

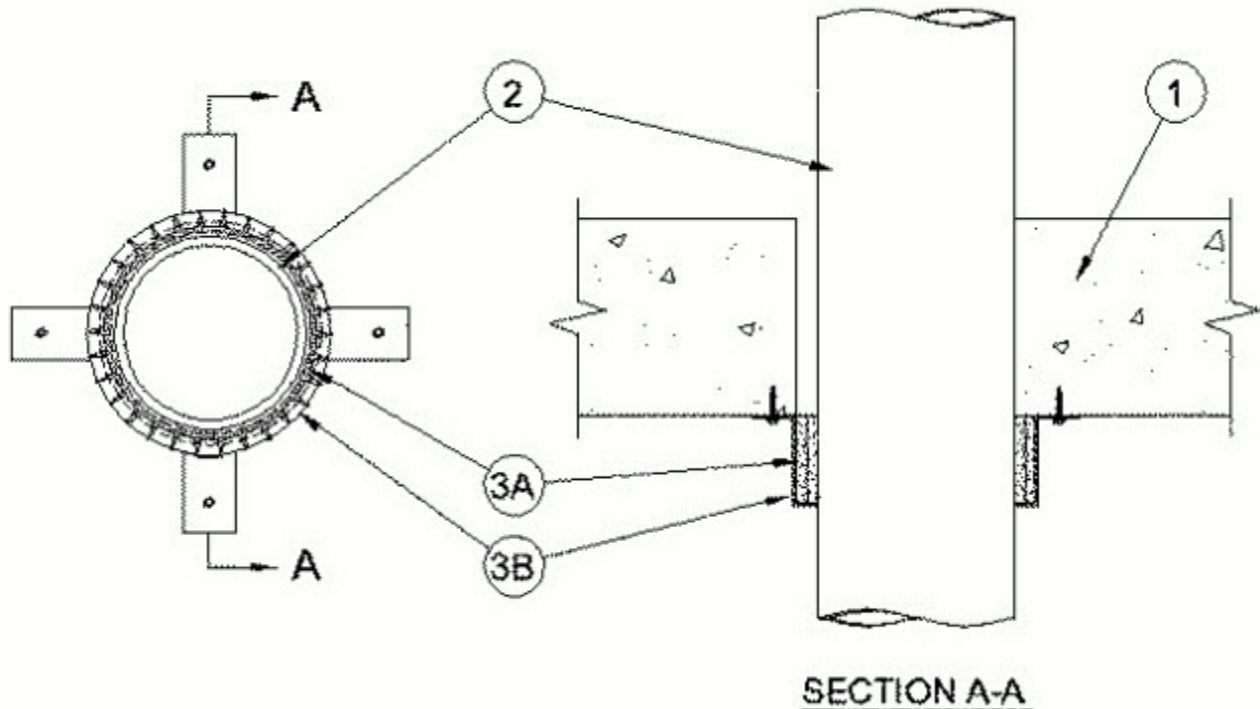
System No. C-AJ-2704

October 22, 2014

F Rating — 3 Hr

T Rating — 3 Hr

W Rating - Class 1 (See Item 3)



1. **Floor or Wall Assembly** — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks***. The diam of opening shall be 5 in.(127 mm)

See **Concrete Blocks (CAZT)** category in the Fire Resistance Directory for names of manufacturers.

2. **Through Penetrants** — One nonmetallic penetrant installed concentrically within the firestop system. The annular space between pipe and periphery of opening shall be min 0 (point contact) 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 non-metallic pipe may be used:

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

B. **Chlorinated Polyvinyl Chloride (CPVC) Pipe** — Nom 4 in. (102 mm) diam (or smaller) SDR 13.5 or Schedule 40 CPVC pipe for use in closed (process or

supply) piping systems. Schedule 40 CPVC pipe for use in vented (drain, waste or vent) piping systems.

C. Acrylonitrile Butadiene Styrene (ABS) Pipe — Nom 4 in. (102 mm) diam (or smaller) Schedule 40 solid core or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

3. Firestop System — The details of the firestop system shall be as follows:

A. Fill, Void or Cavity Materials* - Wrap Strip — Two layers of nom 1/4 in. (6 mm) thick intumescent elastomeric material faced on one side with a plastic film, supplied in 2 in. (51 mm) wide strips. Strips tightly wrapped around nonmetallic pipe (film side exposed) with the edges butted against the underside of the concrete floor or both sides of wall surface. Butted ends in successive layers shall be offset. Wrap strip layers temporarily held in position using tape, wire or equivalent.

EVERKEM DIVERSIFIED PRODUCTS INC — Flame Tech Wrap Strip

B. Steel Collar — Collar fabricated from coils of precut 0.016 in. thick (No. 30 MSG) galv sheet steel available from wrap strip manufacturer. Collar shall be nom 2 in. (51 mm) deep with min 1 in. (25 mm) wide by 1-1/4 in. (32 mm) long anchor tabs on 4 in. (102 mm) centers for securement to underside of concrete floor and both sides of concrete wall. In addition, collar contains retainer tabs, 1/2 in. (13 mm) wide by 3/4 in. (19 mm) long located opposite the anchor tabs. Collar shall be wrapped over the wrap strip, with ends overlapping min 1 in. (25 mm) The retainer tabs are folded 90 deg towards the pipe to maintain the annular space around the pipe and to retain the wrap strip. Steel collar tightened around wrap strips and through pentetrant using min 1/2 in. (13 mm) wide by 0.028 in. (0.71 mm) thick stainless steel hose clamp installed at midheight of the collar. Collar secured to bottom surface of the floor or both surfaces of wall at each anchor tab by means of min 1/4 in. (6 mm) diam by 1-1/4 in. (32 mm) long steel expansion bolts or steel Tapcon® concrete anchors in conjunction with 1/4 in. (6 mm) by 5/8 in. (16 mm) diam fender washers.

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