

Through-penetration Firestop Systems

System No. W-L-7184

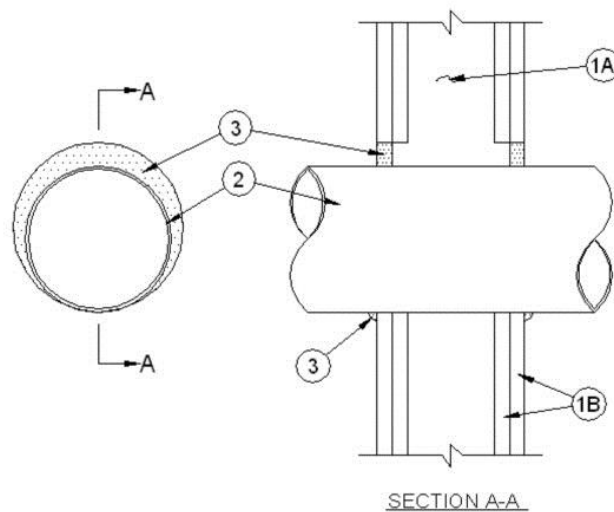
July 07, 2008

F Ratings — 1 and 2 Hr (See Item 1B)

T Rating — 0 Hr

L Rating at Ambient — Less than 1 CFM/sq ft

L Rating at 400° F — Less than 1 CFM/sq ft



1. Wall Assembly — The 1 or 2 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300, U400 or V400 Series Wall and Partition Design in the UL Fire Resistance Directory and shall include the following construction features:

A. Studs — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC with nom 2 by 4 in. (51 by 102 mm) lumber end plates and cross braces. Steel studs to be min 3-5/8 in. (92 mm) wide and spaced max 24 in. (610 mm) OC.

B. Gypsum Board* — 5/8 in. (16 mm) thick, 4 ft (1.2 m) wide with square or tapered edges. The gypsum wallboard type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening as shown in table below.

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 Penetrant — One nom 4 in. (102 mm) diam (or smaller) No. 30 MSG (or heavier), or one nom 6 in. (152 mm) diam (or smaller) No. 28 MSG (or heavier), or nom 20 in. (508 mm) diam (or smaller) No. 22 MSG (or heavier) steel vent duct to be installed either concentrically or eccentrically within the firestop system (see table below). The annular space between duct and periphery of opening shall be min 0

in. (point contact) to max value shown in table below. Duct to be rigidly supported on both sides of wall assembly.

3. **Packing Material** — (not shown). Nom 1 in. (25 mm) foam backer rod firmly packed into the opening as a permanent form in 2 hr fire-rated wall assemblies to prevent leakage of fill material during installation. Packing material to be recessed from both surfaces of wall to accommodate the required thickness of fill material.

4. **Fill, Void or Cavity Materials*** — **Sealant** — Min 5/8 in. (16 mm) thickness of fill material applied within annulus, flush with both surfaces of wall. At the point contact location between through penetrant and gypsum board, a min 3/8 in. (10 mm) diam bead of fill material shall be applied at the gypsum board/through penetrant interface on both surfaces of wall.

Max Diam of Through Opening In. (mm)	Max Duct Diam In. (mm)	Min Duct Thickness MSG	Annular Space In. (mm)
7 (178)	6 (152)	28	0 to 1 (0 to 25)
22 (559)	20 (508)	22	0 to 2 (0 to 51)

ACCUMETRIC L L C — Boss 816

*Bearing the UL Classification Mark