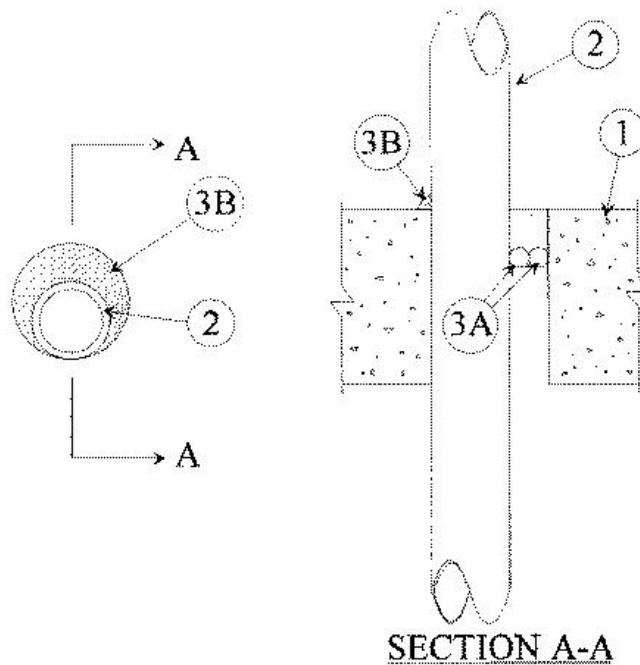


F Rating — 3 Hr
T Rating — 1/2 Hr



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 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, conduit or tubing to be installed either concentrically or eccentrically within the firestop system. Pipe or conduit to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of metallic pipes or conduits may be used:

A. **Steel Pipe** — Nom 2 in. diam (or smaller) Schedule 40 (or heavier) steel pipe. The annular space shall be min 0 in. to max 1-13/16 in.

B. **Iron Pipe** — Nom 2 in. diam (or smaller) cast or ductile iron pipe. The annular space shall be min 0 in. to max 1-13/16 in.

C. **Conduit** — Nom 2 in. diam (or smaller) steel electrical metallic tubing or steel conduit. The annular space shall be min 0 in. to max 1-13/16 in.

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

A. **Packing Material** — Foam backer rod 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* — Putty** — Min 3/4 in. thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall. At th point contact location between pipe and concrete, a min 1/4 in. diam bead of fill material shall be applied at the concrete/pipe interface on the top surface of floor and on both surfaces of wall.

RECTORSEAL — [Metacaulk Fire Rated Putty](#)

*,+ Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

Reprinted from the Online Certifications Directory with permission from UL. ©UL LLC