

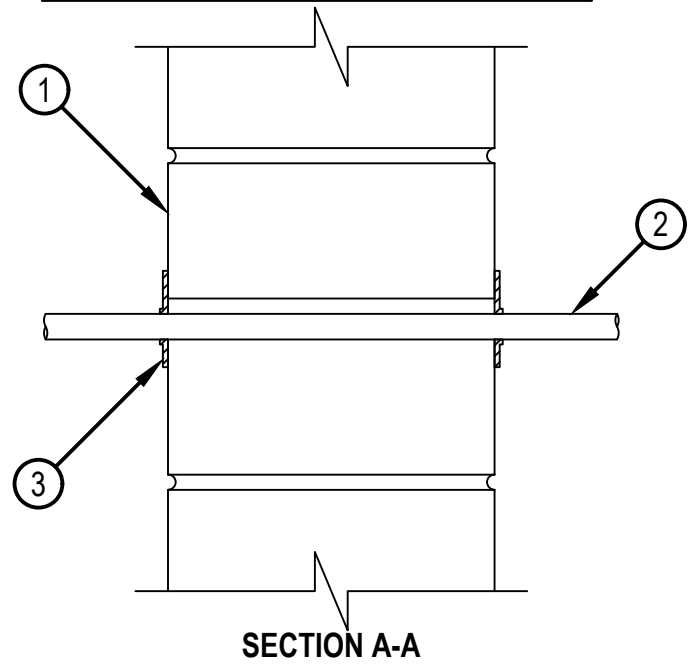
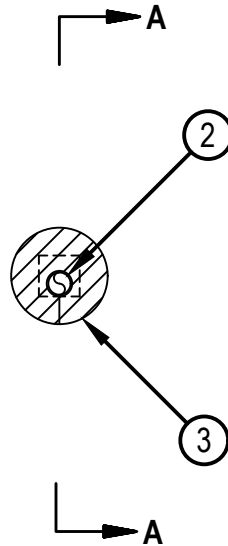


Classified by
Underwriters Laboratories, Inc.
to UL 1479 and CAN/ULC-S115

System No. W-J-1248

WJ 1248

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Ratings — 2 Hr	F Ratings — 2 Hr
T Ratings — 1/2 and 2 Hr (See Item 2)	FT Ratings — 0, 1/2 and 2 Hr (See Item 2)
L Rating at Ambient — Less than 1 CFM/Opening	FH Ratings — 2 Hr
L Rating at 400 F — Less than 1 CFM/Opening	FTH Ratings — 0, 1/2 and 2 Hr (See Item 2)
	L Rating at Ambient — Less than 5.1 L/s/m ² /Opening
	L Rating at 204 °C — Less than 5.1 L/s/m ² /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 Penetrants 2C to 2H 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 Penetrants 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.
 - D. Stainless Steel Pipe - Nom 1 in. (25 mm) diam (or smaller) Schedule 10 (or heavier) stainless steel pipe.
 - E. Iron Pipe — Nom 1 in. (19 mm) diam (or smaller) cast or ductile iron pipe.
 - F. Conduit — Nom 1 in. (25 mm) diam (or smaller) rigid or flexible steel conduit.
 - G. Conduit — Nom 1 in. (25 mm) diam (or smaller) electrical metallic tubing (EMT).
 - H. Aluminum Penetrants - 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 Penetrant 2A or 2B is used. The hourly T Rating of the firestop system is equal to 1/2 Hr when Penetrants 2C to 2H are used.
- Certification to CAN/ULC -S115 is limited to Penetrants A (Copper Tubing) B (Copper Pipe), C (Steel Pipe), D (Stainless Steel Pipe), E (Iron Pipe), F (Steel Conduit), and G (Steel EMT).
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 disc firmly pressed around the penetrant lapping nom 5 mm onto penetrant to completely cover opening and firmly pressed to lap onto the wall around 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 jurisdictions employing the UL or cUL Certification (such as Canada), respectively.