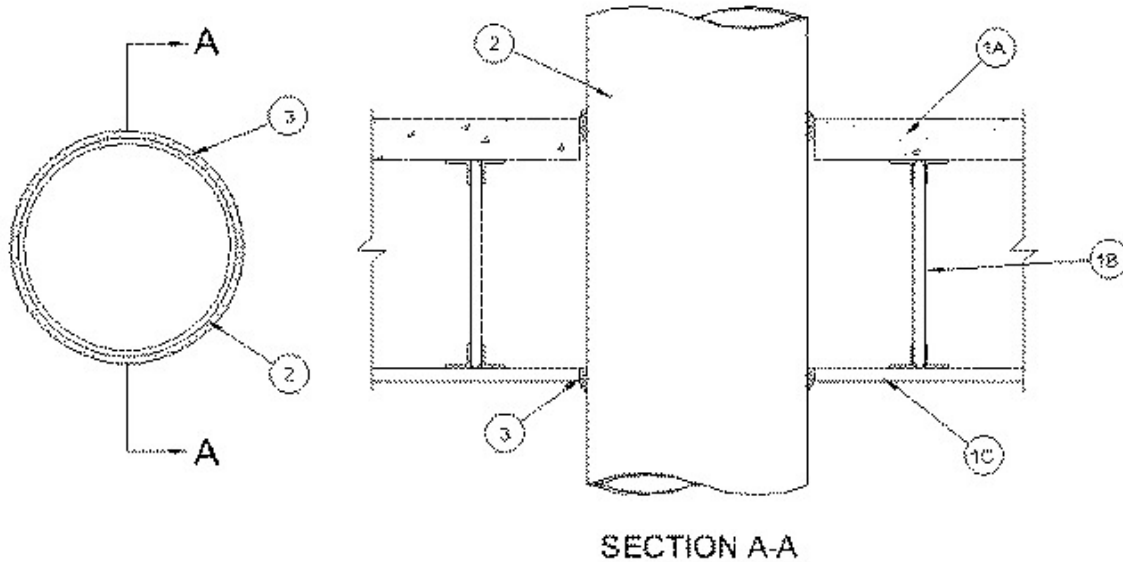


UL System No. F-E-1015

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. Flooring — Normal or Lightweight concrete as specified in the individual G500 Series Design. Max diam of opening is 7 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 opening is 7 in.

2. Through Penetrant — One metallic pipe, conduit or tubing to be installed centered within the opening, approx midway between joists. The annular space between penetrant and periphery of opening shall be a nom 1/4 in. Penetrants to be rigidly supported on both sides of floor assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:

A. Steel Pipe — Nom 6 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.

B. Iron Pipe — Nom 6 in. diam (or smaller) cast or ductile iron pipe.

C. Conduit — Nom 6 in. diam (or smaller) steel conduit, or nom 4 in. (or smaller) electrical metallic tubing.

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

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

3. Fill, Void or Cavity Materials* — Caulk — Min 1-1/8 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 Silicone

*Bearing the UL Classification Mark