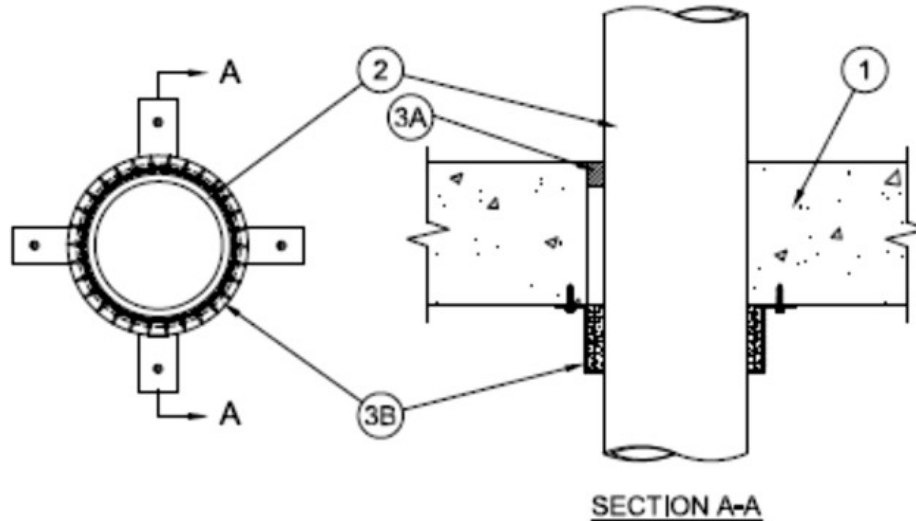


F Rating — 2 Hr  
 T Ratings — 0 or 2 Hr (See Item 3)  
 L Rating at Ambient — Less Than 1 CFM/sq ft (See Item 3A)  
 L Rating at 400 F — Less Than 1 CFM/sq ft (See Item 3A)



1. **Floor or Wall Assembly** — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf 1600-2400 kg/m<sup>3</sup>) 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 Block (CAZT)** and **Precast Concrete Units (CFTV)** categories in the Fire Resistance Directory for names or manufacturers.

2. **Through Penetrants** — Nom 4 in. (102 mm) diam (or smaller). Schedule 40 solid core PVDF 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** — (Optional) Min thickness of 1/2 in. (13 mm) of caulk applied within annulus, flush with both surfaces of wall assembly.

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

B. **Fill, Void or Cavity Material\* - Wrap Strip** — Layers of nom 1/4 in. (6 mm) thick by 2 in. (51 mm) wide intumescent wrap strip individually wrapped around the outer circumference of the pipe such that wrap strip is flush with both surfaces of wall or bottom surface of floor. Butted ends in successive layers shall be offset. Wrap strip secured with tape, wire or tie wire. Three layers are to be used for nom 4 in. (102 mm) diam pipe two layers for nom 3 in. (76 mm) diam Pipe and one layer for nom 2 in. (51 mm) diam pipe

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

C. **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. (51 mm) deep with 1 in. (25 mm) wide by 1-1/2 in. (38 mm) long anchor tabs on 4 in. (102 mm) centers to secure to both surfaces of wall or bottom surface of floor. 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, 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. Collar secured to both surfaces of wall or bottom surface of floor at each anchor tab by means of 1/4 in. diam by 4 in. (6 by 102 mm) long steel anchors in conjunction with 1/4 in. by 5/8 in. (6 by 16 mm) diam washers.

D. **Firestop Device\*** — (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 securement to both surfaces of the wall or bottom surface of

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floor by means of 1/4 in. diam by 4 in. (6 by 102 mm) long steel anchors.  
**RECTORSEAL** — [Metacaulk Pipe Collar](#) or FlameSafe Pipe Collar

**T Rating is 2 hours when Item 3a is used. Air leakage only applies when Item 3A or 3A.A is used.**

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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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