

- 1. Wall Assembly The 1 or 2 hr fire rated 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 shall 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. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) OC.
 - B. Gypsum Board* Nom 5/8 in. (16 mm) thick, 4 ft 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, U400 or V400 Series Design in the Fire Resistance Directory, Max diam of opening is 8 in. (203mm).

The hourly F, T, FT and FTH Ratings of the firestop systems are equal to the hourly fire rating of the wall assembly in which it is installed. 2. Steel Sleeve — Max 8 in. (203 mm) diam, min 28 MSG sheet metal steel sleeve inserted in nom 8 in. (203 mm) diam circular opening core drilled

- through wall. Length of steel sleeve to be equal to thickness of wall. As an alternate, steel sleeve may consist of nom 8 in. (203 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe sleeve friction-fitted into circular cutouts in the gypsum board layers. The ends of the steel sleeve shall be flush with each surface of the wall.
- 3. Through Penetrant One metallic pipe or tubing installed concentrically or eccentrically within the firestop system. Pipe or tube to be rigidly supported on both sides of wall assembly. The annular space between the pipe or tube and periphery of the steel sleeve shall be min 1/2 in. to max 1-3/8 in. (13 to 35 mm). The following types and sizes of metallic pipes or tube may be used:

A. Copper Tube — Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tube.

- B. Copper Pipe Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.
- 4. Firestop System The firestop system shall consist of the following:
 - A. Packing Material Min 2-1/2 in. (64 mm) thickness of min 4 pcf mineral wool batt insulation, firmly packed into the opening. Mineral wool to be recessed from both sides of the assembly to accommodate the required thickness of fill material (Item 4B).
 - B. Fill, Void or Cavity Material* Sealant Min 5/8 in. or 1-1/4 in. (16 or 32 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall for 1 and 2 hr walls, respectively.

HILTI INC — CP606 Flexible Firestop Sealant, CFS-S SIL GG Sealant or CP601S Elastomeric Firestop Sealant

*Bearing the UL Classification Mark



Reproduced by HILTI, Inc. Courtesy of Underwriters Laboratories, Inc. January 14, 2014