

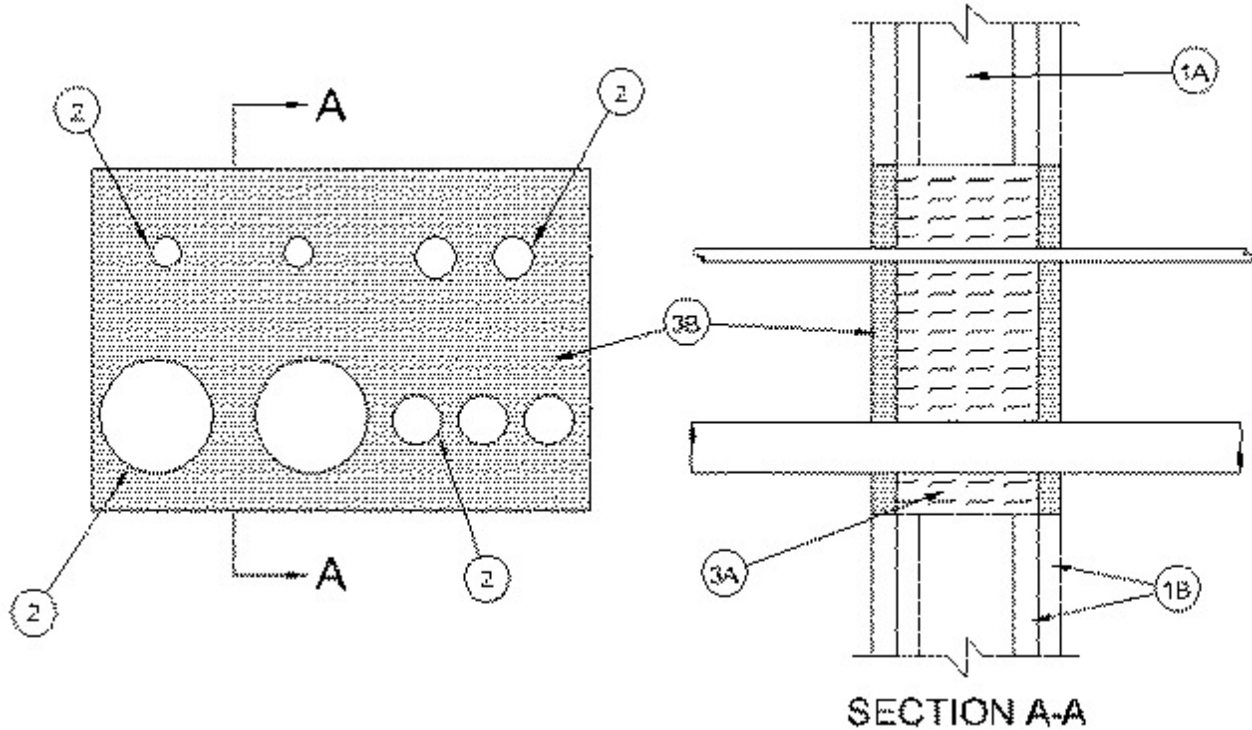


System No. W-L-8043

October 19, 2002

F Ratings - 1 and 2 Hr (See Item 1)

T Ratings - ¼, ½ or ¾ Hr (See Item 2)



1. **Floor or Wall Assembly** — The 1 or 2 hr fire-rated gypsum board/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 either wood or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced 16 in. OC. Steel studs to be min 1-5/8 in. wide by min 3-1/2 in. deep and spaced max 24 in. OC. Framing of the opening shall consist of steel channel studs.

B. **Gypsum Board *** — One or two layers of min 5/8 in. thick gypsum board. The gypsum board type, thickness, number of layers and orientation shall be as specified in the individual Wall and Partition Design. Max area of opening is 200 sq in. with a max dimension of 20 in.

The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.

2. **Through Penetrants** — Any combination of the following metallic penetrants to be installed within the firestop system. The annular space between penetrants shall be min 1/4 in. to max 3-1/2 in. and between penetrants and periphery of opening shall be min 1/4 in. to max 2-1/2 in. Penetrants to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of EMT, metal clad cable or conduits may be used:

A. **Conduit** — Nom 4 in. diam (or smaller) electrical metallic tubing . Max two 4 in. diam conduits and max three 2 in. diam conduits per opening. **When 3 or 4 in diam EMT is used, T Rating is ½ hr. When 2 in. diam (or smaller) EMT is used, T Rating is ¾ hr.**

B. **Metal Clad Cable+** — Nom 2 in. diam (or smaller) 4 conductor 2/0 AWG steel or aluminum Metal Clad Cable+ with or without PVC jacket. Max two metal clad cables per opening. **When metal clad cable is used, T Rating is ½ hr.**

See **Through-Penetrating Products** (XLHY) category in Vol. 2 of the Fire Resistance Directory for names of manufacturers.

C. Flexible Metal Conduit — Nom 1-12 in. diam (or smaller) steel or aluminum Flexible Metal Conduit±. Max two flexible metal conduits per opening. **When flexible metal conduit is used, T Rating is ¼ hr.**

See **Flexible Metal Conduit** (DXUZ) category in the Electrical Construction Materials Directory for names of manufacturers.

T Rating of firestop system is equal to the lowest T Rating of any penetrant used.

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

A. Packing Material — For 1 or 2 hr fire rated walls, min 3-1/2 in. or 4-3/4 in. thickness, respectively, of min 4 pcf mineral wool batt insulation 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+

*Bearing the UL Classification Mark