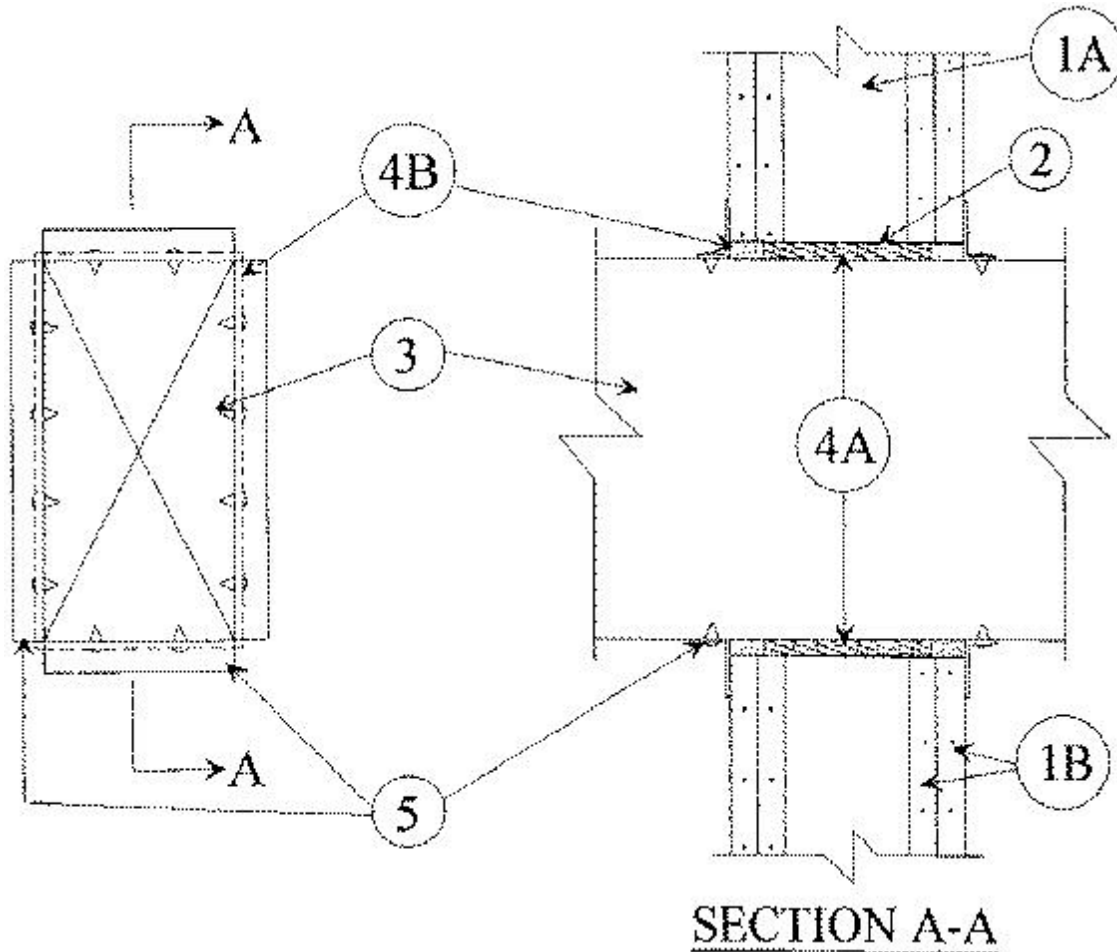


System No. W-L-7022

November 12, 1997

F Ratings — 1 and 2 Hr (See Item 1)

T Rating — 0 Hr



1. Wall Assembly — The 1 or 2 h fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs 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. lumber spaced 16 in. OC. Steel studs to be min 2-1/2 in. wide and spaced max 24 in. OC. When steel studs are used and the max dimension of opening exceeds the width of the stud cavity, the opening shall be framed on all sides using lengths of studs installed between the vertical studs and attached to the studs at each end. The framed opening in the wall shall be 2 to 4 in. wider and 2 to 4 in. higher than the dimensions of the steel duct (Item 3) such that a clearance of 1 to 2 in. is present between the duct and the framing on all four sides.

B. Gypsum Board* — Nom 5/8 in. thick, with square or tapered edges. The gypsum wallboard type, number of layers and sheet orientation shall be as specified in the individual Wall and Partition Design. Max area of opening is 188 in. sq with max dimension of 14-1/2 in. for wood stud walls. Max area of opening is 325 in. sq with max dimension of 25 in. for steel studs. The hourly F rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is intalled.

2. Steel Wire Mesh — Sleeve fabricated from No. 8 steel wire mesh and having a min 1 in. lap along the longitudinal seam. Length of steel wire mesh to be 1/2 in. less than thickness of wall, with mesh centered and formed to fit periphery of

through opening.

3. **Steel Duct** — Nom 24 by 12 (or smaller) by No. 24 gauge (or heavier) galv steel duct for 1 h walls. Nom 12 by 12 in. (or smaller) by No. 24 gauge (or heavier) galv steel ducts for 2 h walls. One steel duct to be positioned within the firestop system. The annular space between the steel duct and the gypsum wallboard shall be min 0 in. to max 1 in. Duct to be rigidly supported on both sides of wall assembly.

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

A. **Packing Material** — Min 2-1/4 in. thickness of min 4.0 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 3/4 in. thickness of fill material applied within the annulus, flush with both surfaces of wall. At the point contact location between duct and wall, a min 1/4 in. diam bead of fill material shall be applied at the wall/duct interface on both surfaces of wall.

RECTORSEAL — Biotherm 100

5. **Steel Retaining Angle** — Nom 2 by 4 by No. 22 gauge (or heavier) steel angles attached to all four sides of the duct on both sides of the wall. The 2 in. leg of the angle shall be attached to the duct with No. 8 (or larger) steel sheet metal screws spaced max of 2 in. from each end and at a max of 5 in. OC.

*Bearing the UL Classification Mark