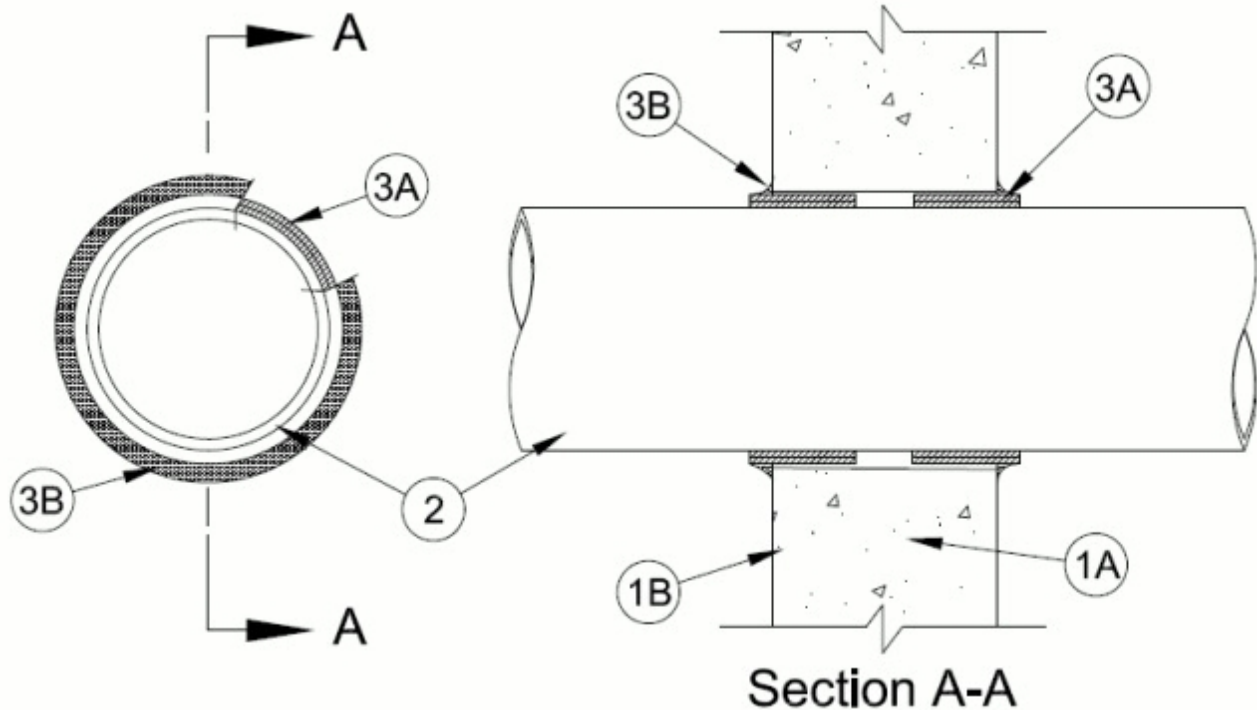


## System No. W-J-2324

October 11, 2017

F Ratings— 2 Hr

T Ratings — 1-3/4 and 2 Hr (See Item 2)



1. **Wall Assembly** — Min 6 in. (152 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 5 in. (127 mm).

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

2. **Through Penetrant** — One nonmetallic pipe centered in the firestop system. The annular space between the penetrant and the periphery of opening shall be nom 1/4 in. (6 mm). Penetrant to be rigidly supported on both sides of wall assembly. The following types and sizes of nonmetallic pipe may be used:

A. **Polyvinyl Chloride (PVC) Pipe** — Nom 4 in. (102 mm) diam (or smaller) Schedule 40 cellular or solid core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.

B. **Rigid Nonmetallic Conduit+** — Nom 4 in. (102 mm) diam (or smaller) Schedule 40 PVC conduit installed in accordance with the National Electrical Code (NFPA 70).

C. **Chlorinated Polyvinyl Chloride (CPVC) Pipe** — Nom 4 in. (102 mm) diam (or smaller) SDR 17 CPVC pipe for use in closed (process or supply) piping systems.

D. **Acrylonitrile Butadiene Styrene (ABS) Pipe** — Nom 4 in. (102 mm) diam (or smaller) Schedule 40 cellular or solid core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

**The hourly T Rating is 1-3/4 hr when Item 2D is used. The hourly T Rating is 2 hr when Items 2A, 2B and 2C are used.**

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

A. **Fill, Void or Cavity Materials\*** — Two layers of nom 2 mm thick by 3 in. (76 mm) wide intumescent joint strip tightly wrapped around the outer circumference of the pipe with ends butted and held in place with tape. Joint strip slid into the annular space on both sides of wall

with the outer edges of the joint strip extending 1/2 in. (13 mm) from both surfaces of wall.

**RECTORSEAL** — Metacaulk Joint Strip, Flame Safe Joint Strip, Biostop Joint Strip

**B. Fill, Void or Cavity Material\* — Caulk** — Min 1/2 in. (13 mm) thickness of fill material applied at the joint strip/wall interface on both sides of the wall assembly.

**RECTORSEAL** — Metacaulk 1000, Metacaulk 350i, Biostop 500+, Biostop 350i or FlameSafe1900.

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