

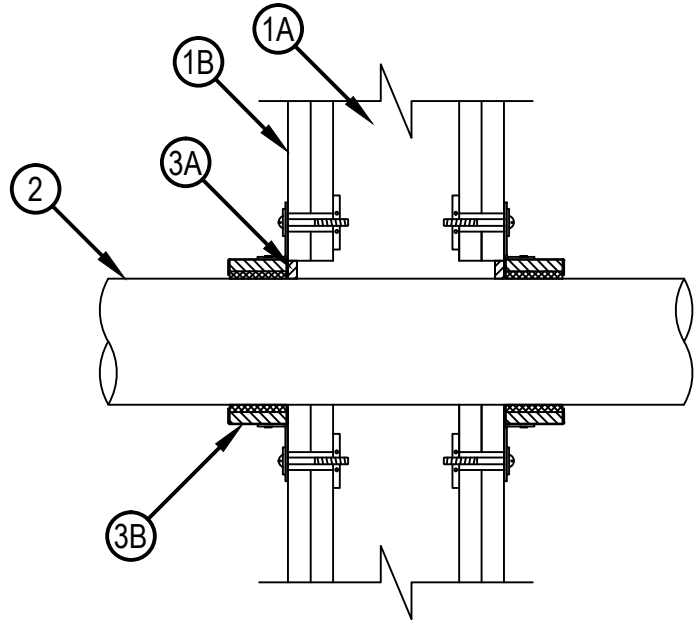
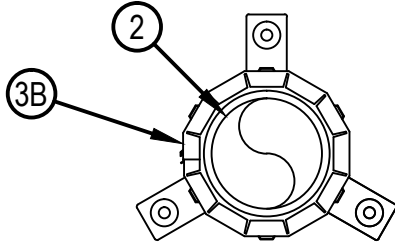


Classified by  
Underwriters Laboratories, Inc.  
to UL 1479

## System No. W-L-2509

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

WL 2509



1. Wall Assembly — The 1 hr 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 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 3-1/2 in. (89 mm) wide and spaced max 24 in. (610 mm) OC.
- B. Gypsum Board\* — The gypsum board type, thickness number of layers, fastener type and sheet orientation shall be specified in the individual Wall and Partition Design in the UL Fire Resistance Directory. Max diam of opening is 3 in. (76 mm).  
The F Rating of the firestop system is equal to the fire rating of the wall assembly in which it is installed.

2. Through Penetrants — One nonmetallic pipe to be installed concentrically or eccentrically within the firestop system. Annular space between pipe and periphery of opening to be min 0 in. (point contact) and max 5/8 in. (16 mm). Pipe to be rigidly supported on both sides of wall assembly. The following types and sizes of nonmetallic pipes may be used:

- A. Polypropylene (PP) Pipe — Nom 2 in. (51 mm) diam (or smaller) SDR 11 PP pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
- B. Polypropylene (PP) Pipe — Nom 50 mm OD (or smaller) Fusiotherm® SDR 11 for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
- C. Polypropylene (PP) Pipe — Nom 2 in. (63 mm OD) diam (or smaller) Orion Polystar™ CT-White SDR 11, SDR 9 or SDR 7.4 PP pipe for use in closed (process or supply) piping systems.

The T Rating of the firestop system is dependent on the type of pipe and the hourly rating of the wall assembly as summarized below.

Pipe Type	1 hr Fire Rated Wall Assembly		2 hr Fire Rated Wall Assembly	
	Firestop System Ratings, hr		Firestop System Ratings, hr	
	F	T	F	T
A	1	0	2	1
B	1	0	2	1/2
C	1	0	2	1/2



Hilti Firestop Systems

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March 10, 2015



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

A. Fill, Void or Cavity Material\* — Sealant — Min 1/4 in. (6 mm) thickness of fill material applied within annulus, flush with both surfaces of wall assembly.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE Sealant or FS-ONE MAX Intumescent Sealant

B. Firestop Device\* - Firestop Collar — Firestop collar sized to diam of penetrant shall be wrapped around the outer circumference of the pipe and installed in accordance with the accompanying installation instructions. Collar to be installed and latched around the pipe and secured to both sides of the wall using the anchor hooks provided with the collar. The anchor hooks are to be secured to the surface of wall with min 3/16 in. (4.8 mm) diam by min 2-1/2 in. (64 mm) long steel toggle bolts.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 643N 110/4", CP 643N 90/3", CP 643 63/2"N, CP 643 63/1.5"N

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



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Page: 2 of 2