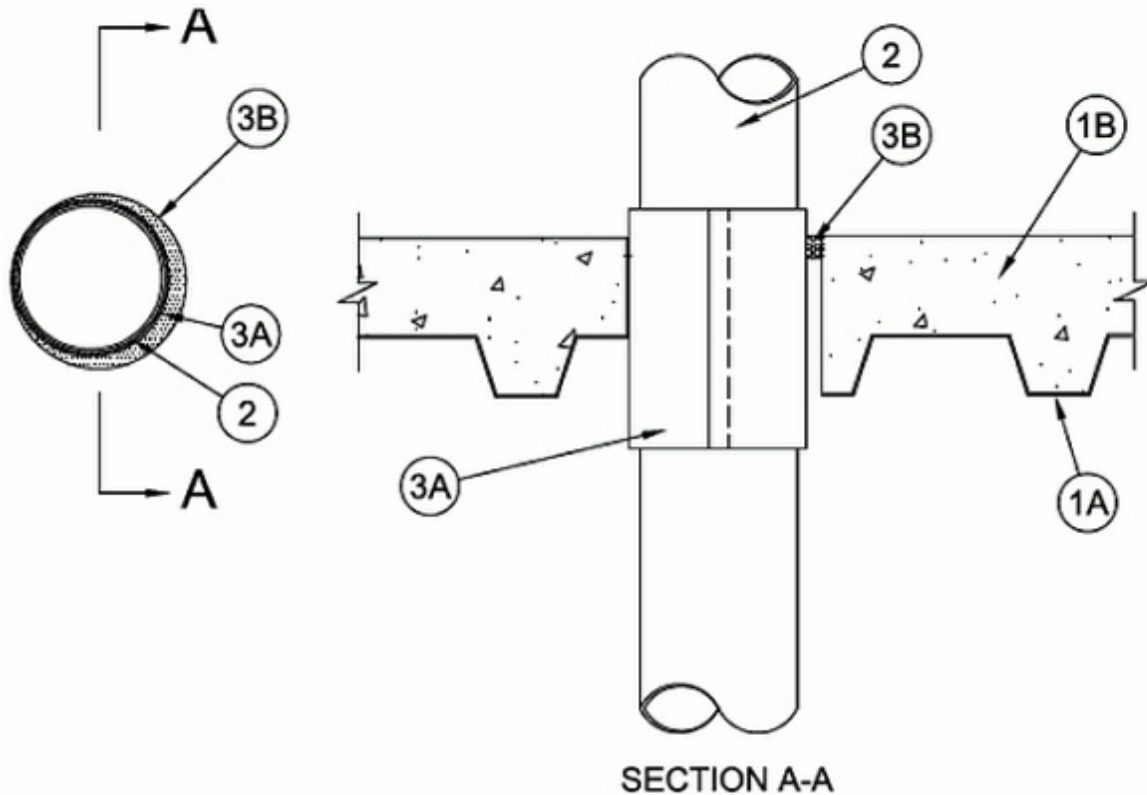


System No. F-A-2228

October 29, 2013

F Rating — 3 Hr**T Rating — 3/4 Hr**

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 6 in. (152 mm).

2. **Through Penetrants** — One nonmetallic pipe to be installed either concentrically or eccentrically within the firestop system. The annular space between the pipe and periphery of opening shall be min 1/4 in. (6 mm) to max 1/2 in. (13 mm). Pipe to be rigidly supported on both sides of the floor assembly. The following types and sizes of nonmetallic pipes may be used:

A. **Polypropylene (PP) Pipe** — Nom 4 in. (102 mm) diam (or smaller) Aquatherm Greenpipe SDR 7.4 with Faser PP pipe for use in closed (process or supply) piping systems.

B. **Polypropylene (PP) Pipe** — Nom 4 in. (102 mm) diam (or smaller) Aquatherm Greenpipe SDR 11 PP pipe for use in closed (process or supply) piping systems.

C. **Polypropylene (PP) Pipe** — Nom 4 in. (102 mm) diam (or smaller) Aquatherm Bluepipe or Climatherm SDR 11 with Faser PP pipe for use in closed (process or supply) piping systems.

3. 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. 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.

RECTORSEAL — Metacaulk 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, Metacaulk 350i, 150+, Biostop 350i, Biostop 500+

C. Fill, Void or Cavity Material* — (Optional. Not Shown) — Min 1/2 in. (13 mm) thickness of fill material applied within the annulus between firestop device sleeve and penetrant, flush with top of the firestop device.

RECTORSEAL — Metacaulk 1000, Biostop 150+, Metacaulk 150+, Metacaulk 350i, Biostop 350i, Biostop 500+, Metacaulk and Biostop PuttySticks

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**