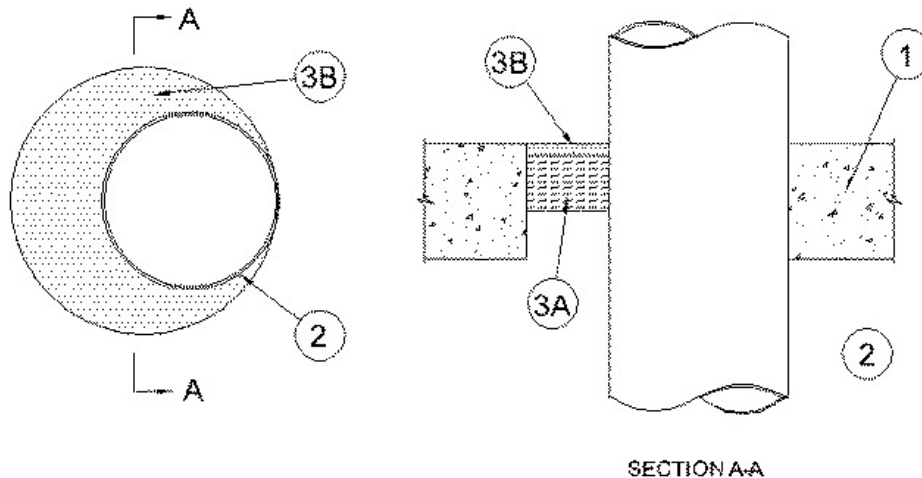


F Rating — 2 Hr
T Ratings — 1/4 and 1/2 Hr (See Item 2)



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***. Max diam of opening is 11-1/4 in. (285 mm).

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

2. Through Penetrants — One metallic pipe, tubing or conduit installed concentrically or eccentrically within the firestop system. An annular space of min 0 in. (point contact) to a max 1-3/4 in. (44 mm) is required between the penetrant and the periphery of the opening. Pipe, tubing or conduit to be rigidly supported on each side of the floor assembly. The following types and sizes of metallic pipes, tubing or conduit may be used:

A. **Steel Pipe** — Nom 8 in. (203 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.

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

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

D. **Conduit** — Nom 6 in. (152 mm) diam (or smaller) steel conduit or nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing.

T Rating is 1/2 hr when annular space is 1-3/4 in. (44 mm) or less and min 1/2 in. (13 mm) thickness of sealant and min 4 in. (102 mm) thickness of mineral wool is used. T Rating is 1/4 hr when annular space is 1-3/4 in. (44 mm) or less, and min 1/4 in. thickness of sealant and min 2 in. (102 mm) thickness of mineral wool is used.

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

A. **Packing Material** — Nom 2 in. (102 mm) or 4 in. (152 mm) thickness of min 4 pcf (64 kg/m³) mineral wool batt insulation firmly packed into opening as a permanent form. (See Item 2 above) Packing material to be recessed from top surface of floor or from both surfaces of wall as required to accommodate the required thickness of fill material.

B. **Fill, Void or Cavity Material* - Caulk** — Min 1/4 in. (6 mm) or 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall. (See Item 2 above)

RECTORSEAL — [Metacaulk 350i](#)

*,+ 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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