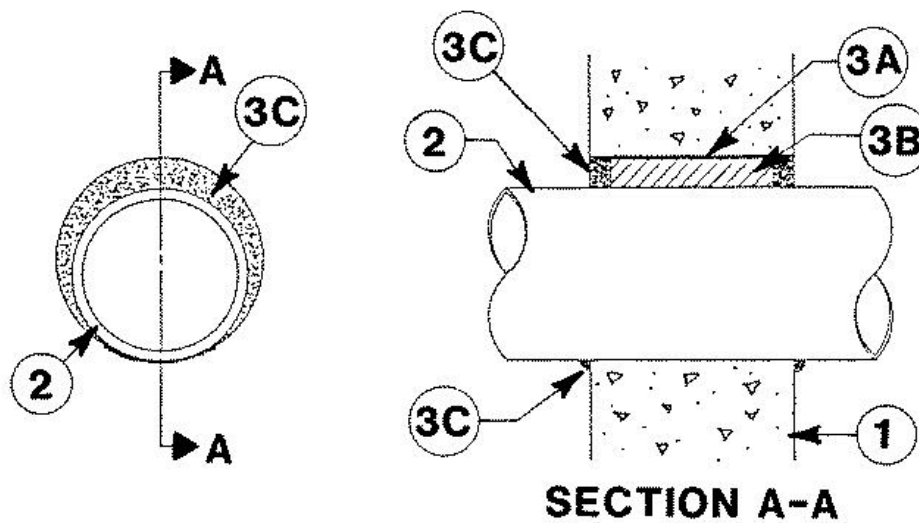


F Rating — 2 Hr  
T Ratings — 0 and 1/4 Hr (See Item 2)



1. **Wall Assembly** — Min 5 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 20 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, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:

A. **Steel Pipe** — 17-1/4 in. diam (or smaller) 0.125 in. wall thickness (or heavier) steel pipe. The annular space shall be min 0 in. to max 2-3/4 in. The T Rating is 0 hr if the steel pipe is used.

B. **Conduit** — Nom 4 in. diam (or smaller) steel electrical metallic tubing or steel conduit. The annular space shall be min 0 in. to max 1/2 in. The T Rating is 1/4 hr if the conduit is used.

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

A. **Steel Wire Mesh** — No. 8 steel wire mesh having a min 1 in. lap along the longitudinal seam. Length of steel wire mesh to be 4-3/4 in., centered and formed to fit periphery of through opening.

B. **Packing Material** — Min 4.0 in. thickness of min 3.5 pcf mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from both surfaces of wall as required to accommodate the required thickness of fill material.

C. **Fill, Void or Cavity Material\*** — **Caulk** — Min 3/4 in. and 1/2 in. thickness of fill material applied within the annulus for steel pipe and EMT, respectively, flush with both surfaces of wall. At the point contact location between pipe and concrete, a min 1/2 in. diam bead of fill material shall be applied at the concrete/pipe interface on both surfaces of wall.

**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.

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