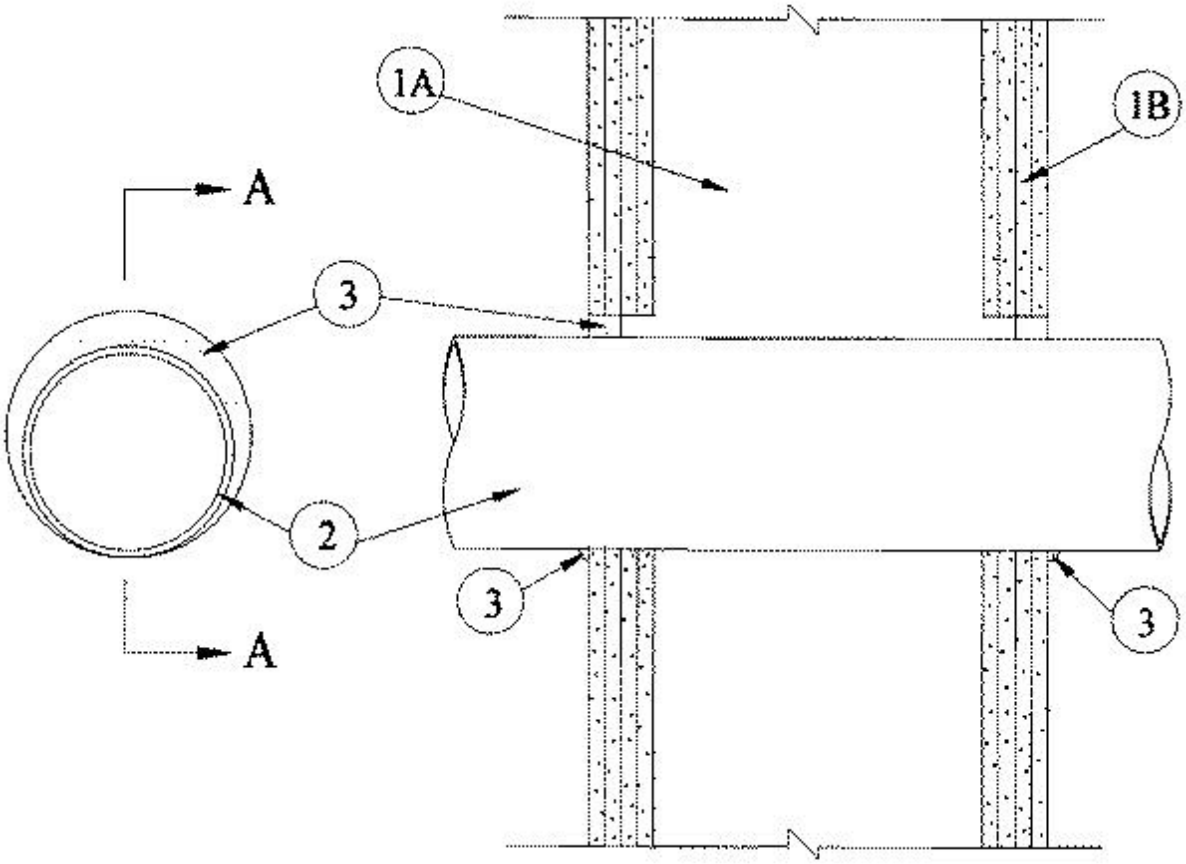
System No. W-L-1162

January 14, 1999

F Ratings — 3 and 4 Hr (See Item 1)

T Rating — 0 Hr



SECTION A-A

1. **Wall Assembly —** The 3 or 4 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. **Studs —** Wall framing shall consist of steel channel studs. Steel studs to be min 1-5/8 in. wide and spaced max 24 in. OC.

B. **Gypsum Board* —** Multiple layers of min 1/2 in. thick gypsum wallboard. The gypsum wallboard type, thickness, number of layers and orientation shall be as specified in the individual Wall and Partition Design. Max diam of opening is 9 in.

2. **Through Penetrants —** One metallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the firestop system. The annular space between pipes, conduits or tubing and periphery of opening shall be min 0 in. (point contact) to max 3/8 in. Pipe, conduit or tubing to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:

A. **Steel Pipe —** Nom 8 in. diam (or smaller) Schedule 40 (or heavier) steel pipe.

B. **Iron Pipe —** Nom 8 in. diam (or smaller) cast or ductile iron pipe.

C. **Conduit —** Nom 4 in. diam (or smaller) steel electrical metallic tubing or nom 6 in. diam (or smaller) steel conduit.

D. **Copper Tubing —** Nom 4 in. diam (or smaller) Type L (or heavier) copper tubing.

E. **Copper Pipe —** Nom 4 in. diam (or smaller) Regular (or heavier) copper pipe.

3. **Fill, Void or Cavity Material* — Caulk —** Min 1 in. thickness of fill material applied within the annulus, flush with both surfaces of wall. A min 1/4 in. diam bead of caulk shall be applied to the pipe/wallboard interface at the point contact location on both sides of wall.

RECTORSEAL — Biostop 500+ Caulk

*Bearing the UL Classification Mark