



Classified by
Underwriters Laboratories, Inc.
to UL 1479

System No. W-L-2165

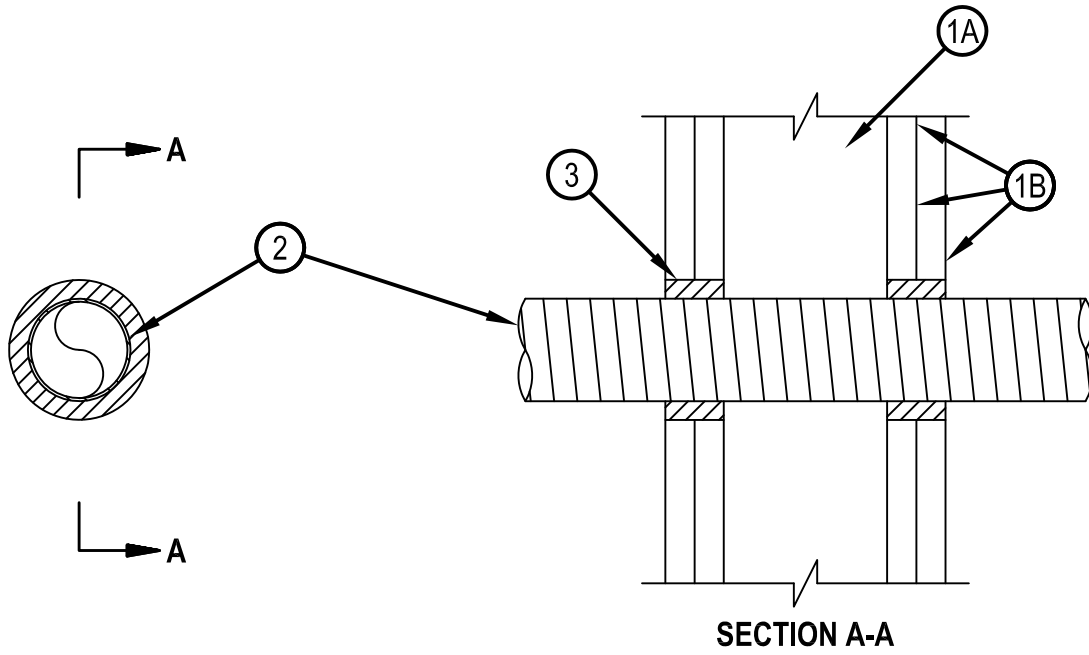
F Ratings — 1 and 2 Hr (See Item 1)

T Ratings — 3/4 and 2 Hr (See Item 1)

L Rating at Ambient - Less Than 1 CFM/sq ft

L Rating at 400 F - 2 CFM/sq ft

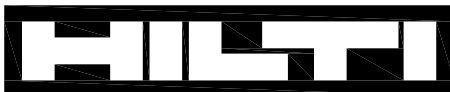
WL 2165



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 U300, U400, V400 or W400 Series Wall and Partition Designs in the Fire Resistance Directory and shall include the following construction features:
 - A. Studs — Wall framing shall consist of either wood studs or channel shaped steel studs. Wood studs to consist of 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, fabricated from min 25 MSG galvanized steel, spaced max 24 in. (610 mm) OC.
 - B. Gypsum Board* — One or two layers of nom 5/8 in. (16 mm) thick gypsum board as specified in the individual Wall and Partition Design. Max diam of opening is 3-1/2 in. (89 mm).
The hourly F Rating of the firestop system is equal to the hourly rating of the wall assembly in which it was installed. The hourly T Rating of the firestop system is 3/4 and 2 hr for 1 and 2 hr rated assemblies, respectively.
2. Nonmetallic Penetrants — One nom 2 in. (51 mm) diam (or smaller) penetrant. The annular space shall be min 1/4 in. (6 mm) to max 7/8 in. (22 mm). Nonmetallic penetrants shall be rigidly supported on both sides of wall assembly.
 - A. Optical Fiber Raceways+ — Optical fiber raceway installed in accordance with the National Electrical Code (NFPA No. 70).
See Optical Fiber Raceways (QAZM) category in the Electrical Construction Directory for names of manufacturers.
 - B. Electrical Nonmetallic Tubing (ENT)+ — ENT installed in accordance with the National Electrical Code (NFPA No. 70).
See Electrical Nonmetallic Tubing (FKHU) category in the Electrical Construction Directory for names of manufacturers.
3. Fill, Void or Cavity Material* — Sealant — Min 5/8 in. (16 mm) and 1-1/4 in. (32 mm) thickness of fill material applied within annulus, flush with both surfaces of wall for 1 and 2 hr rated assemblies, respectively.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE Sealant or FS-ONE MAX Intumescent Sealant

*Bearing the UL Classification Marking

+Bearing the UL Listing Mark



Hilti Firestop Systems

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February 26, 2015