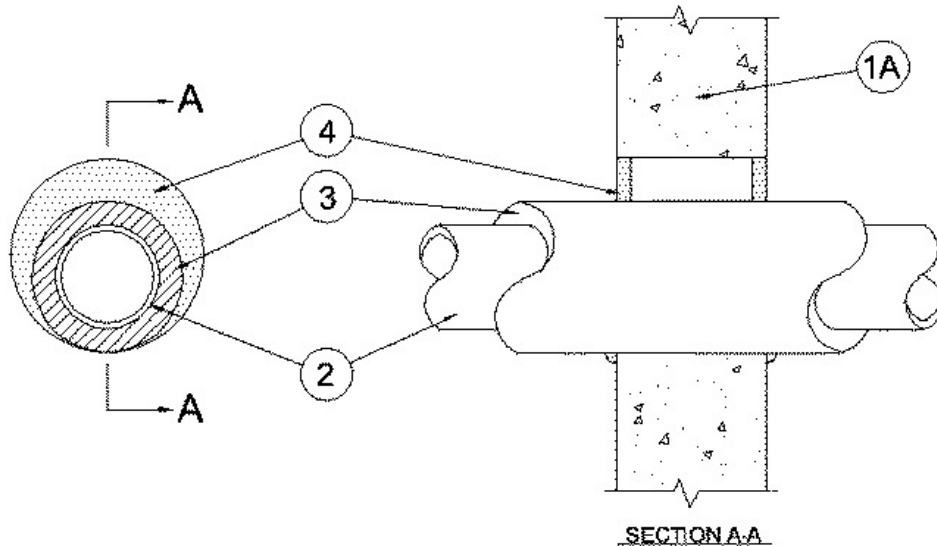


F Rating — 2 Hr
T Rating — 3/4 Hr



1. **Wall Assembly** — Min 6 in. thick lightweight or normal weight (100-150 pcf) concrete wall assembly. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max diam of opening is 6-1/2 in.

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

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

- A. **Steel Pipe** — Nom 4 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.
- B. **Iron Pipe** — Nom 4 in. diam (or smaller) cast or ductile iron pipe.
- C. **Copper Tubing** — 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. **Tube Insulation - Plastics+** — Nom 3/4 in. thick acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing. The annular space between the pipe or tube insulation and the periphery of the opening shall be min 0 in. (point contact) to a max 7/8 in.

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 UL 94 Flammability Classification of 94-5VA may be used.

4. **Fill, Void or Cavity Materials* - Caulk** — Min 5/8 in. thickness of caulk applied within annular space flush with each surface of wall. A min 1/2 in. diam bead of caulk shall be applied to the pipe insulation/concrete interface at the point contact location on both sides of wall.

RECTORSEAL — [Metacaulk 1000](#)

+Bearing the UL Recognized Marking

*,+ 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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