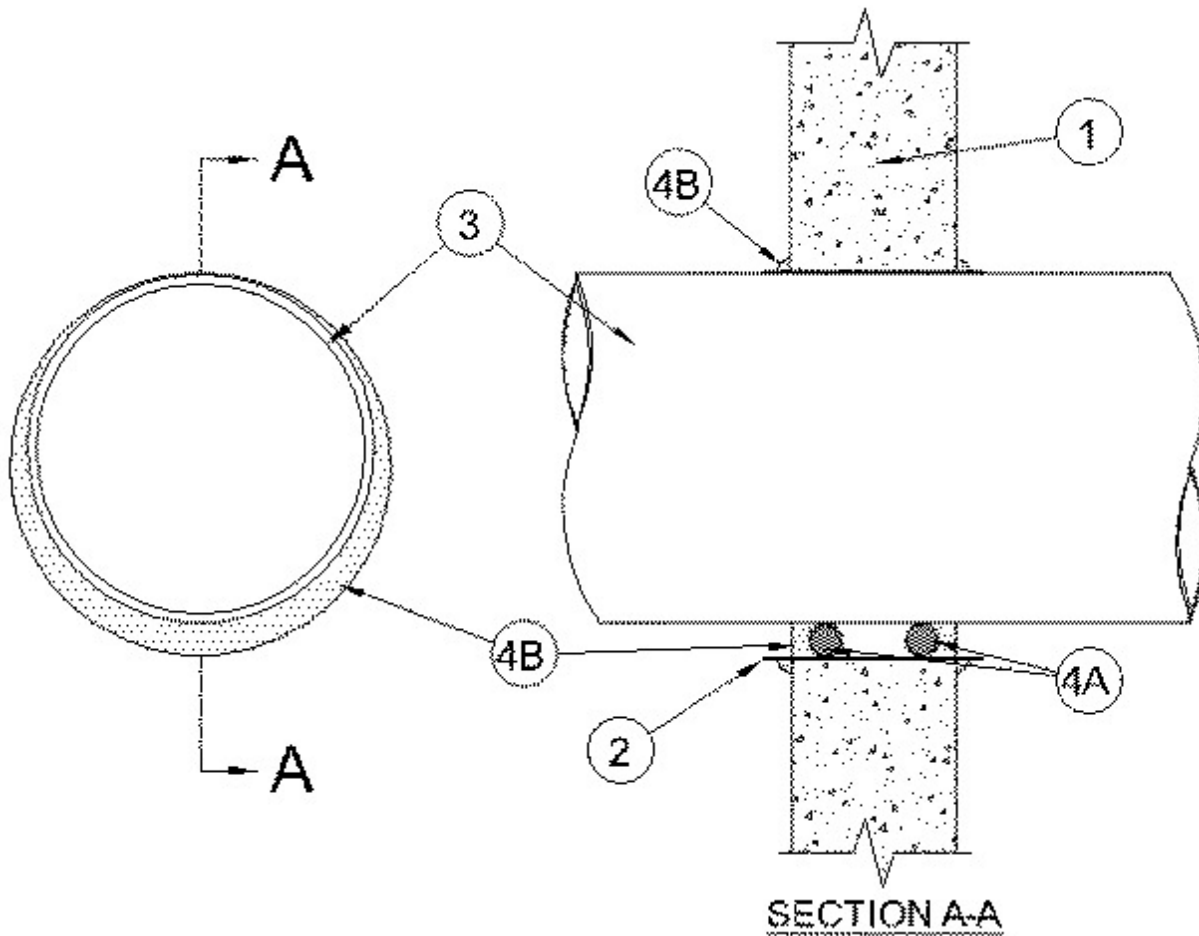


System No. W-J-1146

December 03, 2003

F Rating — 2 Hr

T Rating — 0 Hr



1. **Wall Assembly** — Min 6 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 14-1/2 in.

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

2. **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, conduit or tubing to be installed 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, conduit or tubing may be used:

A. **Steel Pipe** — Nom 12 in. diam (or smaller) Schedule 10 (or heavier) steel pipe. An annular space of 0 in. (point contact) to 1-3/4 in. is required within the firestop system.

B. **Iron Pipe** — Nom 12 in. diam (or smaller) Schedule 10 (or heavier) cast iron pipe. An annular space of 0 in. (point contact) to 1-3/4 in. is required within the firestop system.

C. **Copper Tubing** — Nom 4 in diam (or smaller) Type L (or heavier) copper tube. An annular space of 0 in. (point contact) to 1-7/8 in. is required within the firestop system.

D. **Copper Pipe** — Nom 4 in. diam (or smaller) Regular (or heavier) copper pipe. An annular space of 0 in. (point contact) to 1-7/8 in. is required within the firestop system.

E. **Conduit** — Nom 6 in. (or smaller) steel conduit or or nom 4 in. diam (or smaller) steel electrical metallic conduit. An annular space of 0 in. (point contact) to 1-7/8 in. is required within the firestop system.

4. **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 each surface of the wall to accommodate the required thickness of fill material.

B. **Fill Void or Cavity Materials* - Caulk** — Min 1/2 in. thickness of fill material applied within the annulus on both surfaces of the wall assembly. When steel sleeve is not used or when steel sleeve is flush with the wall surfaces, a min 1/2 in. diam bead of caulk shall be applied to the penetrant /concrete interface at the point contact location on both sides of wall. When steel sleeve is used, a bead of caulk is applied to the steel sleeve/concrete interface on both sides of wall.

RECTORSEAL — BF 150+ Caulk, Biostop 500+

*Bearing the UL Classification Mark