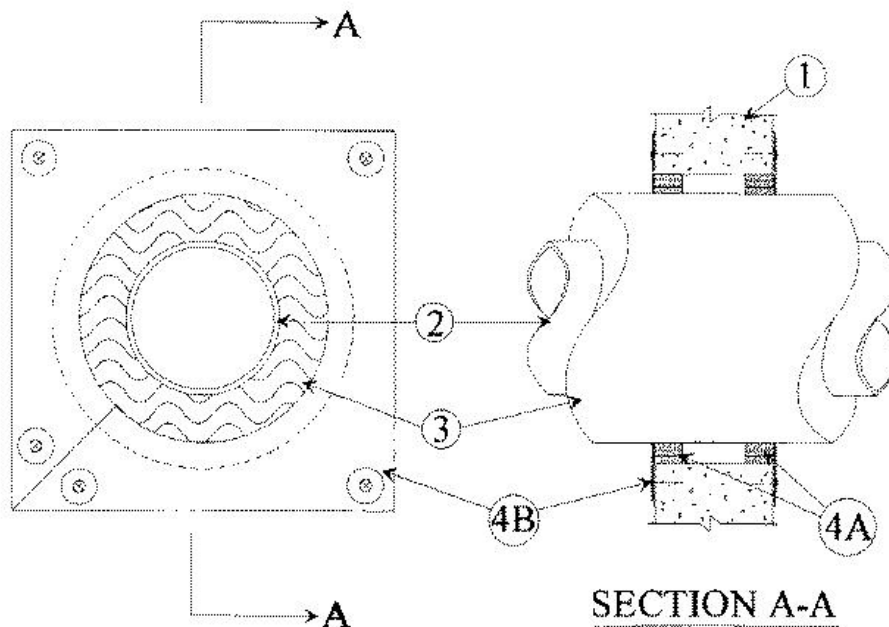


F Rating — 2 Hr  
 T Rating — 1-1/2 hr



1. **Wall Assembly** — Min 7-5/8 in. thick wall assembly constructed of any UL Classified **Concrete Blocks\***. Max diam of opening is 18 in.  
 See **Concrete Blocks (CAZT)** category in the Fire Resistance Directory for names of manufacturers.

2. **Through Penetrants** — One metallic pipe or tubing to be installed either concentrically or eccentrically within the firestop system. Pipe or tubing to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of metallic pipes or tubing may be used:

- A. **Steel Pipe** — Nom 10 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.
- B. **Iron Pipe** — Nom 10 in. diam (or smaller) cast on ductile iron pipe.
- C. **Copper Tube** — Nom 4 in. diam (or smaller) Type L (or heavier) copper tube.
- D. **Copper Pipe** — Nom 4 in. diam (or smaller) Regular (or heavier) copper pipe.

3. **Pipe Covering\*** — Nom 3 in. thick hollow cylindrical heavy density (min 3.5 pcf) glass fiber units jacketed on the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product. The annular space shall be min 1/2 in. to max 3/4 in.

See **Pipe and Equipment Covering — Materials (BRGU)** category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.

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

A. **Fill, Void or Cavity Material\* — Wrap Strip** — Nom 1/4 in. thick by 1 in. wide intrumescent wrap strip. The wrap strip is continuously wrapped around the outer circumference of the pipe covering three times and slid into annular space 7/8 in. such that 1/8 in. of the wrap strip protrudes from the wall surface. When multiple wrap strips are used to achieve the required total length, the ends are to be butted end-to-end and held in place with aluminum tape. Wrap strips are installed on each side of wall.

**RECTORSEAL** — [Metacaulk Wrap Strip](#)

B. **Steel Cover Plate** — Min 0.021 in. thick (No 25 MSG) galv steel cover plates installed on both surfaces of wall and extending a min of 2 in. beyond the periphery of the opening. The steel cover plate is to be placed over the wrap strips and tightly fitted around the pipe covering. Seam of steel cover plate cut from one corner to the center of the plate. Seam of steel cover plate tightly butted together and secured to surfaces of wall by means of 1/8 in. diam by 3 in. long toggle bolts in

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conjunction with 3/16 in. by 3/4 in. and 1/4 in. by 1-1/4 in. steel fender washers.

\*,+ 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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