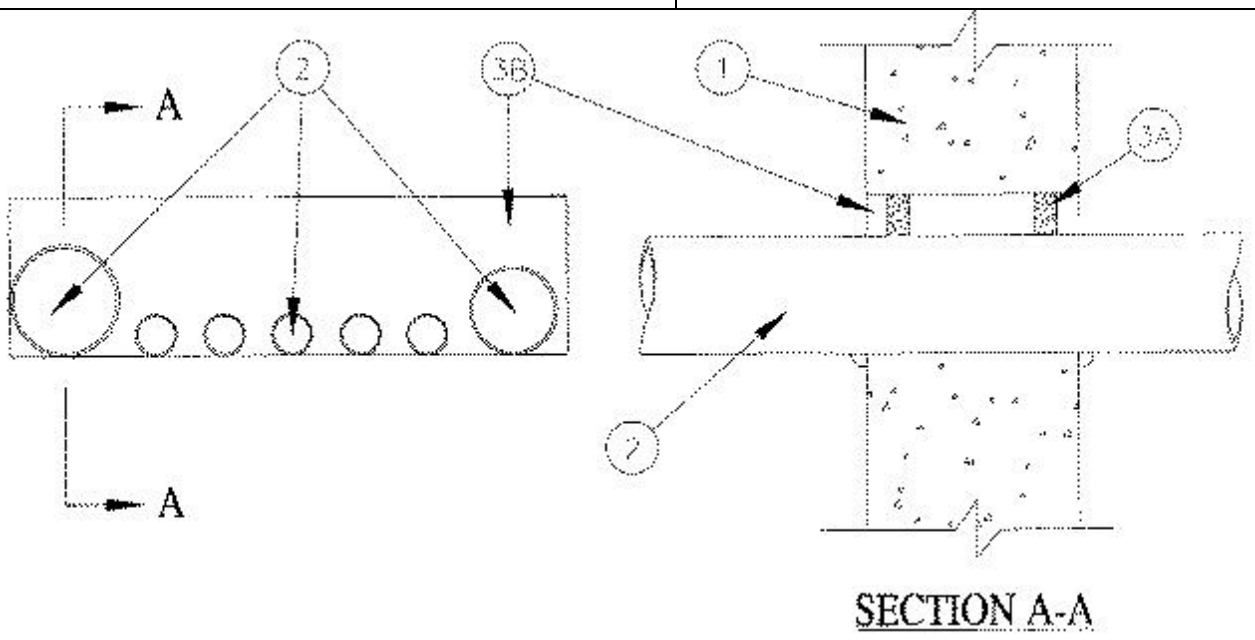
System No. W-J-1066

February 04, 2014

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



SECTION A-A

1. **Wall Assembly —** Min (152 mm) 6 in. thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m^3) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks*** . Max area of opening is 33 sq in. (213 cm^2) with max dimensions of 11 in. (279 mm).

See Concrete Block (CAZT) category in the Fire Resistance Directory for names of manufacturers.

2. **Through Penetrants —** One or more pipes, conduits or tubing to be installed within the opening. The space between pipes, conduits or tubing shall be a nom 1/2 in. (13 mm). The space between pipes, conduits or tubing and periphery of opening shall be min 0 in. (point contact) to max 1-1/4 in. (32 mm). Of the through penetrants, only two through penetrants shall have a nom diam greater than 1 in. Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of pipes, conduits or tubing may be used:

A. **Steel Pipe —** Nom 2 in. (51 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.

B. **Iron Pipe —** Nom 2 in. (51 mm) diam (or smaller) cast or ductile iron pipe.

C. **Conduit —** Nom 2 in. (51 mm) diam (or smaller) steel electrical metallic tubing or galv steel conduit.

3. **Firestop System —** The firestop system shall consist of the following:

A. **Forms —** Used to prevent the leakage of fill material during installation. Forms to be rigid sheet material or polyurethane backer rod, cut to fit the contour of the through penetrant and friction fitted into the opening on both sides of wall. Forms to be recessed from both surfaces of wall as required to accommodate the required thickness of fill material.

B. **Fill, Void or Cavity Material* — Sealant —** Min 5/8 in. (16 mm) thickness of fill material applied within annulus, flush with both surfaces of wall. At the point contact location between through penetrants and concrete, a min 3/8 in. (10 mm) diam bead of fill material shall be applied at the concrete/through penetrant interface on both surfaces of wall.

RECTORSEAL — FlameSafe FS1900, FS1901, FS1905, FS1929, Metacaulk 1000, Metacaulk 350i, Biostop 350i or Biostop 500+

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