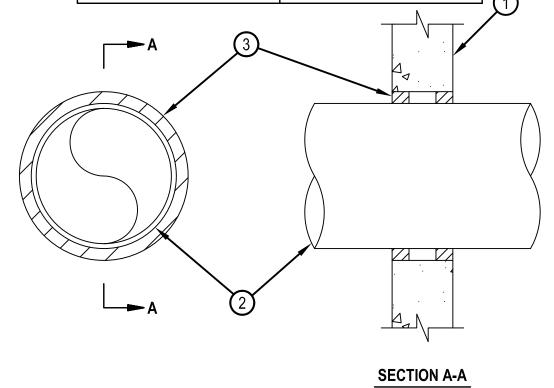


System No. W-J-1028

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



- 1. Wall Assembly Min 2-1/2 in. (64 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of opening is 12-1/2 in. (318 mm). See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
- 2. Through-Penetrants One metallic pipe, conduit or tubing to be centered within the firestop system. The annular space between pipes, conduit or tubing and periphery of opening shall be min 1/2 in. (13 mm) to max 7/8 in. (22 mm). Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
 - A. Steel Pipe Nom 10 in. (254 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
 - B. Conduit Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing or nom 6 in. (152 mm) diam (or smaller) steel conduit.
 - C. Copper Tubing Nom 4 in. (102 mm) diam (or smaller) Type L (or heavier) copper tubing.
 - D. Copper Pipe Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper pipe.
- 3. Fill, Void or Cavity Material* Sealant Min 5/8 in. (16 mm) or 1-1/4 in. (32 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall for 1 hr and 2 hr fire-rated walls, respectively.
 - HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC CP 601s, CFS-S-SIL GG or FS-ONE Sealant or 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.

