

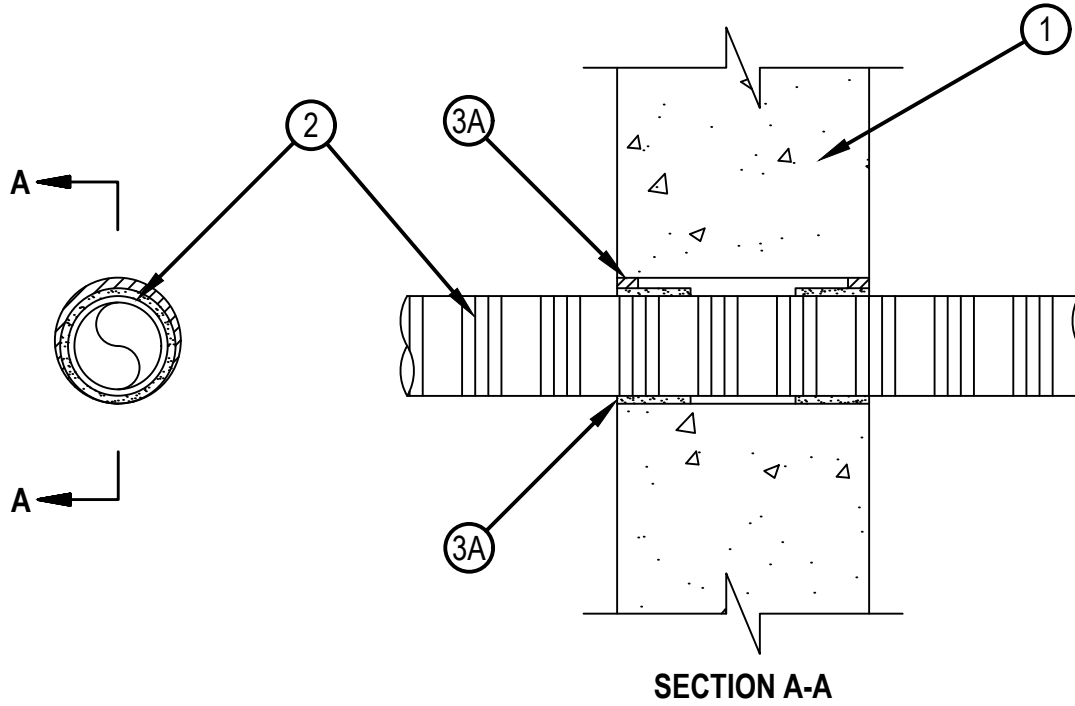


Classified by  
Underwriters Laboratories, Inc.  
to UL 1479 and CAN/ULC-S115

## System No. W-J-2332

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 1 and 2 Hr (See Item 1)	F Rating — 1 and 2 Hr (See Item 1)
T Rating — 0 and 1-3/4 Hr (See Item 1)	FT Rating — 0 and 1-3/4 Hr (See Item 1)
	FH Rating — 1 and 2 Hr (See Item 1)
	FTH Rating — 0 and 1-3/4 Hr (See Item 1)

WJ 2332



— System tested with a pressure differential of 50 Pa between the exposed and the unexposed surfaces with the higher pressure on the exposed side.

1. Wall Assembly — Min 6 in. (152 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m<sup>3</sup>) concrete. Wall may also be constructed of any UL Classified Concrete Blocks\*. Max diam of opening is 3 in. (76 mm).  
See Concrete Blocks (CAZT) in the Fire Resistance Directory for names of manufacturers.
2. Electrical Nonmetallic Tubing+ — Nom 2 in. (51 mm) diam (or smaller) corrugated wall electrical nonmetallic tubing (ENT). Annular space between periphery of opening to be min 3/16 in. (4.8 mm) to max 3/4 in. (19 mm). ENT to be installed as specified in the National Electric Code.  
See Electrical Nonmetallic Tubing (FKHU) category in the Electrical Construction Material Directory for names of manufacturers.
3. Firestop System — The firestop system shall consist of the following:
  - A. Fill, Void or Cavity Material\* — Wrap Strip — Nom 3/16 in. (5 mm) thick by 1-3/4 in. (44 mm) wide intumescent wrap strip. One layer individually wrapped around the through-penetrant with the ends butted and held in place with tape. Wrap strip slid into annular space and installed flush with both surfaces of wall.  
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP-648E Wrap Strip
  - B. Fill, Void or Cavity Material\* - Sealant — Min 5/8 in. (16 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall.  
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.



**Hilti Firestop Systems**

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