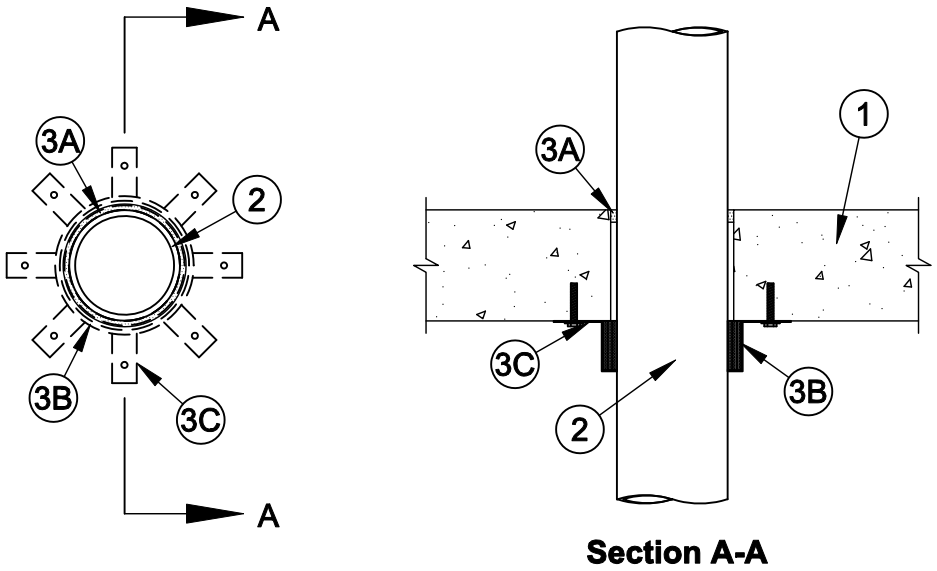
System No. C-AJ-2108

F Ratings - 2 & 3 Hr

T Rating - 2 Hr

L Rating At Ambient - 1 CFM/sq ft

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



Section A-A

1. **Floor or Wall Assembly -** Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf 1600-2400 kg/m3) concrete. Floor may also be constructed of any min 6 in. (152 mm) thick UL Classified hollow-core **Precast Concrete Units***. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max diam of opening is 5 in. (127 mm).

   See **Concrete Blocks** (CAZT) and **Precast Concrete Units** (CFTV) categories in the Fire Resistance Directory for names of manufacturers.

2. **Through Penetrants -** One nonmetallic pipe or conduit to be centered within the firestop system. A nom annular space of 1/4 in. (6 mm) is required within the firestop system. Pipe or conduit to be rigidly supported on both sides of the floor or wall assembly. The following types and sizes of nonmetallic pipes or conduits may be used:

   A. **Polyvinyl Chloride (PVC) Pipe -** Nom 4 in. (102 mm) diam (or smaller) Schedule 40 cellular or solid core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

   B. **Rigid Nonmetallic Conduit+ -** Nom 4 in. (102 mm) diam (or smaller) Schedule 40 PVC conduit installed in accordance with Article 347 of the National Electrical Code (NFPA No. 70).

   C. **Chlorinated Polyvinyl Chloride (CPVC) Pipe -** Nom 4 in. (102 mm) diam (or smaller) SDR 13.5 CPVC pipe for use in closed (process or supply) piping systems.

   The F and T Ratings of the firestop systems are dependent upon the type of through penetrant used. If a solid core PVC pipe, rigid nonmetallic conduit or CPVC pipe is used the F Rating of the firestop system is 3 hr. If a cellular core PVC pipe is used, the F Rating of the firestop system is 2 hr.

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

   A. **Fill, Void or Cavity Material* - Sealant -** Fill material forced into annular spaces to max extent possible. Fill material shall be installed flush with top surface of floor or both surface wall assembly. When required as specified in Item 3B, a min 1/2 in. (13 mm) thickness of fill material is to be installed within the annulus flush with both surfaces of the floor.

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

B. **Fill, Void or Cavity Material* - Wrap Strip -** Nom 1/8 in. (3.2 mm) or 3/16 in. (4.8 mm) thick intumescent material faced on both sides with a plastic film, supplied in 2 in. (51 mm) wide strips. The layers of wrap strips are individually wrapped around the through-penetrant with the ends butted and held in place with masking tape. Butted ends in successive layers may be aligned or offset. The edge of the wrap strips shall abut the surface of the concrete floor or wall. In floor assembles, the wrap strips are installed on the bottom side of the concrete floor. In wall assemblies, the wrap strips are installed on each side of the concrete wall. The number of wrap strips required is dependent upon the diameter of the through-penetrant as tabulated below:

Diam of Thought-Penetrant In. (mm)	No. of Wrap Strips
2 (51)	1
3 (76)	3
4 (102)	3

SPECIFIED TECHNOLOGIES INC - SpecSeal BLU Wrap Strip or SpecSeal BLU2 Wrap Strip. When SpecSeal BLU2 Wrap Strip is used on nom 2 in. (51 mm) diam (or smaller) pipe in concrete floors, the annular space at the bottom of the floor is to be filled with a nom 1/2 in. (13 mm) depth of sealant (Item 3A) in addition to the sealant required at the top of the floor.

C. **Steel Collar -** Collar fabricated from coils of precut 0.016 in. (0.4 mm) thick (30 MSG) galv sheet steel available from wrap strip manufacturer. Collar shall be nom 2 in. (51 mm) deep with min four 1 in. (25 mm) wide by 2 in. (51 mm) long anchor tabs for securement to the concrete floor or wall. Retainer tabs, 3/4 in. (19 mm) wide tapering down to 1/4 in. (6 mm) wide and located opposite the anchor tabs, are folded 90 degrees toward pipe surface to maintain the annular space around the pipe and to retain the wrap strips. Steel collar wrapped around wrap strips and pipe with a 1 in. (25 mm) wide overlap along its perimeter joint and secured together by means of three No. 8 by 1/2 in. (13 mm) long steel screws. As an option, a min 1/2 in. (13 mm) wide by 0.028 in. (0.7 mm) thick stainless steel hose clamp may be installed at mid-depth of the steel collar. Collar secured to concrete surface with 1/4 in. (6 mm) diam by min 1-1/4 in. (32 mm) long steel concrete screws in conjunction with min 1 in. (25 mm) diam steel fender washers. In floor assemblies, one collar is used on the bottom side of the concrete floor. In wall assemblies, a collar is used on each side of the concrete wall.

+Bearing The UL Listing Mark

*Bearing the UL Classification Marking