

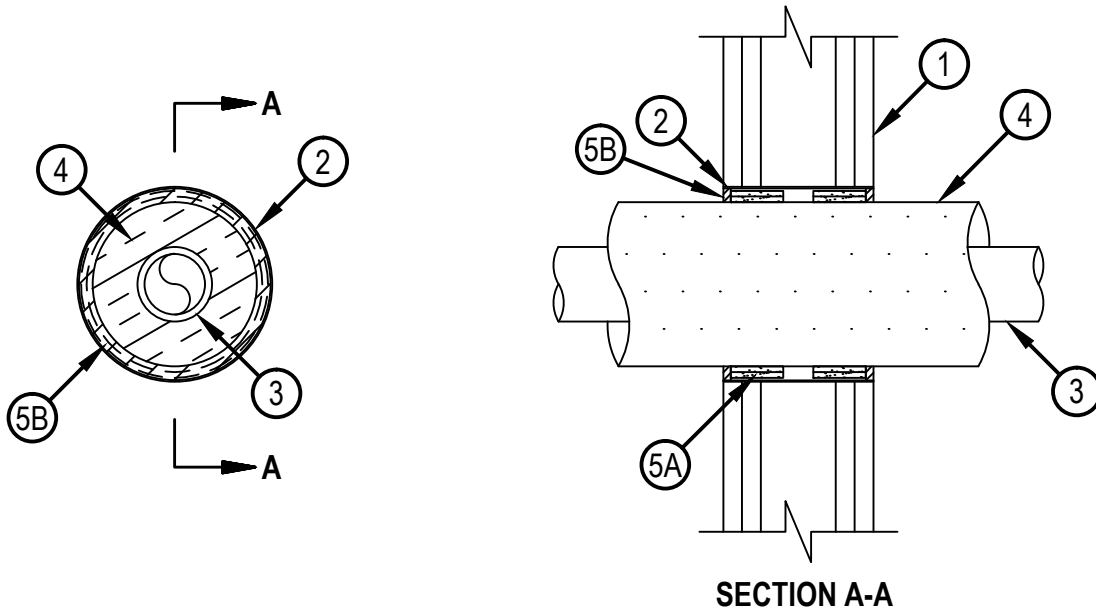


Classified by
Underwriters Laboratories, Inc.
to UL 1479

System No. W-L-5303

F Ratings — 1 and 2 Hr (See Item 1)
T Ratings - 0, 1 and 2 Hr (See Item 4)

WL5303



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 UL 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 gypsum board, as specified in the individual Wall and Partition Design. Max diam of opening is 6-1/2 in. (165 mm).

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



Hilti Firestop Systems

Reproduced by HILTI, Inc. Courtesy of
Underwriters Laboratories, Inc.
February 23, 2015

2. Steel Sleeve — Cylindrical sleeve fabricated from 0.016 in. (0.41 mm) (No. 30 gauge) galv sheet steel and having a min 2 in. (51 mm) lap along the longitudinal seam. Sleeve installed flush with both wall surfaces. Sleeve installed by coiling the sheet steel to a diam smaller than the through opening, inserting the coil through the openings and releasing the coil to let it uncoil against the circular cutouts in the gypsum board layers.
3. Through Penetrants — One nonmetallic pipe to be installed concentrically or eccentrically within the firestop system. Pipe to be rigidly supported on both sides of the floor or wall assembly. The following type and sizes of nonmetallic pipe may be used:
 - A. Polypropylene (PP) Pipe — Nom 2 in. (63 mm OD) diam (or smaller) Aquatherm Fusiotherm SDR 11 PP pipe for use in closed (process or supply) piping systems.
 - B. Polypropylene (PP) Pipe — Nom 2 in. (63 mm OD) diam (or smaller) Orion Polystar™ CT-White SDR 11 pipe for use in closed (process or supply) piping systems.
4. Pipe Covering — Nom 1/2 in. to 1-1/2 in. (13 to 38 mm) thick hollow cylindrical heavy density (min 3.5 pcf or 56 kg/m³) glass fiber units jacketed on the outside with an all-service jacket. Longitudinal joints sealed with metal fasteners or factory-applied, self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product. The annular space between the insulated pipe and the edge of the periphery of the opening shall be min of 3/8 in. (10 mm) to a max of 1-1/8 in. (29 mm).
The T Rating is 1 and 2 hr when 1-1/2 in. (38 mm) thick pipe covering is used in 1 and 2 hr rated walls, respectively. The T Rating is 0 hr when pipe covering thickness is less than 1-1/2 in. (38 mm).
5. Firestop System — The firestop system shall consist of the following:
 - A. Fill, Void or Cavity Material* Wrap Strip — Nom 1-3/4 in. (44 mm) wide by 3/16 in. (5 mm) thick wrap strip. The wrap strip is continuously wrapped around the outer circumference of the pipe covering twice, held in place with integral fastening tape and slid into the steel sleeve on both sides of wall assembly such that the exposed edges of the wrap strips are recessed 1/4 in. (6 mm) from the ends of the sleeve.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 648E
 - B. Fill, Void or Cavity Material* — Sealant — Min 1/4 in. (6 mm) thickness of fill material applied within the sleeve, flush with both ends of the sleeve.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE MAX Intumescent Sealant

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

