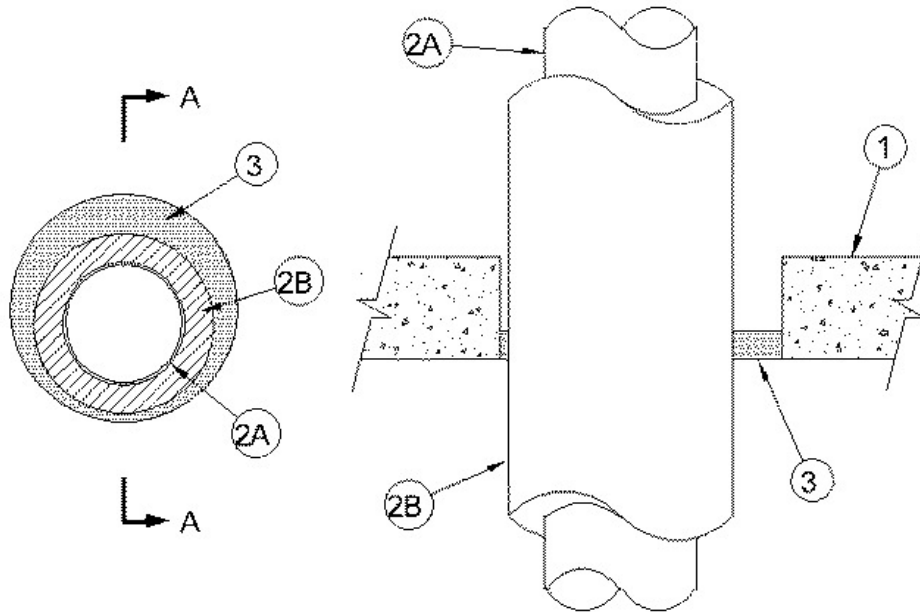


ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 1-1/2 Hr	F Rating — 1-1/2 Hr
T Rating — 3/4 Hr	FT Rating — 3/4 Hr
	FH Rating — 1-1/2 Hr
	FTH Rating — 3/4 Hr



SECTION 'A-A'

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 may also be constructed of any min 6 in. thick UL Classified hollow core **Precast Concrete Units***. Wall may also be constructed of any UL classified **Concrete Blocks***. Max diam of opening is 7 in. (178 mm).

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

2A. Through Penetrants — One metallic pipe or tubing to be installed concentrically or eccentrically within the firestop system. Pipe or tubing to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of pipe or tubing may be used:

- A. **Steel Pipe** — Nom 4 in. (102 mm) diam (or smaller) Schedule 40 (or heavier) steel pipe.
- B. **Iron Pipe** — Nom 4 in. (102 mm) diam (or smaller) cast or ductile iron pipe.
- 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.

2B. Pipe Covering Material* — Nom 1 in. (25 mm) thick hollow cylindrical heavy density (min 3.5 pcf or 56 kg/m³) glass fiber units, jacketed on the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory applied self-sealing tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product. The annular space between the insulated through penetrant and the periphery of the opening shall be min of 1/4 in. (6 mm) to a max of 5/8 in. (16 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.

3. Fill, Void, or Cavity Materials* — Sealant - Min 1 in. (25 mm) thickness of fill material applied within annulus, flush with top or bottom surface of floor or one surface of solid concrete wall. In floors constructed of hollow core precast concrete units, fill material installed flush with bottom surface of floor or with both surfaces of floor. In walls constructed of concrete blocks, fill material installed symmetrically on both sides of wall.

RECTORSEAL — FlameSafe® FS1900, [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.

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