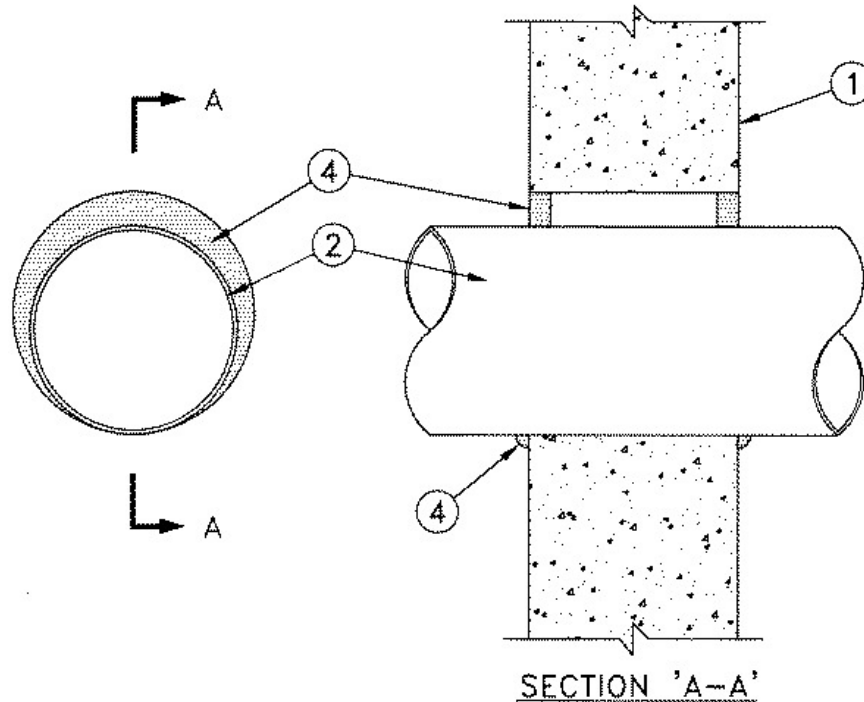


ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 2 Hr	F Rating — 2 Hr
T Rating — 0 Hr	FT Rating — 0 Hr
	FH Rating — 2 Hr
	FTH Rating — 0 Hr



- 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 diam of opening is shown in table below. See **Concrete Block (CAZT)** category in the Fire Resistance Directory for name of manufacturers.
- 2. Through Penetrant** — One nom 4 in. (102 mm) diam (or smaller) No. 30 MSG (or heavier), or one nom 6 in. (152 mm) diam (or smaller) No. 28 MSG (or heavier), or one nom 20 in. (508 mm) diam (or smaller) No. 22 MSG (or heavier) steel vent duct to be installed either concentrically or eccentrically within the firestop system (see table below). The annular space between duct and periphery of opening shall be min 0 in. (point contact) to max value shown in table below. Duct to be rigidly supported on both sides of wall assembly.
- 3. Packing Material** — (not shown). Nom 1 in. (25 mm) foam backer rod firmly packed into the opening as a permanent form to prevent leakage of fill material during installation. Packing material to be recessed from both surfaces of wall as required to accommodate the required thickness of fill material.
- 4. 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 penetrant 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.

Max Diam of Through Opening In. (mm)	Max Duct Diam In. (mm)	Min Duct Thickness MSG	Annular Space In. (mm)	Sealant
5 (127)	4 (102)	30	0 to 7/8 (22)	FS 1900, Metacaulk 1000 , Metacaulk 350i , Biostop 350i or Biostop 500+
7 (178)	6 (152)	28	0 to 1 (25)	FS 900+, Metacaulk MC 150+ , Biostop BF 150+



22 (559)	20 (508)	22	0 to 2 (51)	FS 900+, Metacaulk MC 150+ , Biostop BF 150+
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RECTORSEAL — FlameSafe® FS 1900, FlameSafe® FS900+, [Metacaulk MC 150+](#), [Metacaulk 1000](#), [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.

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