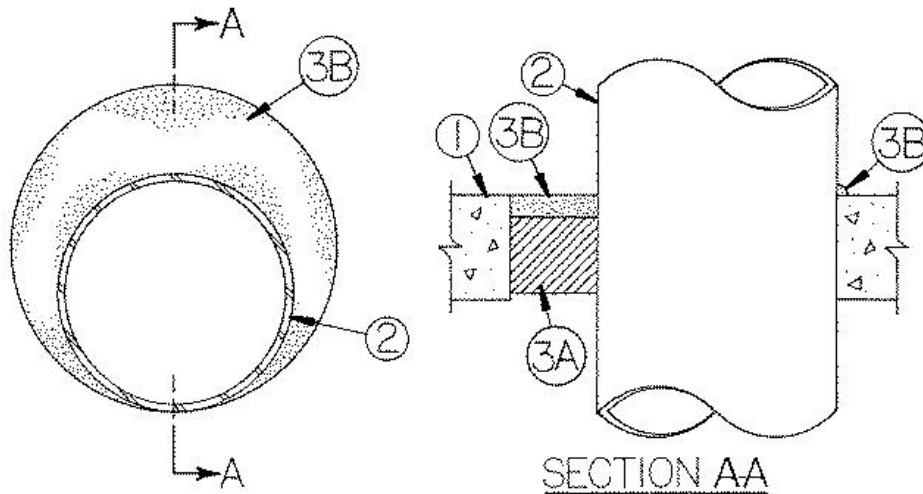


**F Rating — 2 Hr**  
**T Rating — 0 Hr**  
**L Rating at Ambient — Less Than 1 CFM/sq ft**  
**L Rating at 400 F — 3 CFM/sq ft**  
**W Rating — Class 1**



**1. Floor or Wall Assembly** — Min 4-1/2 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete floor or min 5 in. thick reinforced lightweight or normal weight concrete wall. Wall may also be constructed of any UL Classified **Concrete Blocks\***. Floor may also be constructed of any min 6 in. thick UL Classified hollow-core **Precast Concrete Units\***. Diam of circular through opening to be min 3/8 in. to max 3-1/4 in. larger than diam of steel pipe or conduit (Item 2). Diam of opening in hollow-core precast concrete unit floor is 7 in. See **Concrete Blocks** (CAZT) and **Precast Concrete Units** (CFTV) categories in the Fire Resistance Directory for names of manufacturers.

**2. Through Penetrants** — One metallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the firestop system. The annular space shall be min 0 in. to max 3-1/4 in. Pipe, conduit or tubing to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:

A. **Steel Pipe** — Nom 10 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.

B. **Conduit** — Nom 6 in. diam (or smaller) steel electrical metallic tubing or steel conduit.

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

A. **Packing Material** — Min 3-1/2 in. thickness of min 4.4 pcf mineral wool batt insulation or ceramic (alumina silica) fiber blanket firmly packed into opening as a permanent form. Packing material to be recessed from top surface of solid concrete floor, or from both surfaces of wall or hollow-core floor 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 solid concrete floor, or with both surfaces of wall or hollow-core floor. At the point contact location between pipe and concrete, a min 1/2 in. diam bead of caulk shall be applied at the concrete/pipe, conduit or tubing interface on the top surface of solid concrete floor, or on both surfaces of wall or hollow-core floor.

**RECTORSEAL** — [Metacaulk 835+](#)

\*,+ 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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