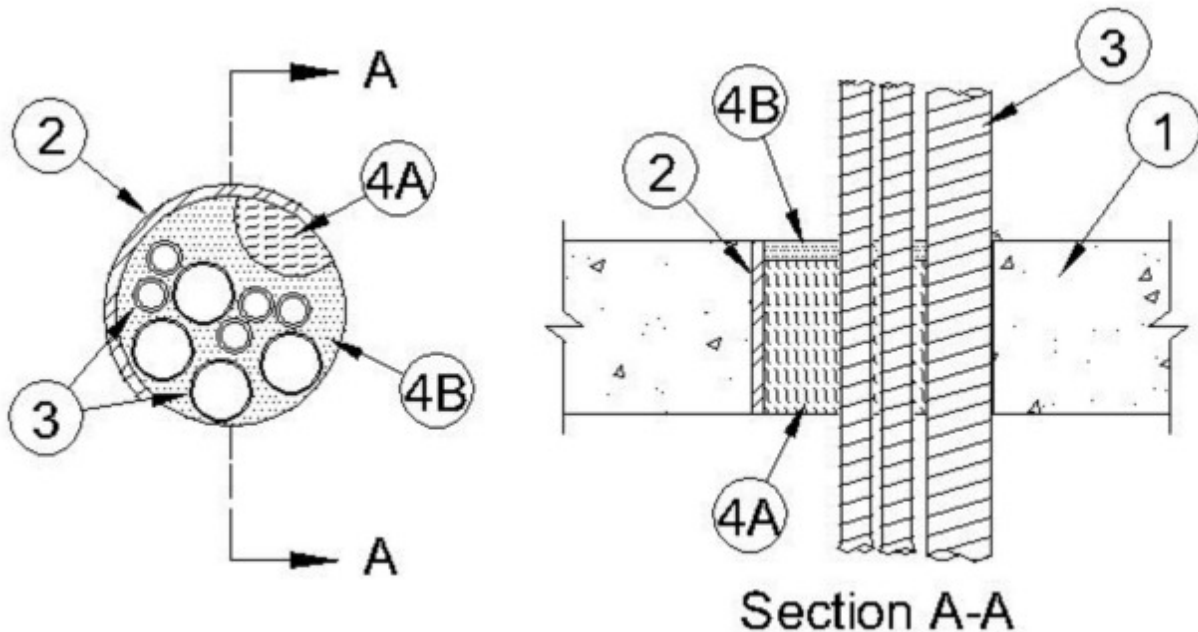


System No. C-AJ-1584

July 16, 2014

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 3 Hr	F Rating — 3 Hr
T Rating — 1 Hr	FT Rating — 1 Hr
L Rating At Ambient — Less Than 1 CFM/sq ft	FH Rating — 3 Hr
L Rating At 400 F — Less Than 1 CFM/sq ft	FTH Rating — 1 Hr
	L Rating At Ambient — Less Than 1 CFM/sq ft
	L Rating At 400 F — Less Than 1 CFM/sq ft



1. **Floor or Wall Assembly** — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. Floor assembly may also be constructed of any min 6 in. (152 mm) thick UL Classified hollow-core **Precast Concrete Units***. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max diam of opening is 6 in. (152 mm).

See **Concrete Blocks** (CAZT) and **Precast Concrete Units** (CFTV) categories in the Fire Resistance Directory for names of manufacturers.

2. **Steel Sleeve** — (Optional) - Nom 6 in. (152 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe sleeve cast or grouted into floor or wall assembly. Steel sleeve may be installed flush or may project max 2 in. (51 mm) above top surface of floor or from both surfaces of wall.

3. **Through Penetrating Product*** — **Flexible Metal Piping** — One or more nom 1-1/4 in. (32 mm) diam (or smaller) corrugated stainless steel tubing with or without a plastic outer jacket to be installed concentrically or eccentrically within the firestop system. The annular space between tubing and periphery of opening shall be min 0 in. (point contact) to max 2 in. (51 mm). The interstices between tubes shall be min 1/4 in. (6 mm) to max 2 in. (51 mm). Tubing to be rigidly supported on both sides of floor or wall assembly.

OMEGA FLEX INC

GASTITE, DIV OF TITFLEX — CSST or FlashShield CSST

WARD MFG L L C

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

A. Packing Material — Min 4 in. (102 mm) thickness of min 4 pcf (64 kg/m³) mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of wall as required to accommodate the required thickness of fill material. When floor is constructed of hollow-core precast concrete units, packing material to extend throughout thickness of floor except for recess at top of floor to accommodate fill material.

B. Fill, Void or Cavity Material* — Sealant — Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall.

RECTORSEAL — FlameSafe FS 900+, FlameSafe FS 1900 Metacaulk 1000, Metacaulk MC 150+, Metacaulk 350i, Biostop BF 150+, 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.