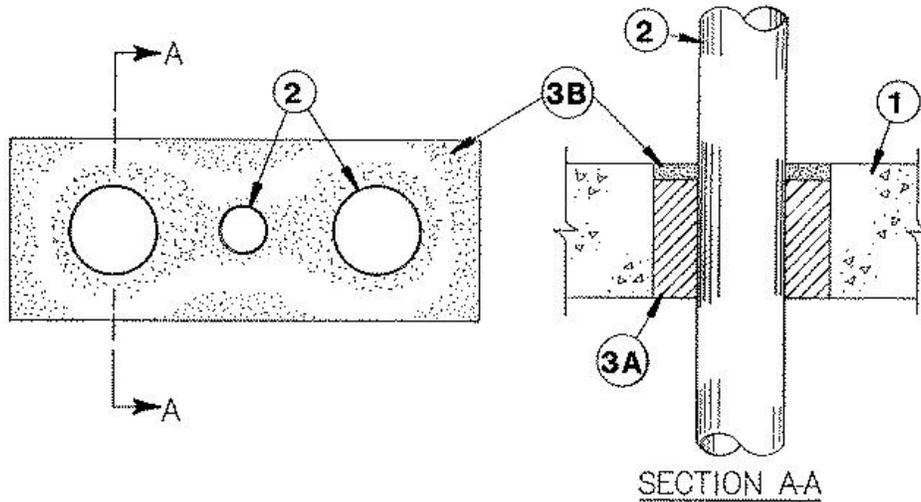


F Rating — 3 Hr
T Rating — 0 Hr



1. **Floor or Wall Assembly** — Min 4-1/2 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max area of opening is 96 sq in. with max dimension of 16 in.

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

2. **Copper Tubing** — Nom 1-1/2 in. diam (or smaller) Type M (or heavier) copper tube. Tubing to be installed with a min clearance of 1 in. and a max clearance of 2-1/4 in. from the sides of the through opening. A min clearance of 1 in. and a max clearance of 2-1/4 in. shall be maintained between adjacent copper tubes. Copper tubing to be rigidly supported on both sides of floor or wall assembly.

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

A. **Packing Material** — Min 2 in. thickness of min 4 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 1/2 in. thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall.

RECTORSEAL — [Metacaulk 950](#)

*,+ 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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