

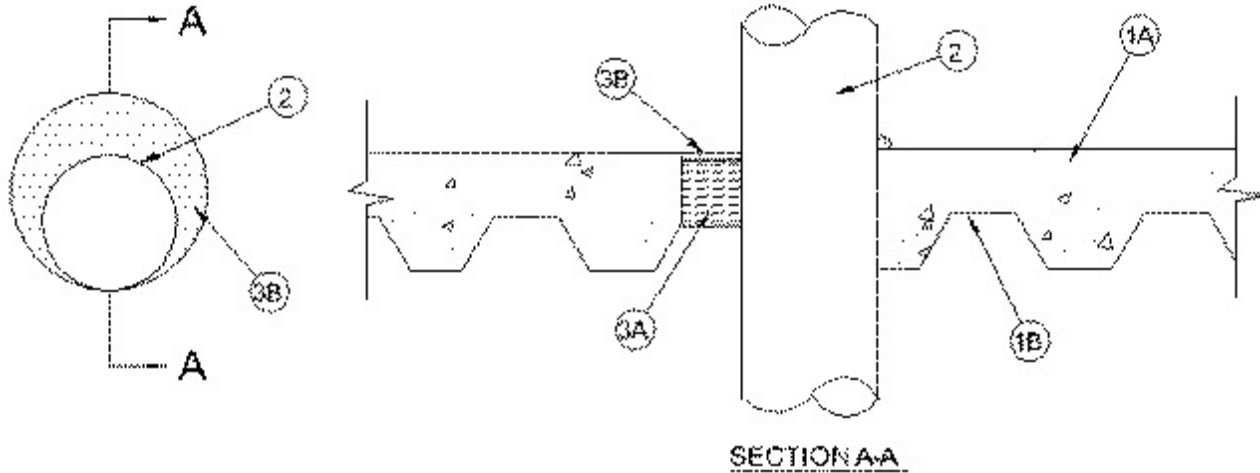


System No. F-A-1048

December 08, 2003

F Rating — 2 Hr

T Rating — 0 Hr



1. **Floor Assembly** — The fire-rated unprotected concrete and steel floor assembly shall be constructed of the materials and in the manner specified in the individual D900 Series designs in the UL Fire Resistance Directory and as summarized below:

A. **Concrete** — Min 2-1/2 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete.

B. **Steel Floor and Form Units*** — Composite or non-composite max 3 in. deep galv fluted units as specified in the individual Floor -Ceiling Design. Max diam of opening is 11 in.

2. **Through-Penetrant** — One metallic pipe, conduit or tubing installed either concentrically or eccentrically within the firestop system. The annular space between penetrant and periphery of opening shall be min of 0 in. (point contact) to max 1-7/8 in. Penetrant 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 8 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.

B. **Iron Pipe** — Nom 8 in. diam (or smaller) cast or ductile iron pipe.

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

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

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

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

A. **Packing Material** — Min 2-1/4 in. thickness of min 4 pcf mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor as required to accommodate the required thickness of fill material.

B. **Fill Void or Cavity Materials* - Sealant** — Min 1/4 in. thickness of sealant applied within the annulus, flush with top surface of floor. Min 1/2 in. diam bead of sealant applied at penetrant/concrete interface at point contact location on top surface of floor.

RECTORSEAL — Metacaulk 1000, MC 150+

*Bearing the UL Classification Mark