

Through-penetration Firestop Systems

System No. W-L-7183

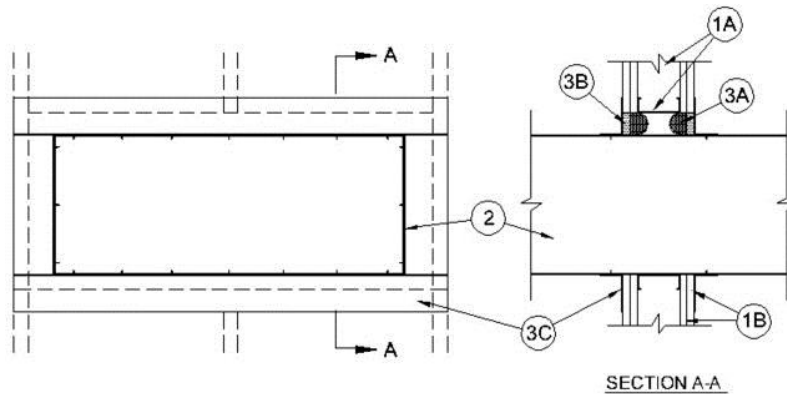
April 11, 2008

F Ratings — 1 and 2 Hr (See Item 1)

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 specified in the individual U400 or V400 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 3-5/8 in. (92 mm) wide and spaced max 24 in. (610 mm) OC. Additional framing members shall be used to completely frame around opening.

B. Gypsum Board* — Min 5/8 in. (16 mm) thick, 4 ft (1.2 m) wide with square or tapered edges. The gypsum board type, thickness, number of layers and orientation shall be as specified in the individual U400 or V400 Wall and Partition Design. Max size of opening is 1470 sq in. (9484 mm) with a max dimension of 70 in. (1778).

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

2. Steel Duct — Nom 67 in. (1702 mm) by 18 in. (457 mm) (or smaller) No. 24 gauge (or heavier) galv steel duct to be installed either concentrically or eccentrically within the firestop system. The space between the steel duct and periphery of opening shall be min 0 in. (point contact) to max 3-1/2 in. (89 mm). Steel duct to be rigidly supported on both sides of the wall assembly.

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

A. Packing Material — Polyethylene backer rod, mineral wool batt insulation, fiberglass batt insulation or foam plastic sheets friction fitted into annular space for 2 hr fire-rated wall assemblies only. Packing material to be recessed from both surfaces of wall to accommodate the required thickness of fill material.

B. Fill, Void or Cavity Material* — Sealant — Min 5/8 in. (16 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall. At the point contact location between

steel duct and gypsum wallboard, a min 3/8 in. (10 mm) diam bead of fill material shall be applied at the gypsum board/steel duct interface on both surfaces of wall assembly.

ACCUMETRIC L L C — Boss 816

C. Steel Retaining Angles — Min No. 22 gauge galv steel angles sized to lap steel duct a min of 2 in. (51 mm) and lap wall surfaces a min 1-1/2 in. (38 mm). Angles attached to steel duct on both sides of wall with min No. 10 steel sheet metal screws spaced a max of 1 in. (25 mm) from each end of steel duct and spaced a max 6 in. (152 mm) OC.

*Bearing the UL Classification Mark