

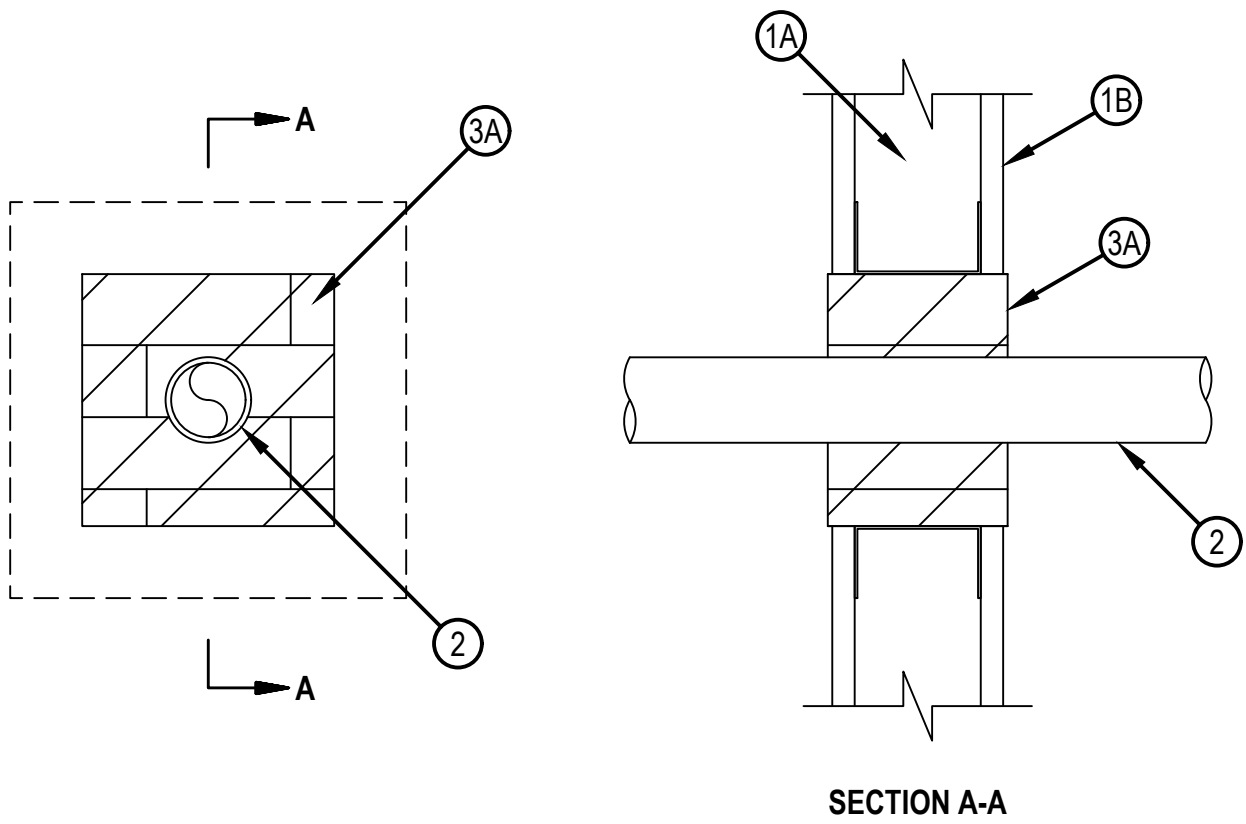


Classified by  
Underwriters Laboratories, Inc.  
to UL 1479 and CAN/ULC-S115

# System No. W-L-1597

WL 1597

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating - 1 Hr	F Rating - 1 Hr
T Rating - 1/2 Hr	FT Ratings - 1/2 Hr
L Rating (Without Movement) At Ambient - 5 CFM/sq ft (See Item 3B)	FH Ratings - 1 Hr
L Ratings (Without Movement) At 400 F - 2 CFM/sq ft (See Item 3B)	FTH Ratings - 1/2 Hr
M Rating (Movement) - See Table 1	L Rating At Ambient (Without Movement) - Less Than 26.1 L/s/m <sup>2</sup> (See Item 3B)
	L Ratings At 204°C (Without Movement) - Less Than 10.4 L/s/m <sup>2</sup> (See Item 3B)



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January 21, 2020

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1. Wall Assembly — The 1 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 in. (51 mm) by 4 in. (102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 3-5/8 in. (92 mm) wide, spaced max 24 in. (610 mm) OC. Additional studs shall be used to completely frame the opening.
  - B. Gypsum Board\* — Nom 5/8 in. (16 mm) thick, 4 ft. (1219 cm) wide with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual wall or partition design in the UL Fire Resistance Directory. Max area of opening is 54.4 in<sup>2</sup> (929 cm<sup>2</sup>) with max dimension of 7-3/8 in. (187 mm).
2. Through Penetrants — One metallic pipe or conduit installed concentrically within the firestop system. Annular space between penetrant and periphery of opening to be min 0 in. (point contact) to max 2.5 in. (63.5 mm). Penetrant to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic penetrants may be used:
  - A. Steel Pipe — Nom 2 in. (51 mm) diam Schedule 40 (or heavier) steel pipe.
  - B. Conduit — Nom 2 in. (51 mm) diam rigid steel conduit.
3. Firestop System — The firestop system shall consist of the following:
  - A. Fill, Void or Cavity Material\* — Fire block installed with 5 in. (127 mm) dimension projecting through and centered in opening. For walls constructed of larger steel studs, fire block installed with long dimension passing through and centered in opening. Blocks to be firmly packed and completely fill the entire opening around the penetrant.  
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CFS-BL Firestop Block
  - B. Fill, Void or Cavity Material\* — Fill material to be forced into any voids/openings between blocks, around penetrants, and between blocks and periphery of opening to the maximum extent possible on both surfaces of wall.  
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE MAX Intumescent Sealant

The M Rating for the firestop system is dependent on the variables as noted in the Table 1 below.

Movement Direction	Penetrant Item	Nominal Penetrant Diameter	Annular Space	Movement	Sealant Depth	L Rating
Y	All	2 in.	Max. 2.5 in.	50%	N/A	N/A
Z	All	2 in.	2.5 in.	1 in.	N/A	N/A

\* 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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