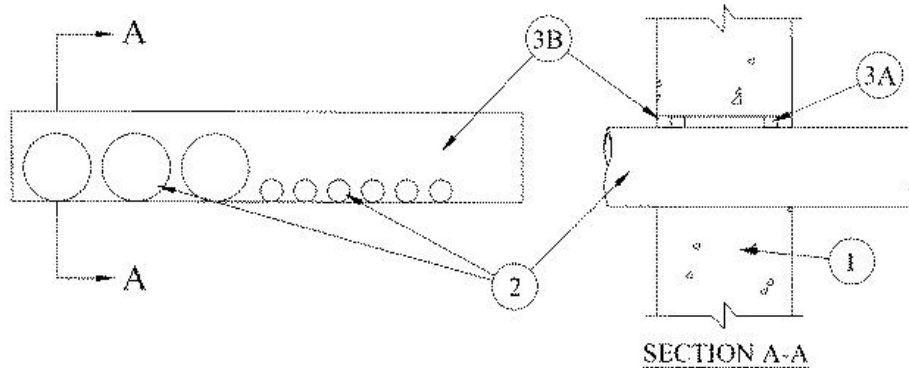


ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Ratings - 2 Hr	F Ratings - 2 Hr
T Ratings - 0 Hr	FT Ratings - 0 Hr
	FH Ratings - 2 Hr
	FTH Ratings - 0 Hr
L Rating at Ambient — Less than 1 CFM/sq ft	L Rating at Ambient — Less than 1 CFM/sq ft
L Rating at 400° F — Less than 1 CFM/sq ft	L Rating at 400° F — Less than 1 CFM/sq ft



1. Wall Assembly — Min 6 in. (152 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 area of opening is 90-1/2 sq in. (584 cm²) with max dimensions of 22-5/8 in. (575 mm).

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

2. Through Penetrants — One or more through penetrants to be installed within the opening. Only three through penetrants shall have a nom diam greater than 1 in. (25 mm). The space between the through penetrants shall be a nom 1/2 in. (13 mm). The annular space between through penetrants and periphery of opening shall be min 0 in. (point contact) to max 1/2 in. (13 mm) for through penetrants having a nom diam greater than 1 in. The annular space between through penetrants and periphery of opening shall be min 0 in. (point contact) to max 2-1/8 in. (54 mm) for through penetrants having a nom diam of 1 in. (25 mm) or less. Through penetrants to be rigidly supported on both sides of wall assembly. The following types and sizes of through penetrants may be used:

A. **Steel Pipe** — Nom 3 in. (76 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.

B. **Iron Pipe** — Nom 3 in. (76 mm) diam (or smaller) cast or ductile iron pipe.

C. **Conduit** — Nom 3 in. (76 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** — (Optional) — 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 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 — FS900+, FS929+, FS901+CG, FS905+CG and FS955+CG Sealant, **Metacaulk MC 150+**, Biostop BF 150+

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

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