



System No. F-A-2186

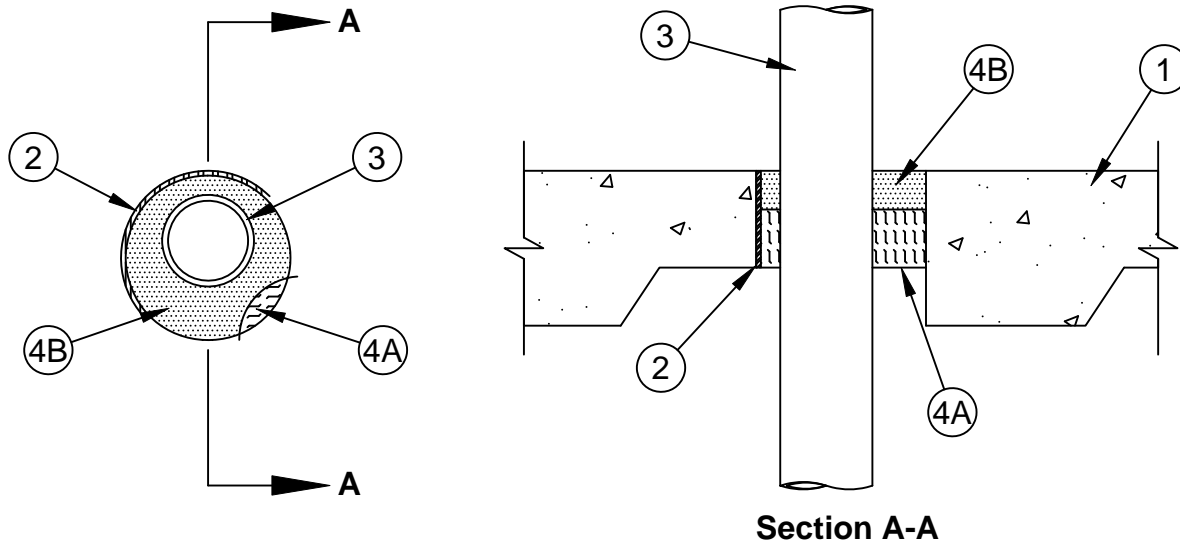
F Rating - 2 Hr

T Rating - 2 Hr

L Rating At Ambient - Less Than 1 CFM/sq ft

L Rating At 400 F - Less Than 1 CFM/sq ft

W Rating - Class 1 (See Item 4B)



1. **Floor Assembly** - The fire rated concrete and steel deck 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/m³) concrete topping.
 - B. **Steel Floor and Form Units*** - Composite or noncomposite min 1-1/2 in. (38 mm) deep fluted galv units as specified in the individual Floor-Ceiling design. Diam of opening through floor to be min 1-1/2 in. (38 mm) larger than outside diam of pipe or conduit. Max diam of opening through floor is 4 in. (102 mm).
- 1A. **Floor Assembly** - As an alternate to Item 1, min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete floor.
2. **Steel Sleeve** - (Optional) - Nom 4 in. (102 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe or nom 4 in. (102 mm) diam (or smaller) No. 26 gauge (0.022 in. or 0.56 mm thick) sheet steel sleeve with square flange spot welded to the sleeve at approx mid-height cast or grouted into floor assembly, flush with floor surfaces.
3. **Through Penetrants** - One nonmetallic pipe to be installed either concentrically or eccentrically within the firestop system. The annular space between pipe and sleeve (Item 2) shall be min 1/4 in. (6 mm) to max 1-3/8 in. (35 mm). When steel sleeve (Item 2) is not provided, the annular space between pipe and periphery of opening shall be min 0 in. (point contact) to max 1-5/8 in. (41 mm). Pipe to be rigidly supported on both sides of floor assembly. The following types and sizes of nonmetallic pipes may be used:
 - A. **Polyvinyl Chloride (PVC) Pipe** - Nom 2 in. (51 mm) diam (or smaller) Schedule 40 solid core or cellular core PVC pipe for use in closed (process or supply) piping systems.
 - B. **Chlorinated Polyvinyl Chloride (CPVC) Pipe** - Nom 2 in. (51 mm) diam (or smaller) SDR 13.5 CPVC pipe for use in closed (process or supply) piping systems.
 - C. **Rigid Nonmetallic Conduit+** - Nom 2 in. (51 mm) diam (or smaller) Schedule 40 PVC conduit installed in accordance with the National Electrical Code (NFPA 70).
 - D. **Crosslinked Polyethylene (PEX) Tubing** - Nom 1 in. (25 mm) diam (or smaller) SDR 9 PEX tubing for use in closed (process or supply) piping systems.



Specified Technologies Inc. 210 Evans Way Somerville, NJ 08876

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

- A. **Packing Material** - Min 1-1/2 in. (38 mm) thickness of min 4 pcf (64 kg/m³) mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor to accommodate the required thickness of fill material.
- B. **Fill, Void or Cavity Material* - Sealant** - Min 1 in. (25 mm) thickness of fill material applied within the annulus, flush with top surface of floor. Additionally, nom 1/2 in. (13 mm) diam bead of fill material applied at concrete/penetrant interface at point contact location on top surface of floor.

SPECIFIED TECHNOLOGIES INC - SpecSeal LCI Sealant, SpecSeal Series 100, 101, 102, 120, 129, or 105 Sealant, Pensil 300 Sealant, or SpecSeal Series SIL300 Sealant for floors or walls and Pensil 300 SL Sealant or SpecSeal Series SIL300SL Sealant for floors only.

W Rating applies only when Pensil 300 Sealant, SpecSeal Series SIL300, Pensil 300 S/L or SpecSeal Series SIL300SL Sealants are used.

*Bearing the UL Classification Mark

+Bearing the UL Listing Mark



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