

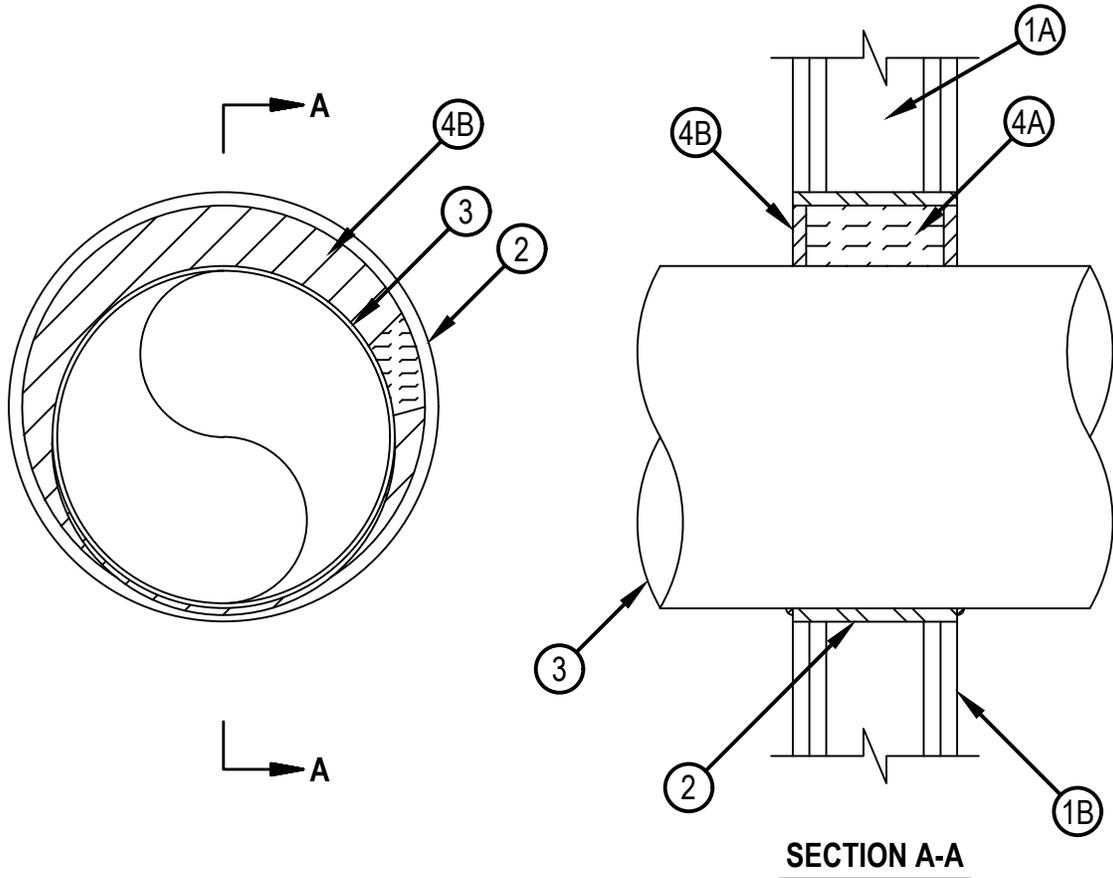


Classified by  
Underwriters Laboratories, Inc.  
to UL 1479 and CAN/ULC-S115

# System No. W-L-1392

WL 1392

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 Rating — 0 Hr	FT Rating — 0 Hr
L Rating At Ambient - Less Than 1 CFM/sq ft	FH Ratings — 1 and 2 Hr (See Item 1)
L Rating At 400 F - 4 CFM/sq ft	FTH Rating — 0 Hr
	L Rating At Ambient - Less Than 1 CFM/sq ft
	L Rating At 400 F - 4 CFM/sq ft



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March 3, 2026

# System No. W-L-1392

WL 1392

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 U400, V400 or W400 Series Wall or Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
  - A. Studs — Wall framing shall consist of min 3-5/8 in. (92 mm) wide steel studs spaced max 24 in. (610 mm) OC.
  - B. Gypsum Board\* — Min 5/8 in. (16 mm), gypsum board. Max diam of opening shall is 16 in. (406 mm).

The hourly F, 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. 16 in. (406 mm) diam (or smaller) Schedule 40 (or lighter) steel sleeve friction fitted into opening & flush with surfaces of wall.
  - A. Sheet Metal Sleeve — Nom. 16 in. (406 mm) diam, min 28 ga. galv steel with a nom. 2 in. overlap at the longitudinal seam. The sleeve is to be friction fitted into opening & flush with surfaces of wall.
3. Through Penetrants — One metallic pipe, tubing or conduit to be installed concentrically or eccentrically within opening. The annular space between the pipes and conduits and the edges of the opening shall be as stated in the table below.. Through penetrant to be rigidly supported on both sides of wall assembly. The following types and sizes of through penetrants may be used:
  - A. Steel Pipe — Nom 12 in. (305 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
  - B., Stainless Steel Pipe – Nom 12 in. (305 mm) diam (or smaller) Schedule 10 (or heavier) stainless steel pipe.
  - C. Iron Pipe — Nom 12 in. (305 mm) diam (or smaller) cast or ductile iron pipe.
  - D. Copper Tubing — Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tube.
  - E. Copper Pipe — Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.
  - F. Conduit — Nom 6 in. (152 mm) diam (or smaller) electrical metallic tubing (EMT) or rigid steel conduit.
  - G. Aluminum Pipe — (Not Applicable to CAN/ULC S115) — Nom 8 in. (203 mm) diam (or smaller) Schedule 5 (or heavier) aluminum pipe for use in closed (process or supply) piping systems.
  - H. Aluminum Conduit — (Not Applicable to CAN/ULC S115) — Nom 8 in. (203 mm) diam (or smaller) aluminum electric metallic tubing (EMT) or rigid aluminum conduit for use in closed (process or supply) piping systems.
4. Firestop System — The firestop system shall consist of the following:
  - A. Packing Material — Min 4 pcf (64 kg/m<sup>3</sup>) mineral wool batt insulation firmly packed into opening as a permanent form. Depth of packing material shall be as stated in the table below. Packing material to be recessed from both surfaces of wall to accommodate the required thickness of fill material.
  - B. Fill Void or Cavity Materials\* — Sealant — Fill material applied within the annulus, flush with both surfaces of wall. Depth of fill material shall be as stated in the table below. Min 1/4 in. (6 mm) diam bead of fill material applied to the through penetrant/steel sleeve interface at the point contact locations on both sides of the wall.

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

F-Rating	Penetrating Item (Item #3)	Depth of Packing Material (Item #4A)	Depth of Fill Material (Item #4B)	Minimum Annular Space (Inches)	Maximum Annular Space (Inches)
1	A, B, C, D, E, & F	3-7/8"	1/2"	0 (Point of Contact)	3-7/8
2	A, B, C, D, E, & F	5-1/8"	1/2"	0 (Point of Contact)	3-7/8
1	G & H	3-5/8"	5/8"	1/2	1-1/2
2	G & H	4-7/8"	5/8"	1/2	1-1/2

\* 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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