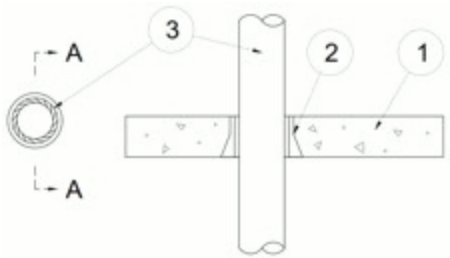
System No. F-A-2148

August 07, 2018

F Rating — 2 Hr

T Rating — 1 or 2 Hr (See Item 2)

W Rating — Class 1 (See Item 5)



Section A-A

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. (64 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m^3) concrete.

B. **Steel Floor and Form Units* —** Composite or noncomposite max 3 in. (76 mm) deep fluted galv units as specified in the individual Floor-Ceiling design.

2. **Firestop Devices* —** Cast in place firestop device permanently embedded during concrete placement in accordance with accompanying installation instructions. The device shall be trimmed flush with the top surface of the floor or project above it max 5-1/2 in. (140 mm). The devices are provided in nom 2, 3 and 6 in. (51, 76 and 152 mm) diam sizes. The 6 in. (152 mm) device shall only be used with PVC penetrants (Item 3A).

RECTORSEAL — Metacaulk Cast-in-Place Device

T Rating is 1 Hr for nom 3 in. (76 mm) and 6 in. (152 mm) devices and 2 Hr for nom 2 in. (51 mm) devices.

3. **Through Penetrants —** One nonmetallic pipe or conduit installed within the firestop system. Pipe or conduit to be rigidly supported on both sides of floor assembly. Max nominal 3 in. (76 mm) ABS (Item 3D) diameter. Max nominal 6 in. (152 mm) diameter for PVC (Item 3A). The nominal Firestop Device (Item 2) size shall be the same as the nominal penetrant size. A min 1/8 in. (3 mm) annular space shall be maintained between the penetrant and the sidewall of the device (Item 2). The following types of metallic pipes or conduits may be used:

A. **Polyvinyl Chloride (PVC) Pipe —** Schedule 40 solid core PVC or cellular core PVC (ccPVC) pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

B. **Rigid Nonmetallic Conduit (RNC)+ —** Schedule 40 PVC conduit installed in accordance with the National Electrical Code (NFPA No. 70).

C. **Chlorinated Polyvinyl Chloride (CPVC) Pipe —** SDR13.5 CPVC pipe for use in closed (process or supply) piping systems.

D. **Acrylonitrile Butadiene Styrene (ABS) Pipe —** Schedule 40 solid core ABS or cellular core ABS (ccABS) pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems. Limited for use with nom 2 in. (51 mm) and 3 in. (76 mm) devices (Item 2).

4. **Packing Material —** (Not shown) - When penetrant is less than nom 3 in. (76 mm) installed within the nom 4 in. (102 mm) device and less than nom 2 in. (51 mm) installed within the nom 2 in. (51 mm) device, a min 3 in. (76 mm) thickness

of min 4 pcf (64 kg/m^3) mineral wool batt insulation shall be firmly packed into the annular space between the penetrant and device as a permanent form. The packing material is to be recessed 1-1/2 in. (38 mm) below the top surface of the floor and extend upward a min of 1-1/2 in. (38 mm) above the top surface of the floor. When optional caulk (Item 5) is used, packing material to be recessed from top of device to accommodate the required thickness of caulk.

5. **Fill, Void or Cavity Material* — Caulk —** — (Optional, Not Shown) - Min 1/4 in. (6 mm) thickness for 2 and 3 in. (51, 76 and 102 mm) and min 3/8 in. (10 mm) thickness for 6 in. (152 mm) CIP device. Caulk applied within device to finish flush with top surface of device.

RECTORSEAL — Metacaulk 835+ will all CIP device sizes or Metacaulk 1200 with 2 in. (51 mm) CIP device only.

W Rating only applies when the optional caulk is used.

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