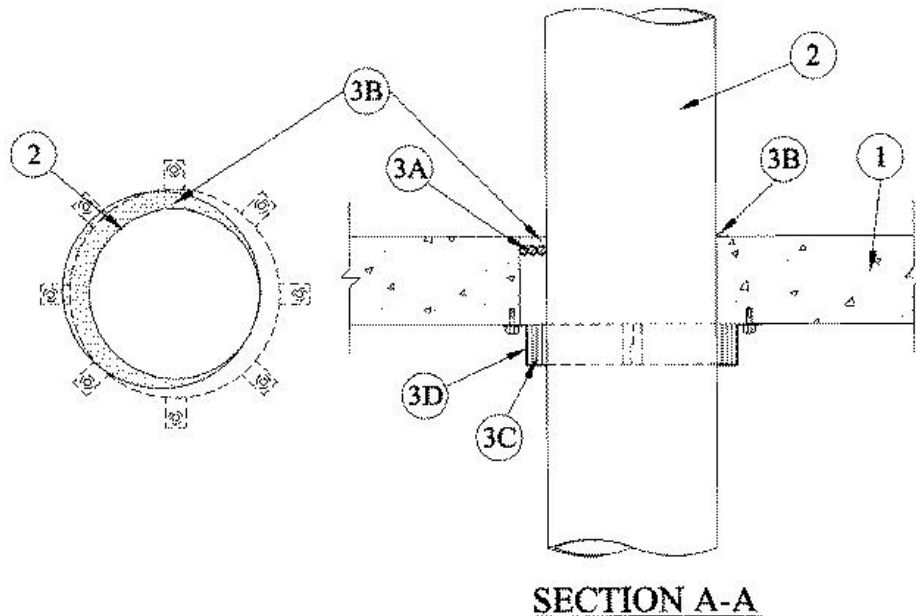


F Rating — 3 Hr
T Rating — 1-1/2 Hr
L Rating at Ambient — Less Than 1 CFM/sq ft
L Rating at 400 F — Less Than 1 CFM/sq ft



1. **Floor or Wall Assembly** — Min 4-1/2 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max diam of opening is 10 in.

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

2. **Through Penetrants** — One nonmetallic pipe to be installed either eccentrically or concentrically within the firestop system. The annular space shall be min 0 in. (point contact) to max 1-3/8 in. Pipe to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of nonmetallic pipes may be used:

A. **Polyvinyl Chloride (PVC or uPVC) Pipe** — Nom 8 in. diam (or smaller) Schedule 40 cellular or solid core PVC or uPVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

B. **Chlorinated Polyvinyl Chloride (CPVC) Pipe** — Nom 8 in. diam (or smaller) SDR 17 CPVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

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

A. **Packing Material** — Foam backer rod firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or both surfaces of wall as required to accommodate the required thickness of fill material.

B. **Fill, Void or Cavity Material* — Caulk** — Min 1/2 in. thickness of fill material applied within the annulus, flush with top surface of floor or both surfaces of wall. At point contact location between concrete floor and pipe, a min 1/4 in. diam bead of fill material shall be applied to the concrete/pipe interface on top surface of floor.

RECTORSEAL — [Metacaulk 1000](#)

C. **Fill, Void or Cavity Material* — Wrap Strip** — Nom 1/4 in. thick by 2 in. wide intumescent wrap strip. Four layers of wrap strip are individually wrapped around the through-penetrant with ends butted and held in place with masking tape. Butted ends in successive layer shall be offset. Wrap strip butted tightly against bottom surface of floor or both surfaces of wall.

RECTORSEAL — [Metacaulk Wrap Strip](#)

D. **Steel Collar** — Collar fabricated from coils of precut min 0.016 in. thick (No. 28 gauge) galv steel available from fill material manufacturer. Collar shall be nom 2 in. deep with 1 in. wide by 1-1/2 in. long anchor tabs on 4 in. centers for securement to the underside of floor or both surfaces of wall. In addition, collars contain retainer tabs 1/2 in. wide by 3/4 in. long, located opposite the anchor tabs. Collar shall be wrapped over the wrap strip, overlapping min 1 in. At the overlap, the two ends of the collar shall be transversely slit from opposite directions for a distance of 1-1/2 in., approximately 1/2 in. from the ends, and tucked together. The retainer tabs are folded 90 deg towards the pipe to maintain the annular space around the pipe and to retain the wrap strip. Collar

secured to bottom surface of the floor or both surfaces of wall at each anchor tab by means of min 1/4 in. diam by 1-1/4 in. long steel expansion bolts or steel Tapcon® concrete anchors in conjunction with 1/4 in. by 5/8 in. diam washers.

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