

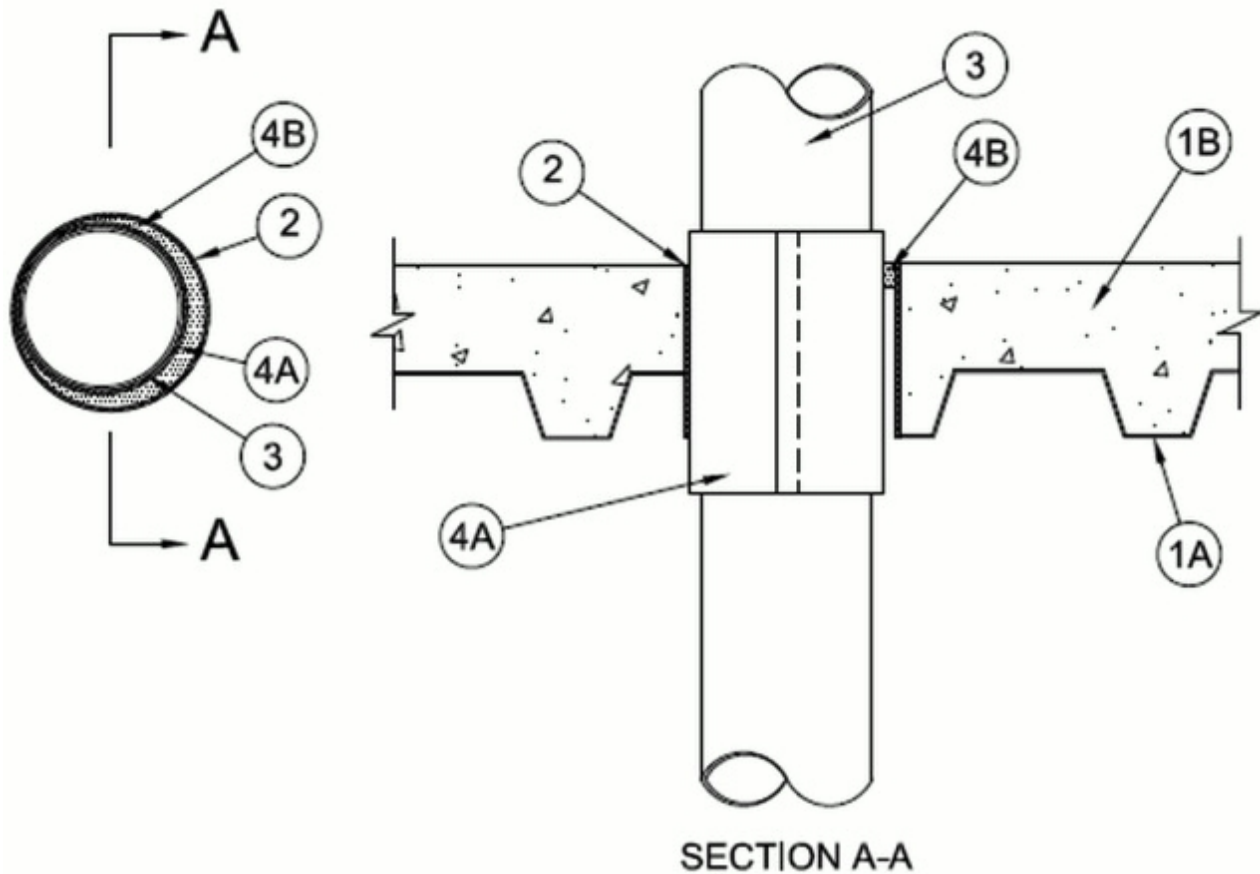


System No. F-A-2217

June 11, 2012

F Rating - 2 Hr

T Ratings - 0, 1 and 1-1/2 Hr (See Items 2 and 3)



1. **Steel Deck/Floor Assembly** — The floor assembly shall consist of a fluted steel deck/concrete floor assembly. The floor assembly shall be constructed of the materials and in the manner described in the individual D900 Series design in the UL Fire Resistance Directory and shall include the following construction features:

A. **Steel Floor and Form Units*** — Max 3 in. (76 mm) deep galv fluted units.

B. **Concrete** — Min 2-1/2 in. (64 mm) thick reinforced concrete, as measured from the top plane of the floor units. Max diam of opening is 10 in. (254 mm).

2. **Metallic Sleeve** — (Optional) - Nom 10 in. (254 mm) diam (or smaller) Schedule 10 (or heavier) steel sleeve cast or grouted into floor, flush with both surfaces of floor or a cylindrical sleeve fabricated from min 0.018 in. (0.46 mm) thick (28 gauge) galv sheet steel and having a min 1 in. (25 mm) lap along the longitudinal seam. Sheet steel coiled to a diam less than circular cutouts in floor assembly, inserted through both sides of floor and allowed to uncoil against the circular cutouts in the wall assembly, flush with both surfaces of floor.

The T Rating is 0 hr when optional sleeve is used.

3. **Through Penetrants** — One nonmetallic pipe or conduit to be installed either concentrically or eccentrically within the firestop system. The annular space between the pipe or conduit and periphery of opening shall be min 1/4 in. (6 mm) to max 1 in. (25 mm). Pipe or conduit to be rigidly supported on both sides of the floor assembly. The following types and sizes of nonmetallic pipes may be used:

A. **Polyvinyl Chloride (PVC) Pipe** — Nom 8 in. (203 mm) diam (or smaller) Schedule 40 solid or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent)

pipng systems.

B. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 8 in. (203 mm) diam (or smaller) SDR 13.5 CPVC pipe for use in closed (process or supply) piping systems.

C. Rigid Nonmetallic Conduit+ — Nom 6 in. (152 mm) diam (or smaller), Schedule 40, PVC conduit installed in accordance with the National Electrical Code (NFPA No. 70).

The T Rating is 1 hr for Penetrants of nom 6 and 8 in. diam. The T Rating is 1-1/2 hr for Penetrants of nom diam 4 in. and smaller.

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

A. Firestop Device — Galv steel sleeve lined with an intumescent material sized to fit the specific diam of the through penetrant. Device to be installed in accordance with the manufacturer's installation instructions along with the following: Device to be wrapped around outer circumference of through penetrant and installed through the annular space of the opening. The device shall be secured together by means of min 3/4 in. (19 mm) wide glass cloth electrical tape, duct tape, fiberglass tape, pop rivets, hose clamps or tie wires around the outer circumference of through penetrant, spaced max 2 in. (51 mm) OC. In floors having a nominal thickness of 8 in. (203 mm) or less, the device shall be centered within the floor and extend equally beyond the top surface of the floor and the bottom of the steel deck. In floors having a nominal thickness greater than 8 in. (203 mm) , two devices shall be installed within the opening with butted ends and extending equally beyond the top surface of the floor and the bottom of the steel deck.

RECTORSEAL — FlameSafe® Intumescent Sleeve, Metacaulk Intumescent Sleeve or Biostop Intumescent Sleeve

B. Fill, Void or Cavity Material* — Sealant — Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with top surface of floor.

RECTORSEAL — Metacaulk 1000, 150+, Biostop 500+, 150+, FlameSafe 1900, 900+

*Bearing the UL Classification Mark