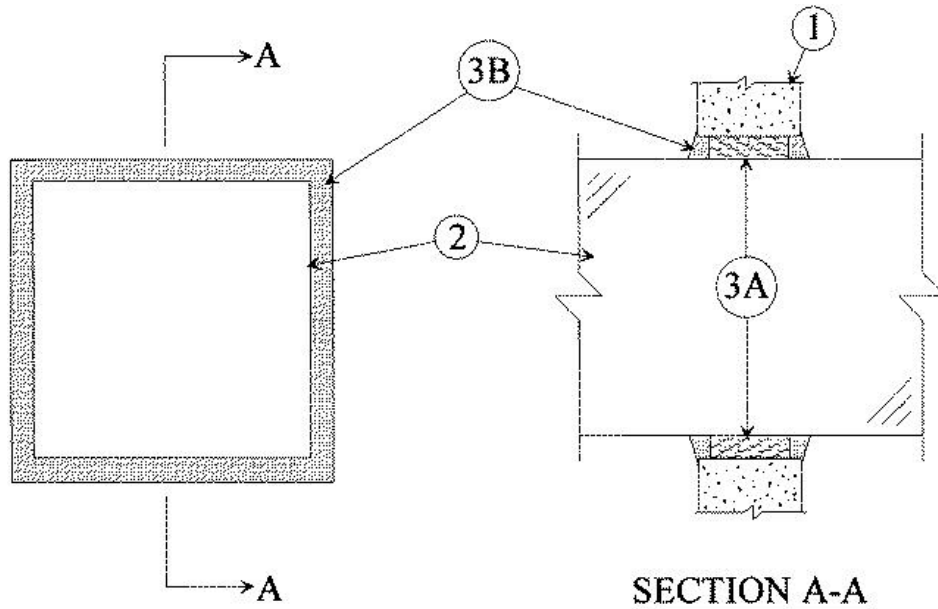


ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 2 Hr	F Rating — 2 Hr
T Rating — 1 Hr	FT Rating — 1 Hr
L Rating At Ambient — Less Than 1 CFM/sq ft	FH Rating — 2 Hr
L Rating At 400 F — Less Than 1 CFM/sq ft	FTH Rating — 1 Hr



1. **Wall Assembly** — Min 5 in. (127 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 196 sq in. (1265 cm²), with max dimension of 14 in. (356 mm)
See **Concrete Blocks** (CAZT) category in the Fire Resistance Directory for names of manufacturers.

2. **Steel Duct** — Nom 12 by 12 in. (305 by 305 mm) (or smaller) No. 24 gauge (or heavier) steel duct to be centered within the firestop system. A nom 1 in. (25 mm) annular space is required within the firestop system. Steel duct to be rigidly supported on both sides of wall assembly.

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

A. **Packing Material** — Min 3-1/2 in. (89 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 both surfaces of wall as required to accommodate the required thickness of fill material.

B. **Fill, Void or Cavity Material* — Sealant** — Min 3/4 in. (19 mm) thickness of fill material applied within the annulus on both surfaces of wall. Additional fill material to be installed such that a min 1/4 in. (6 mm) thick crown is formed around the penetrating item and lapping a min 1/4 in. (6 mm) beyond the periphery of the opening.

RECTORSEAL — FlameSafe FS 1900, [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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