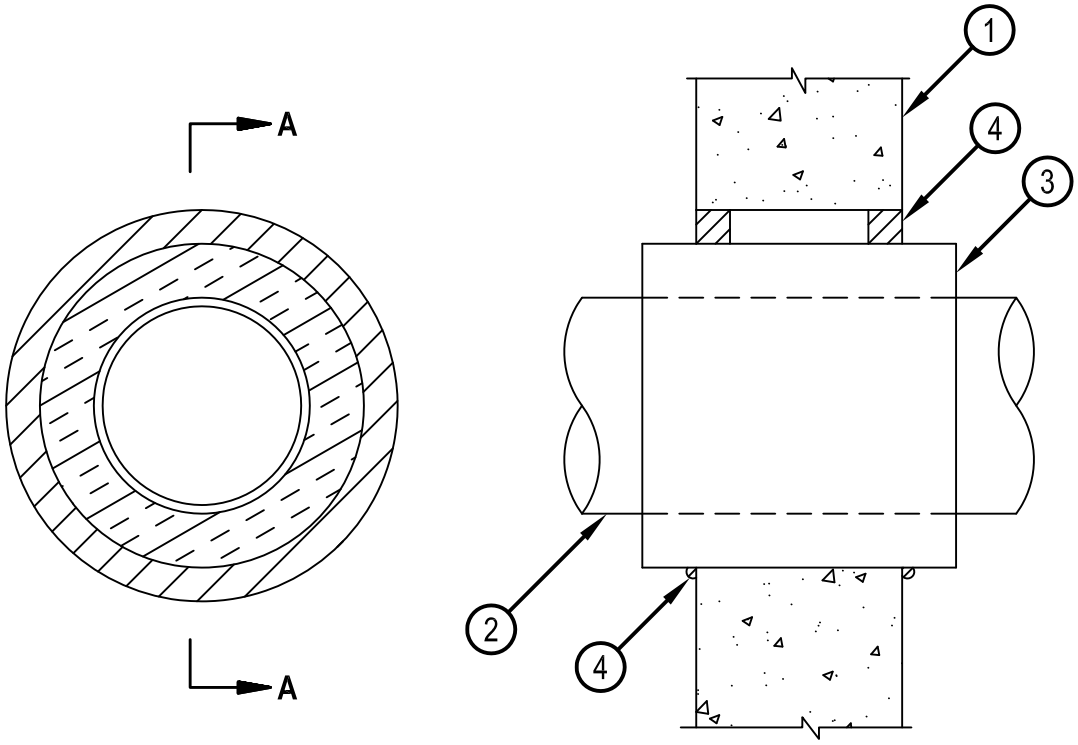
System No. W-J-1058

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

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



SECTION A-A

1. Wall Assembly — Min 5 in. (127 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 13 in. (330 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 installed either concentrically or eccentrically within the firestop system. Pipe, conduit or tubing to be rigidly supported on both sides of the assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
   A. Steel Pipe — Nom 8 in. (203 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
   B. Iron Pipe — Nom 8 in. (203 mm) diam (or smaller) cast or ductile iron pipe.
   C. Conduit — Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing or steel conduit.

System No. W-J-1058

3. Pipe Covering — Nom 2 in. (51 mm) thick hollow cylindrical heavy density (min 3.5 pcf or 56 kg/m3) fiberglass pipe covering with an all-service jacket. Pipe covering material to extend 2 in. (51 mm) beyond both sides of wall surface. Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap (SSL) tape. The annular space between the pipe covering and periphery of opening shall be min 0 in. (point contact) to max 3/8 in. (5 mm).
   See Pipe and Equipment Covering-Materials (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.
4. Fill, Void or Cavity Material* — Sealant — In 1 hr assemblies, min 5/8 in. thickness of fill material applied within annulus flush with both surfaces of wall. In 2 hr assemblies, min 1-1/4 in. (32 mm) thickness of fill material applied within annulus flush with both surfaces of wall. For both 1 and 2 hr assemblies, at point contact location between insulation and gypsum board, a min 1/2 in. (13 mm) bead of fill material shall be applied on both sides of wall.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — 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.