

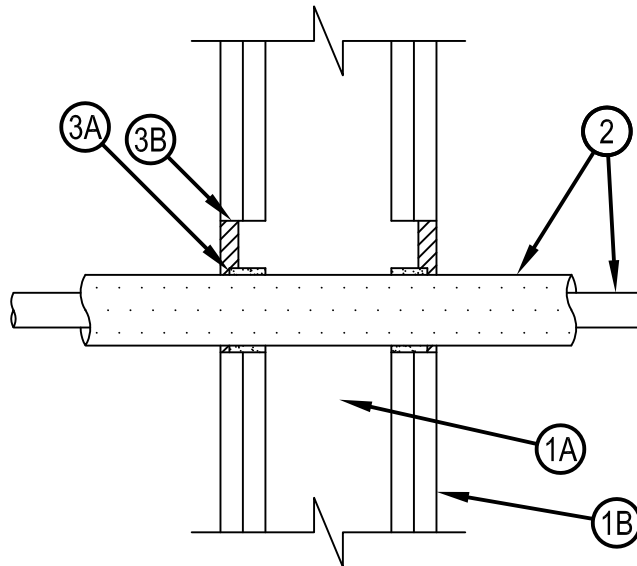
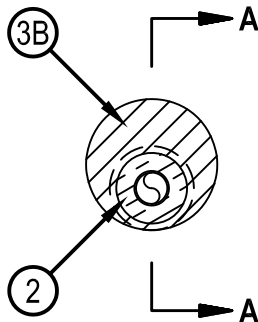


Classified by  
Underwriters Laboratories, Inc.  
to UL 1479 and CAN/ULC-S115

## System No. W-L-5345

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 1/2 Hr (See Item 1)	FT Ratings - 0 and 1/2 Hr (See Item 1)
	FH Ratings - 1 and 2 Hr (See Item 1)
	FTH Ratings - 0 and 1/2 Hr (See Item 1)

WL 5345



**SECTION A-A**

- 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, V400 or W400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
  - Studs — Wall framing may 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 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.
  - Gypsum Board\* — Thickness, type, number of layers and orientation shall be as specified in the individual Wall and Partition Design. Max diam of opening is 3-1/2 in. (89 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. The hourly T, FT and FH Ratings of the firestop system are 0 and 1/2 hr when installed in 1 and 2 hr fire rated walls, respectively.
- Through Penetrant (Refrigerant Tubing)+ — One nom 7/8 in. (22 mm) diam (or smaller) Streamline® ACR-Type L (or heavier) copper tube preassembled with nom 1/2 in. (13 mm) thick Streamline Duraguard™ polyethylene tubing insulation to be installed concentrically or eccentrically within the firestop system. Penetrant to be rigidly supported on both sides of wall assembly. The annular space between the insulated tubing and periphery of the opening shall be min 1/4 in. (6 mm) to max 1-1/2 in. (38 mm).
- Firestop System — The firestop system shall consist of the following:
  - Fill, Void or Cavity Material\* — Wrap Strip — Nom 3/16 in. (5 mm) thick by 1 in. (25 mm) wide intumescent wrap strip. One layer wrapped around the insulated penetrant with the ends butted and held in place with tape. Wrap strip to be installed on each side of wall and recessed into opening 1/4 in. (6 mm) from each surface of wall.  
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP-648E W25/1" Wrap Strip
  - Fill, Void or Cavity Material\* — Sealant — Min 1/2 in. (13 mm) thickness of sealant applied within annulus, flush with both surfaces of wall. At area where wrap strip is installed, sealant thickness to be 1/4 in. (6 mm).  
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — 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.

+Bearing the UL Recognized Mark



**Hilti Firestop Systems**

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