

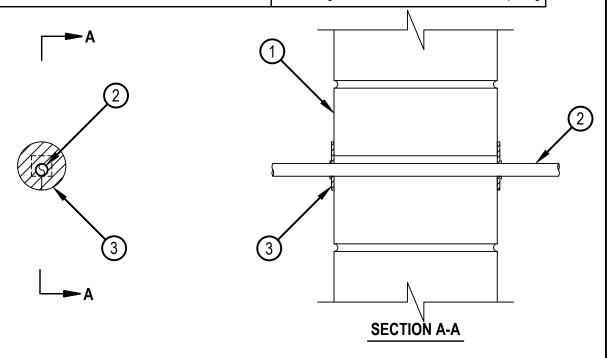
Classified by Underwriters Laboratories, Inc. to UL 1479 and CAN/ULC-S115

System No. W-J-1248

ANSI/UL1479 (ASTM E814)

CAN/ULC S115

F Ratings — 2 Hr	F Rating — 0 and 2 Hr (See Item 2)		
T Rating — 1/2 and 2 Hr (See Item 2)	FT Rating — 0, 1/2 and 2 Hr (See Item 2)		
L Rating at Ambient — Less than 1 CFM/Opening	FH Rating — 0 and 2 Hr (See Item 2)		
L Rating at 400 F — Less than 1 CFM/Opening	FTH Rating — 0, 1/2 and 2 Hr (See Item 2)		
	L Rating at Ambient — Less than 5.1 L/s/m2/Opening		
	L Rating at 400 F — Less than 5.1 L/s/m2/Opening		



- 1. Wall Assembly Min 6 in. (152 mm) thick lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Opening may be round, rectangular or irregular with a max diam or dimension of 1 in. (25 mm), or round with a max diam of 1-1/4 in. (31 mm).
 - See Concrete Blocks (CAZT) in the Fire Resistance Directory for names of manufacturers.
- 2. Through Penetrant Max one metallic pipe, tubing or conduit installed either concentrically or eccentrically within the firestop system. For items 2C to 2G the annular space between penetrant and periphery of the opening shall be min 0 in. (point contact) to max 1/8 in. (3 mm). For items 2A and 2B the annular space between penetrant and periphery of the opening shall be min 0 in. (point contact) and when opening dimension exceeds 1 in. (25 mm), the max annular space is 3/8 in. (9.5 mm). Pipe or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of pipes, tubing or conduit may be used:
 - A. Copper Tubing Nom 1/2 in. (13 mm) diam (or smaller) Type L and Type K (or heavier) copper tubing.
 - B. Copper Pipe Nom 1/2 in. (13 mm) diam (or smaller) Regular (or heavier) copper pipe.
 - C. Steel Pipe Nom 1 in. (25 mm) diam (or smaller) Schedule 5 (or heavier) steel pipe for use in closed (process or supply) piping systems.
 - D. Iron Pipe Nom 1 in. (19 mm) diam (or smaller) cast or ductile iron pipe for use in closed (process or supply) piping systems.
 - E. Conduit Nom 1 in. (25 mm) diam (or smaller) rigid or flexible steel conduit for use in closed (process or supply) piping systems.
 - F. Conduit Nom 1 in. (25 mm) diam (or smaller) electrical metallic tubing (EMT) for use in closed (process or supply) piping systems.
 - G. Nom 1 in. (25 mm) diam (or smaller) aluminum conduit, aluminum electrical metallic tubing (EMT) or aluminum pipe (Schedule 5 or heavier) for use in closed (process or supply) piping systems.

The hourly T, FT, FTH Ratings of the firestop system are equal to 2 Hr when item 2A or 2B is used. The hourly T Ratings of the firestop system are equal to 1/2 Hr when items 2C to 2G are used. The hourly CAN F, FT, FH and FTH Ratings are equal to 0 Hr when items 2C to 2G are used.



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3. Fill, Void or Cavity Material* — Nom 60 mm diam by 3 mm thick putty disc with one seam at radius. Paper-backer of disc to be removed and dis
firmly pressed around the penetrant lapping nom 5 mm onto penetrant to completely cover opening and firmly pressed to lap onto the wall aroun
periphery of opening. Disc seam to be firmly pressed and sealed tight, Disc to be installed at both surfaces of wall.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CFS-D 1" Firestop Putty Disc

* Indicates such products shall bear the UL	or cUL Certification Mark for	r jurisdictions employing the	e UL or cUL Certificatio	n (such as Canada)
respectively.				

