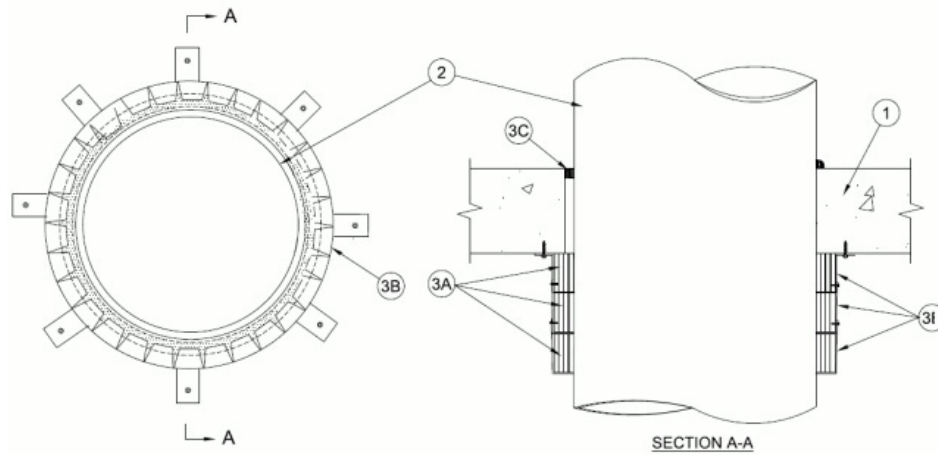


F Rating — 2 Hr  
T Rating — 2 Hr



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/m<sup>3</sup>) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks\***. Max diam of opening is 14 in. (356 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 to be installed concentrically or eccentrically within the firestop system. The annular space between the pipe and periphery of opening shall be min 0 in. (point contact) to max 1-5/8 in. (41 mm). Pipe to be rigidly supported on both sides of the floor or wall assembly. The following types and sizes of nonmetallic pipes may be used:

A. **Polypropylene (PP-R) Pipe** — Nom 12 in. diam - 315 mm OD (or smaller) SDR 11 MF Aquatherm Blue Pipe for use in closed (process or supply) piping systems.

B. **Polypropylene (PP-RCT) Pipe** — Nom 12 in. diam - 315 mm OD (or smaller) SDR 11 Niron Clima Pipe for use in closed (process or supply) piping systems.

C. **Polypropylene (PP-R) Pipe** — Nom 12 in. diam - 315 mm OD (or smaller) SDR 11 MF Aquatherm Green Pipe for use in closed (process or supply) piping systems.

D. **Polypropylene (PP-RCT) Pipe** — Nom 12 in. diam - 315 mm OD (or smaller) SDR 11 Niron CoolPro Pipe for use in closed (process or supply) piping systems.

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

A. **Fill, Void or Cavity Material\* - Wrap Strip** — Nom 1/4 in. (6 mm) thick by 2 in. (51 mm) wide intumescent wrap strip wrapped around the outer circumference of the pipe on bottom of floor or on each side of the wall. Three stacks of four layers of wrap strip shall be used. Wrap strip installed in individually wrapped layers having butted ends offset in successive layers, or in continuous layers, in each stack. Edge of nearest wrap strip to be flush with the bottom surface of floor or both surfaces of wall. Each wrap strip stack temporarily secured with tape or tie wire.

**RECTORSEAL** — [Metacaulk Wrap Strip](#), Biostop Wrap Strip, FlameSafe Wrap Strip

B. **Steel Collar** — Collar fabricated from coils of precut min 0.016 in. thick (0.41 mm) galv steel available from fill material manufacturer shall be installed to restrain each stack of wrap strip. Collar shall be nom 2 in. (51 mm) deep with 1 in. (25 mm) wide by 1-1/2 in. (38 mm) long anchor tabs located 4 in. (102 mm) on center for attachment to the underside of floor or both surfaces of wall. In addition, collar provided with 1/2 in. (13 mm) wide by 3/4 in. (19 mm) long retainer tabs opposite the anchor tabs. Collar shall be wrapped over each stack of the wrap strip, overlapping min 1 in. (25 mm) and secured with two steel screws or stainless steel hose clamp. The retainer tabs of each collar are folded 90 deg towards the pipe to maintain the annular space around the pipe and to retain the wrap strip. Collar nearest floor or wall is 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 washers. Anchor tabs of remaining two collars are lapped onto and secured to adjacent collar with min 3/8 in. long by #8 steel screw in each anchor tab.

C. **Fill, Void or Cavity Material\* — Sealant** — Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with top surface of floor. In addition, min 1/2 in. (13 mm) bead of sealant applied at point contact location between pipe and concrete at top surface of floor. Sealant is optional in walls.

**RECTORSEAL** — [Metacaulk 1000](#), Biostop 500+ or FlameSafe 1900



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