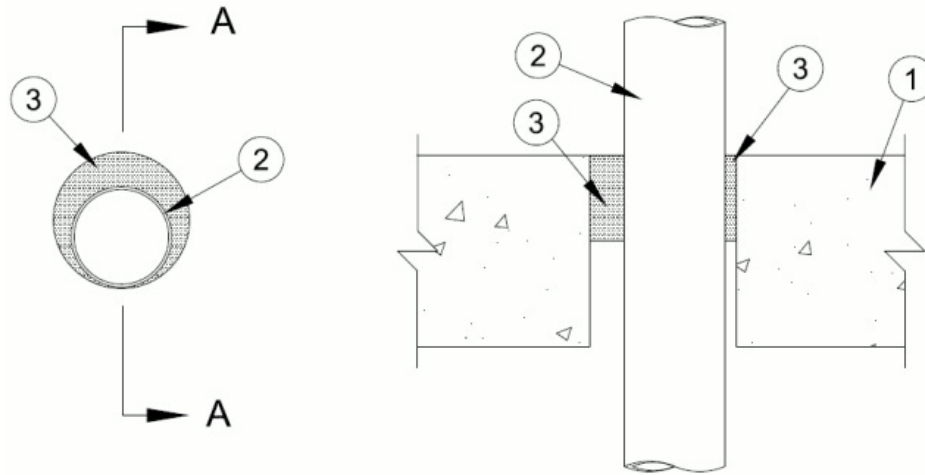


F Rating — 2 Hr  
T Rating — 2 Hr



Section A-A

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 4 in. (102 mm). See **Concrete Blocks** (CAZT) in the Fire Resistance Directory for names of manufacturers.

2. **Through Penetrants** — One nonmetallic pipe to be installed concentrically within the firestop system. The annular space between the pipe and periphery of opening shall be min 1/2 in. (13 mm) to max 1 in. (25 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-RTC) Pipe** — Nom 2 in. (63 mm OD) diam (or smaller) SDR 17 Niron pipe for use in closed (process or supply) piping systems.

B. **Polypropylene (PP-RTC) Pipe** — Nom 2 in. (63 mm OD) diam (or smaller) SDR 11 Niron pipe for use in closed (process or supply) piping systems.

C. **Polypropylene (PP-RTC) Pipe** — Nom 2 in. (63 mm OD) diam (or smaller) SDR 7.3 Niron pipe for use in closed (process or supply) piping systems.

3. **Fill, Void or Cavity Materials\*** — (Caulk) - Min 2 in. (51 mm) thickness of caulk applied within the annulus, flush with top surface of floor or both surfaces of wall.

**RECTORSEAL** — [Metacaulk 1000](#), [Metacaulk 350i](#), Biostop 500+, Biostop 350i or FlameSafe 1900

\*,+ 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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