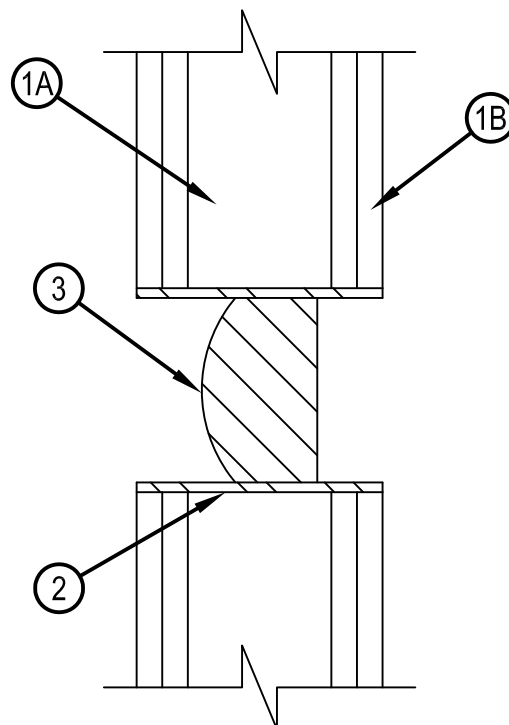
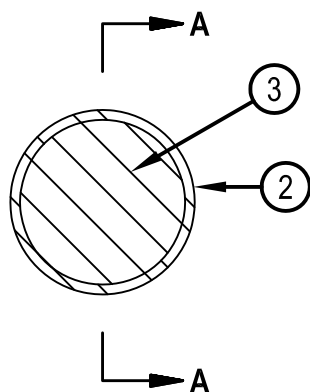


System No. W-L-0019



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to UL 1479 and CAN/ULC-S115

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Ratings — 1 and 2 Hr (See Item 1)	F Ratings — 1 and 2 Hr (See Item 1)
T Ratings — 0 and 1-3/4 Hr (See Item 2)	FT Ratings — 0 and 1-3/4 Hr (See Item 2)
L Rating At Ambient - Less Than 1 CFM/sq ft	FH Ratings — 1 and 2 Hr (See Item 1)
L Rating At 400 F - Less Than 1 CFM/sq ft	FTH Ratings — 0 and 1-3/4 Hr (See Item 2)
	L Rating At Ambient - Less Than 1 CFM/sq ft
	L Rating At 400 F - Less Than 1 CFM/sq ft



SECTION A-A

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 or V400 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 max 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide, fabricated from min 25 MSG galvanized steel, spaced max 24 in. (610 mm) OC.

B. Gypsum Board* — Nom 5/8 in. (16 mm) thick with square or tapered edges. The gypsum board type, number of layers and sheet orientation shall be as specified in the individual Wall and Partition Design. Max diam of opening is 5-1/2 in. (140 mm).

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

2. Metallic Sleeve — Nom 1-1/2, 2, 3 or 4 in. (38, 51, 76 or 102 mm) diam Schedule 5 (or heavier) steel pipe sleeve. Sleeve to be flush with wall surfaces or may extend up to 12 in. (305 mm) beyond either or both wall surfaces. The annular space between the steel sleeve and the periphery of opening shall be 0 in. (continuous point contact), except that when sleeve is rigidly supported, the annular space may be min 0 in. (point contact) to max 1 in. (25 mm). Where sleeve extends more than 2 in. (51 mm) beyond the surface of the wall it shall be rigidly supported.

The T, FT and FTH Ratings of the firestop system are 0 Hr when sleeve extends beyond one or both wall surfaces. The T, FT and FTH Ratings are 1-3/4 Hr when the sleeve is flush with both wall surfaces.



Hilti Firestop Systems

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January 23, 2015



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WL 0019

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

A. Fill, Void or Cavity Materials* - Plug — Nom 2, 2.5 or 4 in. (51, 63 or 102 mm) plug sized for the steel sleeve per Table below friction-fitted within the sleeve (Item 2) and centered within thickness of wall.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 658T Firestop Plug 2.5 or 4 in. or CFS-PL Firestop Plug 2 or 4 in.

Sleeve/Opening Diam in. (mm)	Nom Plug Size, in. (mm)	
	CP 658T	CFS-PL
1-1/2 (38)	2.5 (63) **	2 (51) **
2 (51)	2.5 (63) **	2 (51)
3 (76)	4 (102) **	4 (102) **
4 (102)	4 (102)	4 (102)

** Cut wedge from plug to fit sleeve/opening size. See Hilti Installation Instructions for specific size of wedge cuts required.

B. Fill, Void or Cavity Material* - Sealant — (Not shown) — Min 5/8 in. (16 mm) thickness of fill material applied within the annulus between the sleeve and the periphery of opening, flush with each side of wall. At point contact location, a min 1/2 in. (13 mm) bead of fill material shall be applied at the sleeve/wall interface when sleeve extends beyond surface of wall.

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



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