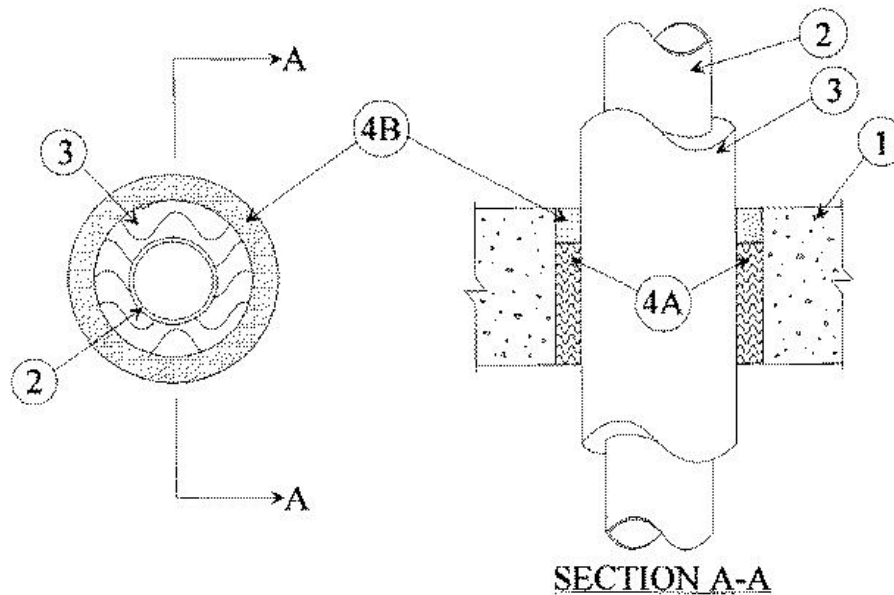


F Rating — 3 Hr
 T Rating — 0 Hr



1. **Floor or Wall Assembly** — Min 4-1/2 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete floor or min 5-1/4 in. thick reinforced lightweight or normal weight concrete wall. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max diam of opening is 4 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 centered within the firestop system. Pipe or tubing to 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 2 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.

B. **Iron Pipe** — Nom 2 in. diam (or smaller) cast or ductile iron pipe.

C. **Copper Tubing** — Nom 2 in. diam (or smaller) Type L (or heavier) copper tubing.

D. **Copper Pipe** — Nom 2 in. diam (or smaller) Regular (or heavier) copper pipe.

3. **Tube Insulation — Plastics+** — Nom 1/2 in. thick acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing. A nom annular space of 3/8 in. is required within the firestop system.

See **Plastics+** — (QMFZ2) category in the 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. **Firestop System** — The firestop system shall consist of the following:

A. **Packing Material** — Min 3-3/4 in. thickness of min 4.5 pcf mineral wool batt insulation firmly packed into opening as a permanent form. 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 3/4 in. thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall.

RECTORSEAL — [Metacaulk 1000](#)

*Bearing the UL Classification Marking

+Bearing the UL Recognized Component 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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