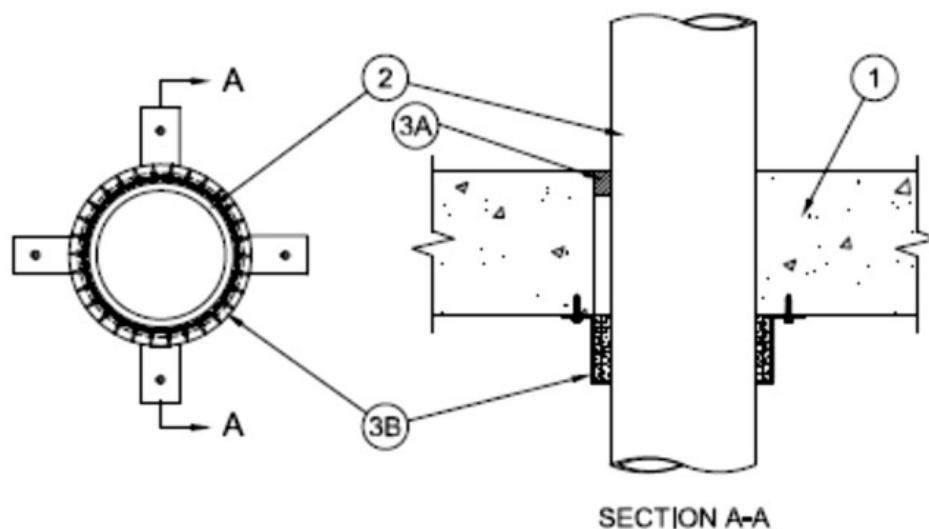


F Rating — 2 Hr
T Rating — 2 Hr
L Rating at Ambient — Less than 1 CFM/ft³
L Rating at 400° F — Less than 1 CFM/ft³



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***. Floor may also be constructed of any min 6 in. (152 mm) thick UL Classified hollow-core **Precast Concrete Units***. 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 or manufacturers.

2. **Through Penetrant** — Nom 4 in. (102 mm) diam (or smaller). Schedule 40 solid core CPVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems. Pipe to be installed either 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 1/2 in. (13 mm). Pipe to be rigidly supported on both sides of wall assembly.

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

A. **Fill, Void or Cavity Materials* - Caulk** — Min 1/2 in. (13 mm) thickness of caulk applied within annulus, flush with top of floor or both surfaces of wall assembly.

RECTORSEAL — [Metacaulk MC150+](#), 350i, 1000, 1200, FS900+, FS1900, FlameSafe FS3000, FS4000, Biostop150+, 350i, 500+, 700, 750

B. **Fill, Void or Cavity Material* - Wrap Strip** — Layers of nom 1/4 in. (6 mm) thick by 1 in. (25 mm) wide intumescent wrap strip individually wrapped around the outer circumference of the pipe with edges butted against underside of floor or both sides of wall assembly. Butted ends in successive layers shall be offset. Wrap strip temporarily secured with tape or tie wire. Min of one, two or three layers of wrap strip are to be used for nom 2 in. (51 mm), 3 in. (76 mm) or 4 in. (102 mm) diam pipe, respectively.

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

C. **Steel Collar** — Collar fabricated from coils of precut min 0.016 in. (0.41 mm) thick (No. 28 gauge) galv steel available from fill material manufacturer. Collar shall be nom 1 in. (25 mm) deep with 1 in. (25 mm) wide by 1-1/2 in. (38 mm) long anchor tabs on 4 in. (102 mm) centers for attachment to both surfaces of wall or bottom surface of floor. In addition, collar provided with 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, 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. Collar secured to both surfaces of wall or bottom surface of floor at each anchor tab by means of 1/4 in. (6 mm) diam by 1-1/4 in. (32 mm) long steel anchors in conjunction with 1/4 in. (6 mm) by 5/8 in. (16 mm) diam steel washers.

D. **Firestop Device*** — (Not Shown) - As an alternate to Items 3B and 3C, galv steel collar lined with an intumescent material sized to fit specific diam of the through penetrant. Device to be installed around through penetrant in accordance

with accompanying installation instructions. Device incorporates anchor tabs for attachment to both surfaces of the wall or bottom surface of floor by means of 1/4 in. (6 mm) diam by 1-1/4 in. (32 mm) long steel anchors.

RECTORSEAL — [Metacaulk Pipe Collar](#), Biostop Pipe Collar, FlameSafe Pipe Collar

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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.

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