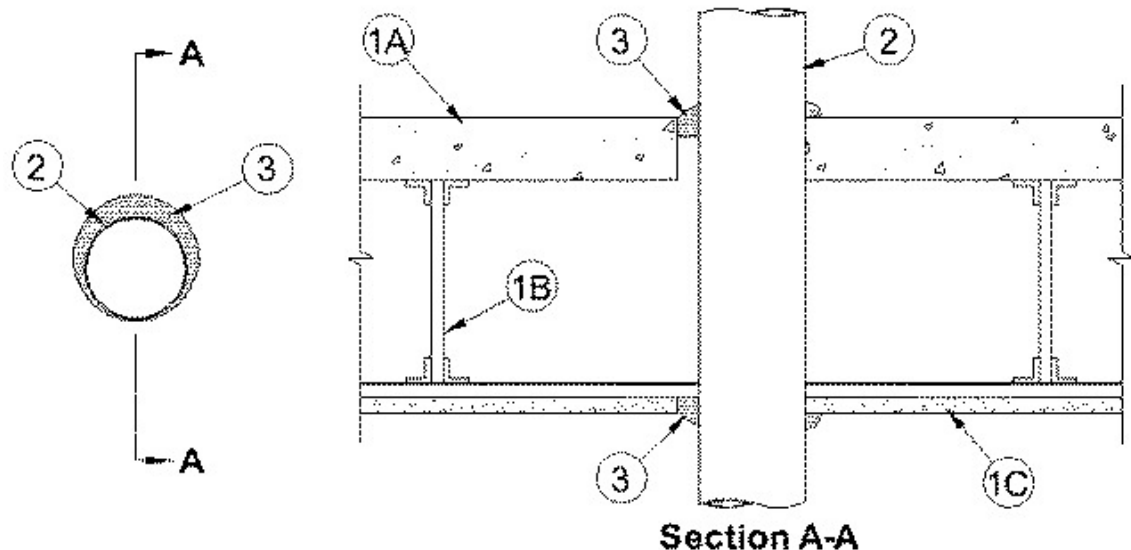


UL System No. F-E-1014

October 31, 2003

F Rating — 1 Hr

T Rating — 1 Hr



1. **Floor-Ceiling Assembly** — The 1 hr fire-rated concrete and steel joist Floor-Ceiling assembly shall be constructed of the materials and in the manner described in the individual G500 Series Design in the UL Fire Resistance Directory, as summarized below:

A. **Concrete Floor** — Normal weight or lightweight (100-150 pcf) concrete over metal lath or steel deck as specified in the individual G500 Series Design. Max diam of floor opening is 5 in.

B. **Joists** — Steel joists or Structural Steel Members* as specified in the individual G500 Series Design.

C. **Gypsum Board*** — Min 5/8 in. thick, screw-attached to furring channels as specified in the individual G500 Series Design. Max diam of ceiling is 5 in.

2. **Through Penetrant** — One metallic pipe, conduit or tube to be installed either concentrically or eccentrically within the opening. Penetrant to be located approx midway between joists and rigidly supported on both sides of floor-ceiling assembly. The annular space within the firestop system shall be a 0 in. (point contact) to max 1/2 in. The following types and sizes of metallic pipe, conduit or tubing may be used:

A. **Steel Pipe** — Nom 4 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.

B. **Iron Pipe** — Nom 4 in. diam (or smaller) cast or ductile iron pipe.

C. **Conduit** — Nom 4 in. diam (or smaller) steel electrical metallic tubing or rigid galv steel conduit.

D. **Copper Tubing** — Nom 4 in. diam (or smaller) Type L (or heavier) copper tubing.

E. **Copper Pipe** — Nom 4 in. diam (or smaller) Regular (or heavier) copper pipe.

3. **Fill, Void or Cavity Materials* — Sealant** — Min 3/4 in. thickness of fill material applied within the annulus, flush with top surface of floor. Min 5/8 in. thickness of fill material applied within the annulus, flush with bottom surface of ceiling. Additional fill material shall be installed such that a min 1/2 in. thick crown of fill material applied around the through penetrant on both the top and bottom surfaces of the assembly.

A/D FIRE PROTECTION SYSTEMS INC — A/D FIREBARRIER Intumescent Caulk

*Bearing the UL Classification Mark