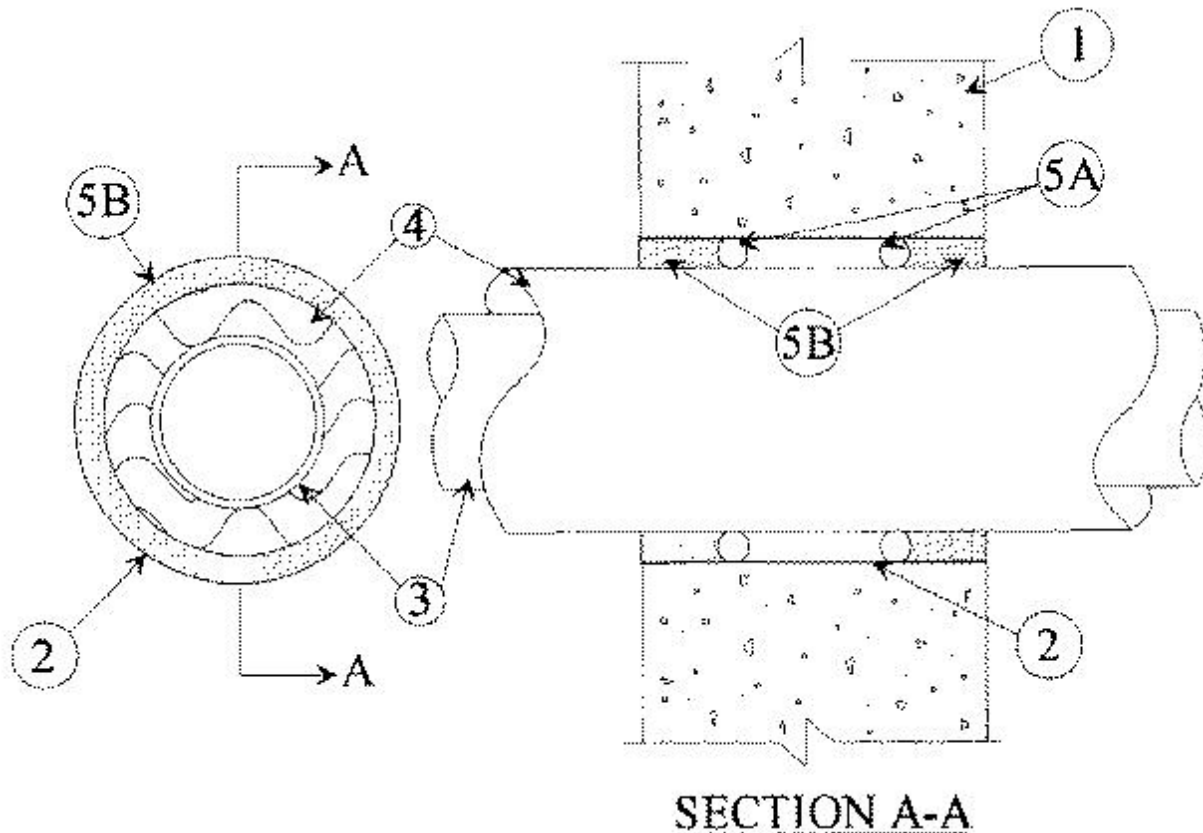


System No. W-J-5019

May 13, 2004

F Ratings — 2 Hr

T Rating — 1 Hr



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*** having a min face shell thickness of 1-1/4 in. Max diam of opening is 16 in.

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

2. **Steel Wire Mesh** — Cylindrical sleeve fabricated from No. 8 steel wire mesh and having a min 1 in. lap along the longitudinal seam. Length of steel wire mesh to be 1/2 in. less than thickness of wall, centered and formed to fit periphery of through opening.

2A. **Metallic Sleeve** — (Optional) — Cylindrical sleeve fabricated from min No. 26 gauge galv sheet steel and having a min 1 in. overlap along the longitudinal seam. Ends of sleeve to be flush with or extend a max 1 in. beyond each surface of wall.

3. **Through Penetrants** — One metallic pipe or tubing to be installed either concentrically or eccentrically within the firestop system. Pipe or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes or tubing may be used:

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

B. **Iron Pipe** — Nom 10 in. diam (or smaller) cast or ductile iron pipe.

C. **Copper Tubing** — Nom 6 in. diam (or smaller) Type L (or heavier) copper tubing.

D. **Copper Pipe** — Nom 6 in. diam (or smaller) regular (or heavier) copper pipe.

4. **Pipe Covering*** — Nom 2 in. thick hollow cylindrical heavy density (min 3.5 pcf) glass fiber units jacketed on the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product. The annular space shall be 0 in. (point contact) to max 2-1/2 in.

See **Pipe and Equipment Covering — Materials** (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.

5. **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 both surfaces of wall as required to accommodate the required thickness of fill material.

B. **Fill, Void or Cavity Material* — Caulk** — Min 5/8 in. thickness of fill material applied within the annulus, flush with both surfaces of wall.

RECTORSEAL — Biostop 500+ Caulk

*Bearing the UL Classification Mark