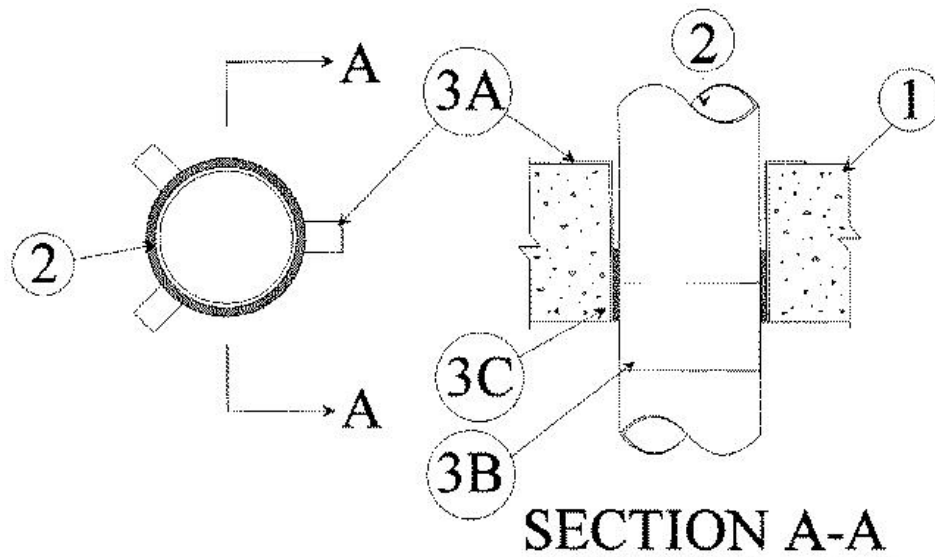


F Rating — 2 Hr
 T Rating — 0 Hr



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 diam of opening is 3 in. See **Concrete Blocks** (CAZT) category in the Fire Resistance Directory for names of manufacturers.

2. Through Penetrants — One nonmetallic pipe to be centered within the firestop system. A nom annular space of 5/16 in. is required in the firestop system. Pipe to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of nonmetallic pipes may be used:

A. Polyvinyl Chloride (PVC) Pipe — Nom 2 in. diam (or smaller) Schedule 40 cellular or solid core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system. A nom annular space of 5/16 in. is required in the firestop system.

B. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 2 in. diam (or smaller) SDR 17 CPVC pipe for use in closed (process or supply) piping systems.

C. Acrylonitrile Butadiene Styrene (ABS) Pipe — Nom 2 in. diam (or smaller) Schedule 40 cellular or solid core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

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

A. Steel Support Clips — Nom 3/4 in. wide by nom 0.022 in. thick (25 gauge) galv steel strips field formed into Z" -shape with height of Z-shape equal to the floor thickness and with width of bottom leg of sufficient length to span annular space. Top leg of Z-shape to be min 1/2 in. long. Min of three steel support clips to be used, symmetrically located and friction fitted into opening with bottom leg of clips flush with bottom plane of floor. Steel support clips not required for walls.

B. Tape — Min 3 in. wide aluminum tape wrapped once around the outer circumference of the pipe. The tape is to be installed recessed 1 in. into the bottom surface of the floor or 1 in. into both surfaces of wall. In walls, tape is installed on each surface of the wall.

C. Fill, Void or Cavity Material* — Wrap Strip — Nom 1/4 in. thick by 1 in. wide intumescent wrap strip. The wrap strip is continuously wrapped around the outer circumference of the pipe once and held in place with steel tie wire located at mid-height. The wrap strip is to be installed flush with the bottom surface of the floor or both surfaces of wall. Wrap strips are installed on each surface of the wall.

RECTORSEAL — [Metacaulk Wrap Strip](#)

*,+ 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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