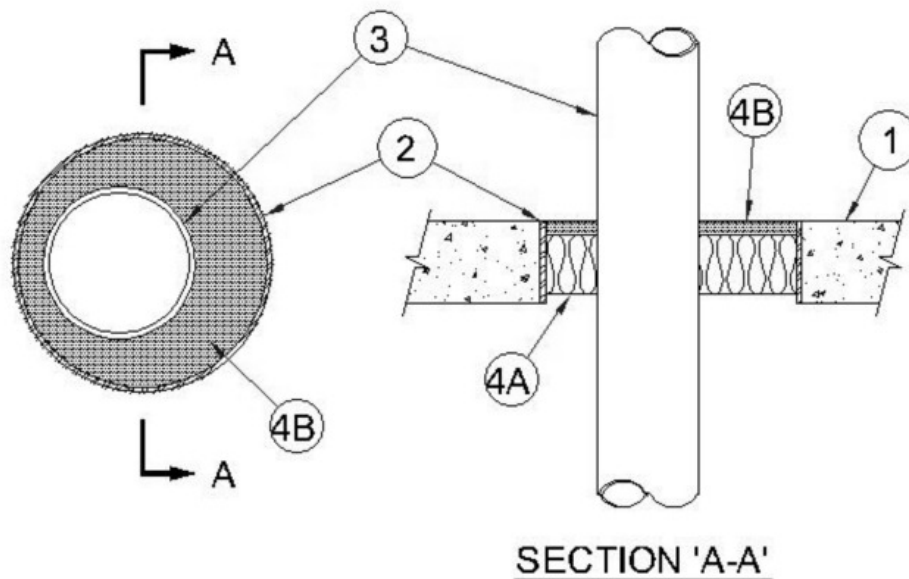


F Ratings — 2 and 3 Hr (See Item 3)
 T Ratings — 1 and 1-1/2 Hr (See Item 3)



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 light weight or normal weight concrete wall. Floor may also be constructed of any min 6 in. thick hollow-core **Precast Concrete Units***. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max diam of opening is 6 in.

See **Concrete Blocks** (CAZT) or **Precast Concrete Units** (CFTV) categories in the Fire Resistance Directory for names of manufacturers.

2. **Steel Sleeve** — (optional) - Nom 6 in. diam (or smaller) Schedule 10 (or heavier) steel pipe cast or grouted into floor or wall assembly, flush with floor or wall surfaces.

3. **Through Penetrant** — One nonmetallic pipe, conduit or tube to be installed eccentrically or concentrically within the firestop system. **F rating is 2 Hr when ABS pipes are used and 3 Hr when the other pipes shown below are used. T rating is 1 Hr when ABS pipes are used and 1-1/2 Hr when the other pipes shown below are used.** The annular space between the pipe, conduit or tube and the periphery of the opening shall be min 0 in. (point contact) to max 2-1/2 in. Pipe, conduit or tube to be rigidly supported on both sides of the floor or wall assembly. The following types and sizes of nonmetallic pipes, conduits and tubes may be used:

A. **Polyvinyl Chloride (PVC) Pipe** — Nom 3 in. diam (or smaller) Schedule 40, cellular or solid core polyvinyl chloride (PVC) pipe for use in closed (process or supply) piping systems.

B. **Rigid Nonmetallic Conduit+** — Nom 3 in. diam (or smaller) Schedule 40 PVC conduit installed in accordance with Article 347 of the National Electrical Code (NFPA 70).

C. **Electrical Nonmetallic Tubing+** — Nom 2 in. diam (or smaller) PVC tubing installed in accordance with Article 331 of the National Electrical Code (NFPA 70).

D. **Acrylonitrile butadiene styrene (ABS) pipe** — Nom 3 in. diam (or smaller) Schedule 40 cellular or solid core ABS pipe for use in closed (process or supply) piping systems.

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

A. **Packing Material** — Min 4 in. thickness of min 4 pcf mineral wool batt insulation compressed and tightly packed into opening. Packing material recessed from top surface of floor or both surfaces of wall or precast concrete units to accommodate the required thickness of fill material.

B. **Fill, Void or Cavity Material* - Sealant** — Min 1/2 in. thickness of fill material installed within annulus, flush with top surface of floor or both surfaces of wall assembly. In floors constructed of precast hollow core units, fill material installed to min 1/2 in. depth flush with each surface of the floor. At any point of contact of pipe and concrete (if applicable) a min 1/2 in. diam bead of fill material shall be applied at top surface of floor or both surfaces of wall or precast concrete units.

RECTORSEAL — FlameSafe® FS1900 Series Sealant, [Metacaulk 1000](#) and [Metacaulk 350i](#) Sealants

