



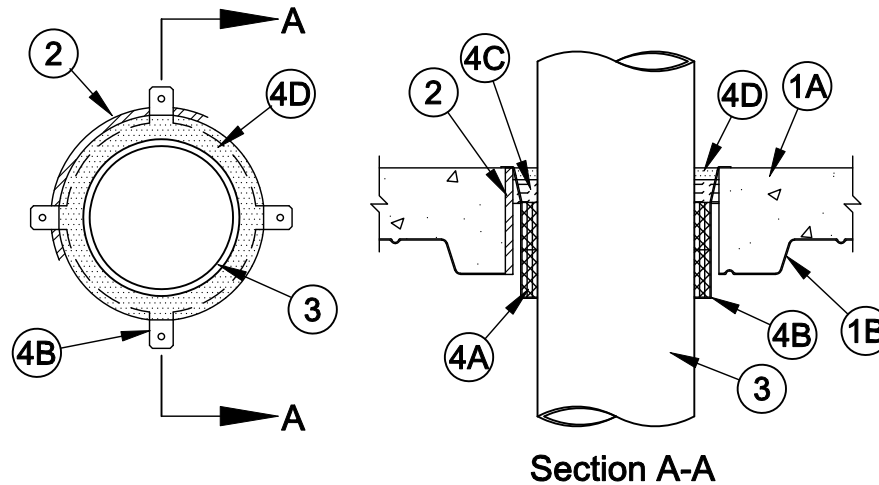
System No. F-A-2047

F Rating - 2 Hr

T Rating - 0 Hr

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

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



1. **Floor Assembly** - The fire-rated 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 3 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete.
 - B. **Steel Floor and Form Units*** - Composite or noncomposite 1-1/2 in. deep fluted galv units as specified in the individual Floor-Ceiling design. Max diam of opening through floor is 8 in.
- 1A. **Floor Assembly** - As an alternate to item 1, min 4-1/2 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete floor assembly. Max diam of opening is 8 in.
2. **Metallic Sleeve** - (Optional) -Nom 8 in. diam (or smaller) Schedule 10 (or heavier) steel pipe cast or grouted into floor assembly, flush with floor surfaces.
3. **Through Penetrants** - One nonmetallic pipe or conduit to be centered within the opening. Pipe to be rigidly supported on both sides of floor assembly. The following types and sizes of nonmetallic pipes and conduits may be used:
 - A. **Polyvinyl Chloride (PVC) Pipe** - Nom 6 in. diam (or smaller) Schedule 40 solid or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
 - B. **Rigid Nonmetallic Conduit++** - Nom 6 in. diam (or smaller) Schedule 40 PVC conduit installed in accordance with Article 347 of the National Electric Code (NFPA No. 70).
 - C. **Chlorinated Polyvinyl Chloride (CPVC) Pipe** - Nom 6 in. diam (or smaller) SDR17 CPVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
 - D. **Acrylonitrile Butadiene Styrene (ABS) pipe** - Nom 6 in. diam (or smaller) Schedule 40 solid or cellular core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
 - E. **Flame Retardant Polypropylene (FRPP) Pipe** - Nom 6 in. diam (or smaller) Schedule 40 FRPP pipe for use in closed (process or supply) or vented (drain, waste or vent) 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. **Fill, Void or Cavity Materials* - Wrap Strip** - Nom 3/16 in. thick intumescent material faced on both sides with a plastic film, supplied in 2 in. wide strips. Two stacks of wrap strip, each consisting of three layers, are individually wrapped around the through penetrant with the ends butted and held in place with tape. Butted ends in successive layers to be aligned or offset.

SPECIFIED TECHNOLOGIES INC - SpecSeal BLU Wrap Strip

- B. **Steel Collar** - Collar fabricated from coils of precut 0.022 in. thick (26 MSG) galv sheet steel available from wrap strip manufacturer. Collar shall be nom 4 in. deep with min four 1 in. wide by 2 in. long anchor tabs. Retainer tabs, 3/4 in. wide tapering down to 1/4 in. wide and located opposite the anchor tabs are folded 90 degrees toward through-penetrant to maintain the annular space around the through-penetrant and to retain the wrap strips. Steel collar wrapped around wrap strips and through penetrant with a 1 in. wide overlap along its perimeter joint and secured together by means of three No. 8 by 1/2 in. long steel sheet metal screws. Steel collar/wrap strip assembly slid along through penetrant into annulus of opening until the bottom of the collar extends 3/4 in. below the bottom surface of the floor. Mounting tabs shall be bent 90 degree outward to lap onto floor surface by 1/2 in. For thicker concrete, fabricate hanger straps extensions from min 0.022 in. thick (26 MSG) galv sheet steel. Taper straps from 1/4 in. wide to 1 in. wide with sufficient length to allow 1/2 in. lap onto floor. Straps secured to collar by inserting 1/4 in. wide end into hole on mounting tab and bending 180 degrees.

- C. **Packing Material** - Min 3/4 in. thickness of min 4 pcf mineral wool batt insulation firmly packed into annular space. Recess packing material from top surface of floor as required to accommodate the required thickness of fill material.

- D. **Fill, Void or Cavity Materials* - Sealant or Putty** - Min 1/2 in. thickness of fill material applied within the annulus, flush with top surface of floor.

SPECIFIED TECHNOLOGIES INC - SpecSeal Series SSS Sealant, SpecSeal LCI Sealant or SpecSeal Putty

*Bearing the UL Classification Mark



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