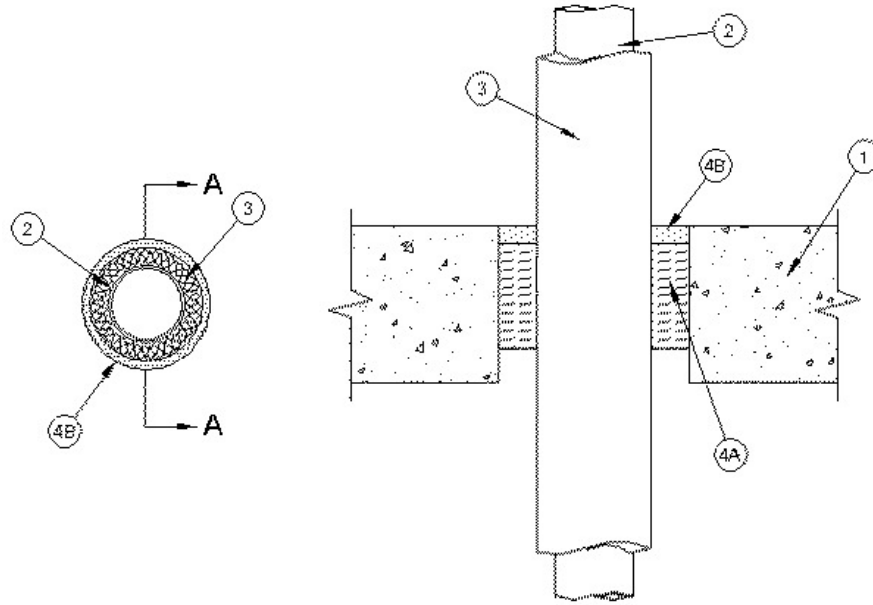


F Rating — 2 Hr
T Rating — 1/2 Hr



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/m³) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max diam of opening is 8 in. (203 mm). See **Concrete Blocks** (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. **Through Penetrant** — One metallic pipe or tubing to be installed concentrically or eccentrically within the firestop system. The following types and sizes of metallic pipes or tubing may be used:
 - A. **Steel Pipe** — Nom 4 in. (102 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
 - B. **Iron Pipe** — Nom 4 in. (102 mm) diam (or smaller) cast or ductile iron pipe.
 - C. **Copper Tubing** — Nom 4 in. (102 mm) diam (or smaller) Type L (or heavier) copper tubing.
 - D. **Copper Pipe** — Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper pipe.
3. **Pipe Covering - Plastics++** — Nom 1 in. (25 mm) thick acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing. The annular space between pipe covering and periphery of opening shall be min 3/8 in. (10 mm) to max 1-1/2 in. (38 mm). See **Plastics** (QMFZ2) category in the Plastics Recognized Component Directory for names of manufacturers. Any Recognized Component tube insulation material meeting the above specifications and having a UL94 Flammability Classification of 94-5VA may be used.
- 4 **Firestop System** — The firestop system shall consist of the following:
 - A. **Packing Material** — Min 3 in. (76 mm) thickness of min 4 pcf (64 kg/m³) mineral wool batt insulation tightly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of wall to accommodate the required thickness of fill material.
 - B. **Fill, Void or Cavity Material*** — **Caulk** — Min 1/2 in. (13 mm) thickness of fill material applied within the annulus flush with top surface of floor or both surfaces of wall.
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.