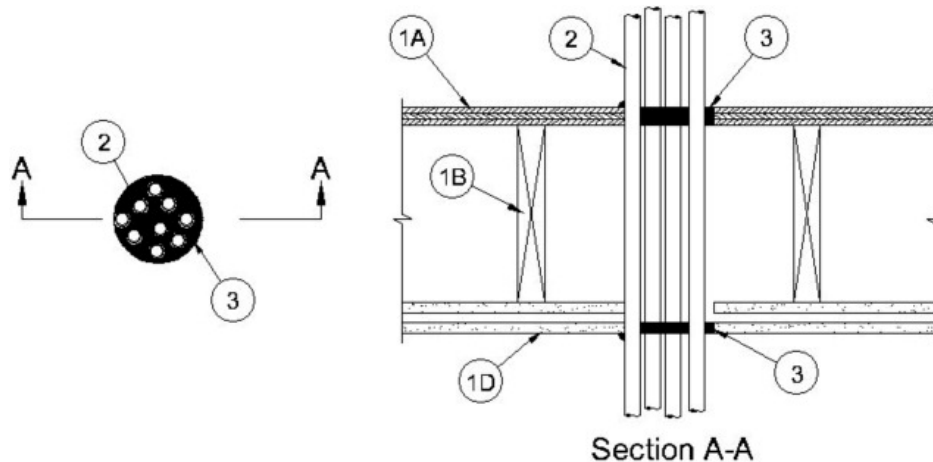


**F Ratings — 1 and 2 Hr (See Item 1)**  
**T Ratings — 1 and 2 Hr (See Item 1)**



**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 2 hr fire-rated wood joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in Design Nos. L505, L511 or L536 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 floor opening is 6 in. (152 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. (406 mm) OC with nom 1 by 3 in. (25 by 76 mm) lumber bridging and with ends firestopped.

**C. Furring Channels** — (Not Shown) — In 2 hr fire rated assemblies, resilient galv steel furring installed perpendicular to wood joists between first and second layers of gypsum board (Item 1D). Furring channels spaced max 24 in. (610 mm) OC. In 1 hr fire rated assemblies, resilient galv steel furring installed perpendicular to wood joists between gypsum board and wood joists as specified in the individual Floor-Ceiling Design. Furring channels spaced max 24 in. (610 mm) OC.

**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. First layer of gypsum board secured to wood joists or furring channels as specified in the individual Floor-Ceiling Design. Second layer of gypsum board (2 hr fire rated assembly) screw-attached to furring channels as specified in the individual Floor-Ceiling Design. Max diam of ceiling opening is 6 in. (152 mm).

**The hourly F and T Ratings of the firestop system are equal to the hourly rating of the floor-ceiling assembly in which it is installed.**

**2. Cross-Linked Polyethylene (PEX) Tubing** — Nom 3/4 in. (19 mm) diam (or smaller) SDR 9 (or heavier) cross-linked polyethylene (PEX) tubing for use in closed (process or supply) piping systems. Aggregate cross-sectional area of tubing in opening to be max 28 percent of the cross-sectional area of the opening. The annular space between the tubing and the periphery of the opening shall be min 0 in. (point contact) to max 1 in. (25 mm). The space between the tubing shall be min 1/2 in. (13 mm) to max 1-3/4 in. (44 mm). Tubing to be rigidly supported on both sides of the floor-ceiling assembly.

**3. Fill, Void or Cavity Material\* — Sealant** — Min 3/4 in. (19 mm) thickness of fill material applied to fill annular space flush with top surface of plywood flooring. Min 5/8 in. (16 mm) thickness of fill material applied to fill annular space flush with bottom surface of ceiling. Min 3/8 in. (10 mm) diam bead of fill material applied at point contact locations.

**RECTORSEAL** — FlameSafe FS1900, FS1901, FS1905, FS1929, [Metacaulk 1000](#), [Metacaulk 350i](#), 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.

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