

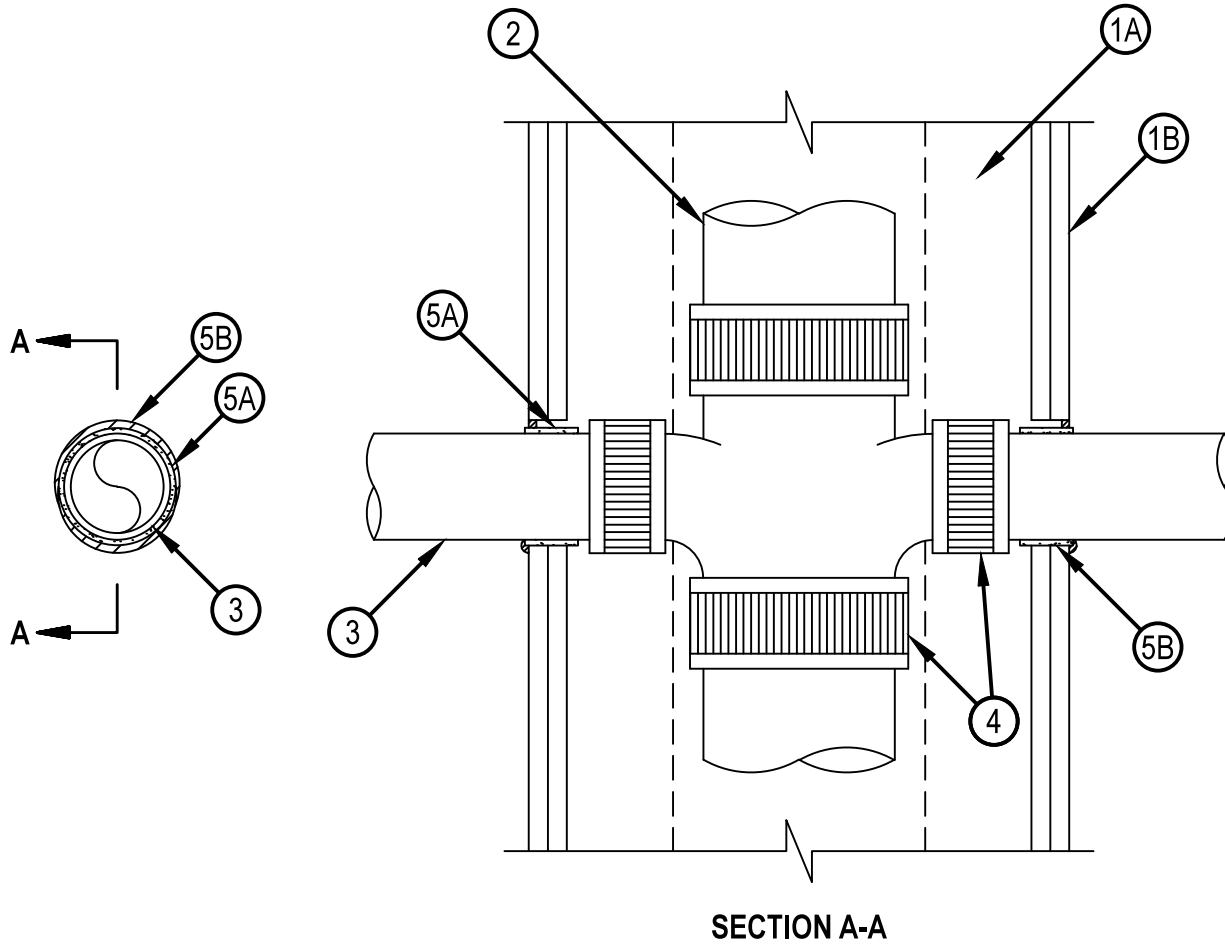


Classified by
Underwriters Laboratories, Inc.
to UL 1479

System No. W-L-2445

F Ratings - 1 and 2 Hr (See item 1)
T Ratings - 0, 1/2 and 3/4 Hr (see Item 3)

WL 2445



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 described in the individual U300, U400, V400 or W400 Series Wall and Partition Design in the UL Fire Resistance Directory and shall include the following construction features:
 - A. Studs — Wall framing may consist of either single, double or staggered wood studs or steel channel studs. Wood studs to consist of min 2 by 4 in. (51 by 102 mm) lumber spaced max 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide and spaced max 24 in. (610 mm) OC. Depth of stud cavity to be min 1 in. (25 mm) greater than the diameter of the cast iron soil stack (Item 2).
 - B. Gypsum Board* — The gypsum board 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 UL Fire Resistance Directory. Max diam of opening is 4 in. (127 mm).

The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.
2. Soil Pipe — Max 6 in. (152 mm) diam cast iron soil stack with hub-less fittings installed within stud cavity of the wall assembly (Item 1). Sections of pipe and fittings connected by means of compression couplings (Item 4).



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3. Through Penetrants — One nonmetallic pipe centered within the firestop system. See Table under Item 5B for annular space required in the firestop system. Pipe to be rigidly supported on both sides of wall assembly. Nonmetallic pipe connected to soil stack (Item 2) within the wall assembly by means of a compression coupling (Item 4). The following types and sizes of nonmetallic pipes may be used:
- A. Polyvinyl Chloride (PVC) Pipe — 6 in. (152 mm) diam (or smaller) Schedule 40 cellular or solid core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.
 - B. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 6 in. (152 mm) diam (or smaller) SDR 13.5 CPVC pipe for use in closed (process or supply) piping system.
 - C. Acrylonitrile Butadiene Styrene (ABS) Pipe — Nom 4 in. (102 mm) diam (or smaller) Schedule 40 cellular or solid core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.
- The T Rating for 2 hr fire-rated walls is 0 hr. The T Rating for 1 hr fire-rated walls is 3/4 hr for nom 1-1/2, 2 and 3 in. (38, 51 and 76 mm) diam through penetrants. The T Rating for 1 hr fire-rated walls is 1/2 hr for nom 4 and 6 in. (102 and 152 mm) diam through penetrants.
4. Compression Coupling — Soil stack fitting and nonmetallic pipes to be secured together with compression type pipe coupling with elastomeric gasket and a stainless steel jacket with stainless steel band clamps. Each coupling to be installed entirely within the stud cavity.
5. Firestop System — The firestop system shall consist of the following:
- A. Fill, Void or Cavity Material* — Wrap Strip — See Table under Item 3B for min size of intumescent wrap strip. The wrap strip is continuously wrapped around the outer circumference of the pipe once and slid into the annular space such that approx 1/8 in. (3 mm) of the wrap strip protrudes from the wall surface. Wrap strip is held in place with integral fastening tape. Wrap strip installed on each surface of wall. HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 648S - 1.5", CP 648S - 2", CP 648S - 3", CP 648S - 4" and CP 648S - 6"
 - B. Fill, Void or Cavity Material* — Caulk — Min 1/4 in. (6 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall. For 2 hr fire-rated walls, 1/4 in. (6 mm) bead fill material also applied at wrap strip/gypsum wall interface. In 1 hr fire-rated walls, fill material is optional for nom 1-1/2, 2, 3 and 4 in. (25, 51, 76 or 102 mm) diam penetrants. HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-One Sealant or FS-ONE MAX Intumescent Sealant

Nom Pipe Diam, In. (mm)	Wrap Strip	Wrap Strip Size, thick. x width, in. (mm)	Max Diam of Opening, in. (mm)	Annular Space, in. (mm)	
				Min.	Max.
1-1/2 (38)	CP 648S - 1.5" US	3/16 x 1 (5 x 25)	2-3/8 (60)	3/16 (4.8)	5/16 (8)
2 (51)	CP 648S - 2" US	3/16 x 1 (5 x 25)	3 (76)	3/16 (4.8)	5/16 (8)
3 (76)	CP 648S - 3" US	3/16 x 1-3/4 (5 x 44)	4 (102)	3/16 (4.8)	5/16 (8)
4 (102)	CP 648S - 4" US	3/8 x 1-3/4 (9.5 x 44)	5-3/8 (137)	3/8 (9.5)	1/2 (13)
6 (152)	CP 648S - 6" US	1/2 x 1-3/4 (13 x 44)	8 (203)	9/16 (14)	13/16 (21)

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



Hilti Firestop Systems

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