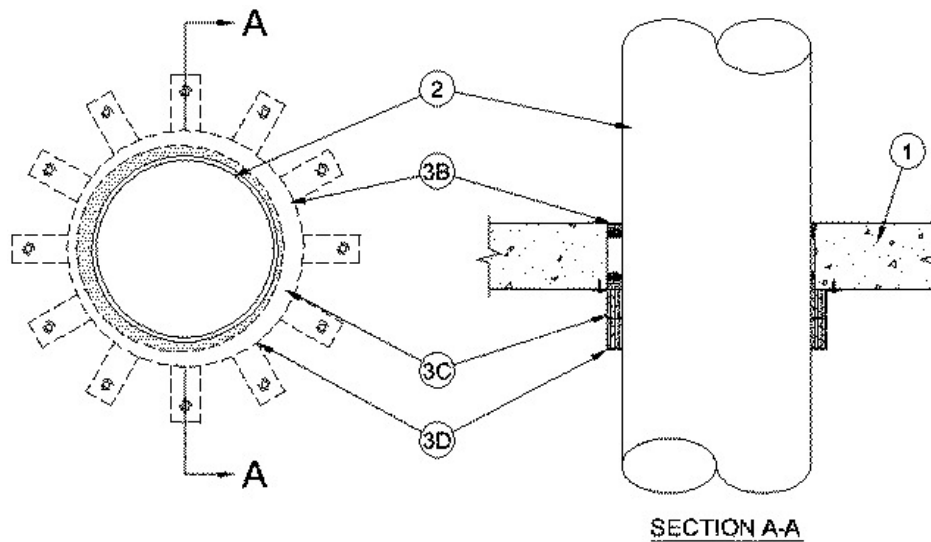


F Rating — 3 Hr
T Rating — 3 Hr



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 14 in.

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

2. Through Penetrants — One non-metallic pipe to be installed either eccentrically or concentrically within the firestop system with an annular space of min 1/4 in. to max 1 in. Pipe to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of non-metallic pipe may be used:

A. **Polyvinyl Chloride (PVC) Pipe** — Nom 10 or 12 in. diam Sch 40 solid core polyvinyl chloride (PVC) 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 both surfaces of floor or both surfaces of wall.

RECTORSEAL — [Metacaulk 1000](#)

C. **Fill, Void or Cavity Material* - Wrap Strip** — Nom 1/4 in. thick by 2 in. wide intumescent wrap strip faced on one side with a plastic film. Alternately, two nom 1/4 in. thick by 1 in. wide wrap strips may be butted together side by side to achieve the 2 in. width. Two stacks of four layers of 2 in. wide wrap strip are individually wrapped around the through-penetrant with film exposed and ends butted and held in place with masking tape. Butted ends in successive layers 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 1-1/4 in. long anchor tabs on 4 in. centers for securement to the underside of floor or both surfaces of wall. In addition, collar contains retainer tabs 1/2 in. wide by 3/4 in. long, located opposite the anchor tabs. Collar shall be wrapped over the wrap strip, with ends overlapping min 1 in. 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 penetrant using min 1/2 in. wide by 0.028 in. 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. 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 spaced 4 in. OC. A second similar collar with wrap strips shall be installed in a like manner and butted tightly to the first collar. The anchor tabs of the lower collar are left unbent so they may mount to the outside surface of the upper collar using 1/4 sheet metal screws at each anchor tab. A second min 1/2 in. wide by 0.028 in. thick stainless steel hose clamp shall be installed around the second collar.



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

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