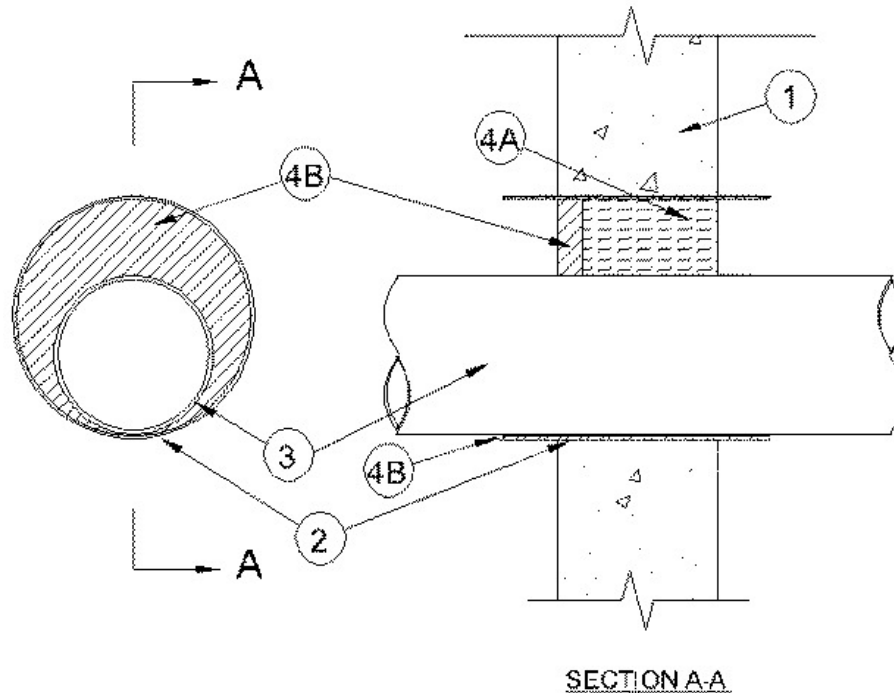


F Rating — 2 Hr
T Rating — 0 Hr



1. **Wall Assembly** — Min 3-3/4 in. (95 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600 - 2400 kg/m³) concrete wall. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max diam of opening is 6 in. (152 mm). See **Concrete Blocks** (CAZT) category in the Fire Resistance Directory for names of manufacturers.

2. **Steel Sleeve** — (Optional) - Cylindrical sleeve fabricated from min 0.019 in. (0.49 mm) thick (28 gauge) galv sheet steel and having a min 1 in. (25 mm) lap along the longitudinal seam. Steel sleeve to be 2 in. (51 mm) longer than the thickness of wall such that, when installed, the ends of the sleeve will project 1 in. (25 mm) beyond each surface of the wall. Sleeve installed by coiling the sheet steel to a diam smaller than the opening, inserting the coil through the opening and releasing the coil. Steel sleeve required for concrete block construction.

3. **Through Penetrants** — One metallic pipe, tubing or conduit installed within the firestop system. Penetrant to be rigidly supported on both sides of wall assembly. Annular space between the penetrant and sleeve shall be min 0 in. (point contact) to max 1-7/8 in. (0 to 48 mm). The following types of metallic pipes or conduits may be used:

A. **Steel Pipe** — Nom 4 in. (102 mm) schedule 5 (or heavier) steel pipe.

B. **Iron Pipe** — Nom 4 in. (102 mm) cast or ductile iron pipe.

C. **Copper Tubing** — Nom 4 in. (102 mm) Type L (or heavier) copper tubing.

D. **Copper Pipe** — Nom 4 in. (102 mm) Regular (or heavier) copper pipe.

E. **Conduit** — Nom 4 in. (102 mm) (or smaller) steel electrical metallic tubing or rigid steel conduit.

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

A. **Packing Material** — Min 4 pcf mineral wool batt insulation tightly packed into the sleeve flush with one surface of the wall and recessed 5/8 in. (16 mm) from the other surface of the wall to accommodate the required thickness of fill material.

B. **Fill, Void or Cavity Material*** — **Caulk** — Min 5/8 in. (16 mm) thickness of caulk applied within annulus, flush with one surface of wall. At the point contact location between penetrant and sleeve, a min 1/2 in. (13 mm) diam bead of fill material shall be applied at the sleeve/penetrant interface on the same side of wall.

RECTORSEAL — [Metacaulk 1000](#)

+ Bearing the UL Listing Mark



*,+ 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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