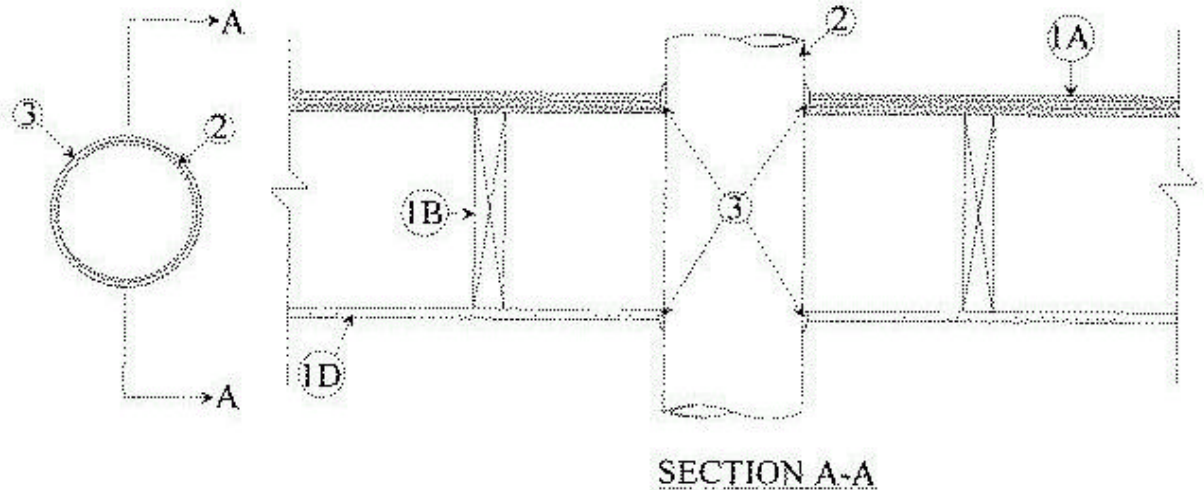


**UL System No. F-C-1011**  
**F Rating — 1 Hr**  
**T Ratings — 0, 3/4 & 1 Hr (See Item 2)**



**1. Floor-Ceiling Assembly** The fire-rated wood joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in Design Nos. L512, L513 or L514 in the UL Fire Resistance Directory, and shall include the following construction features:

A. **Flooring System** Lumber or min 1/2 in. plywood sub-floor with lumber or min 3/4 in. plywood finish floor, or **Floor-Topping Mixture\*** as specified in the individual Floor-Ceiling Design. Max dia. of opening is 7 in.

B. **Wood Joists** Nom 2 by 10 in. lumber joists spaced 16 in. OC with nom 1 by 3 in. lumber bridging and with ends firestopped. As an alternate to lumber joists, nom 10 in. 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 between wallboard (Item 1D) and wood joists and spaced max 24 in. OC.

D. **Gypsum Board\*** Nom 4 ft wide by 1/2 or 5/8 in. thick as specified in the individual Floor-Ceiling Design. Wallboard attached to wood joists and furring channels as specified in the individual Floor-Ceiling Design. Max dia. of opening is 7 in.

**2. Through-Penetrants** One metallic pipe, conduit or tubing to be installed approximately midway between wood joist and centered within the firestop system. Dia. of openings hole-sawed through flooring system and through gypsum wallboard ceiling to be nom 1/2 in. larger than the outside dia. of through penetrant. Pipe, conduit or tubing to be rigidly supported on both sides of floor-ceiling assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:

F-C-1011 continued...

- A. **Steel Pipe** Nom 6 in. dia. (or smaller) Schedule 40 (or heavier) steel pipe.
- B. **Iron Pipe** Nom 6 in. dia. (or smaller) cast or ductile iron pipe.
- C. **Conduit** Nom 4 in. dia. (or smaller) electrical metallic tubing or steel conduit.
- D. **Copper Tubing** Nom 4 in. dia. (or smaller) Type L (or heavier) copper tubing.
- E. **Copper Pipe** Nom 4 in. dia. (or smaller) Regular (or heavier) copper pipe.

The T Rating of the firestop system is dependent upon the type of penetrant and nom dia. of penetrant used as tabulated below:

Penetrant Type	Max Dia. of Penetrant In.	T Rating Hr
Steel Pipe	4	1
Steel Pipe	6	3/4
Iron Pipe	6	0
Copper Tubing	4	0
Copper Pipe	4	0

3. **Fill, Void or Cavity Material\*** — **Caulk** On top of assembly, a min 1-1/8 in. depth of fill material applied within annulus on top surface of floor. On bottom of assembly, a min 1/2 in. depth of fill material applied within annulus on bottom surface of ceiling. Additional fill material to be installed such that a min 1/2 in. thick crown is formed around the through penetrant on both sides of floor-ceiling assembly.

**A/D FIRE PROTECTION SYSTEMS INC** — A/D FIREBARRIER Silicone

\*Bearing the UL Classification Mark