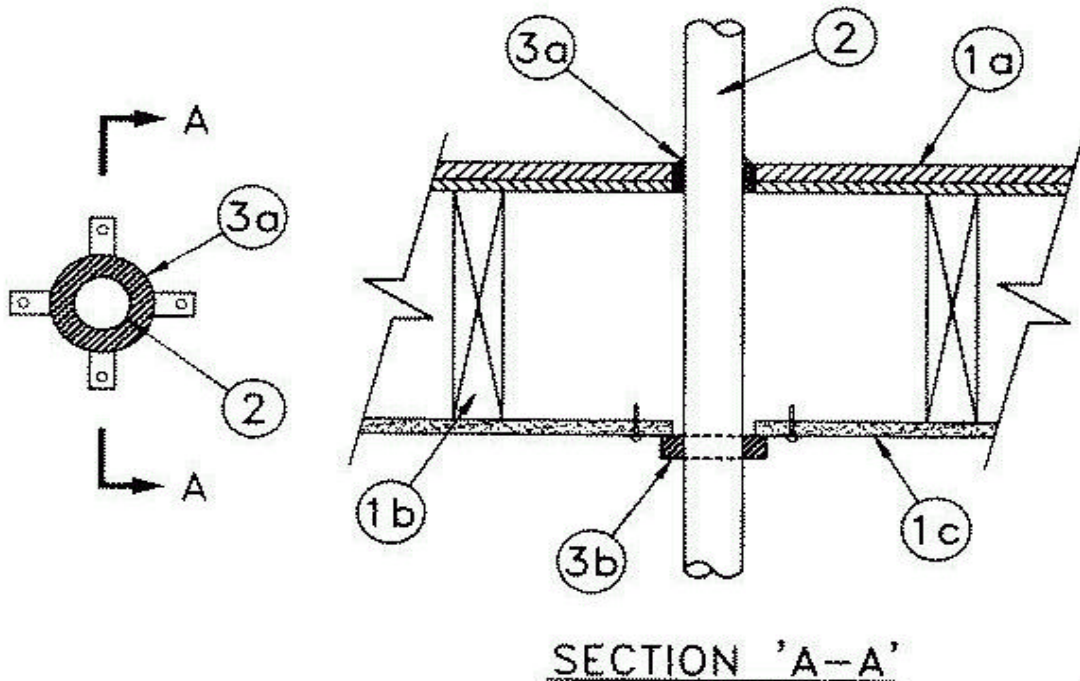


UL System No. F-C-2194

F Rating —1 Hr

T Rating — 1 Hr



1. **Floor-Ceiling Assembly** The fire-rated wood joist floor-ceiling assembly shall be constructed of materials and in the manner specified in Design No. L505, L511 or L536 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. Max diam of floor opening is 5 in.
- (b) **Wood joist** Nom 2 by 10 in. lumber joist spaced 16 in. OC with nom 1 by 3 in. lumber bridging with ends firestopped.
- (c) **Wallboard, Gypsum*** Nom 4 ft wide by 5/8 in. thick as specified in the individual Floor-Celing Design. Max diam of ceiling opening is 5 in.

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

- (a) **Polyvinyl Chloride (PVC) Pipe** Nom 4 in. dia. (or smaller) Schedule 40 cellular or solid core PVC pipe for use in closed (process or supply) or vent (drain, waste or vent) piping system.

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(b) **Acrylonitrile Butadiene Styrene (ABS) Pipe** Nom 4 in. dia. (or smaller) schedule 40 cellular or solid core ABS for use in closed (process or supply) or vented (drain, waste or vent) piping system

(c) **Chlorinated Polyvinyl Chloride (CPVC) Pipe** Nom 4 in. dia. (or smaller) SDR 17 CPVC pipe for use in closed (process or supply) piping systems.

(d) **Rigid Nonmetallic Conduit** Nom 4 in. dia. (or smaller) Schedule 40 PVC conduit installed in accordance with Article 347 of the National Electrical Code (NFPA No. 70).

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

(a) **Fill, Void or Cavity Material* Sealant** Fill material forced into annulus to fill space to max extent possible, flush with top surface of floor. Additional fill material to be installed such that a min 1/4 in. crown is formed around the penetrating item on top surface of floor.

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

(b) **Firestop Device*** Galv. steel collar lined with an intumescent material sized to fit specific dia of the through penetrant. Device to be installed around through penetrant in accordance with accompanying installation instructions. Device incorporates four anchor tabs for securement to bottom surface of gypsum wallboard ceiling by means of 1/8 in. dia. by 3 in. long toggle bolts in conjunction with 1/4 in. by 1 in. dia. steel fender washer.

A/D FIRE PROTECTION SYSTEMS INC — A/D FIREBARRIER Collar

*Bearing the UL Classification Mark