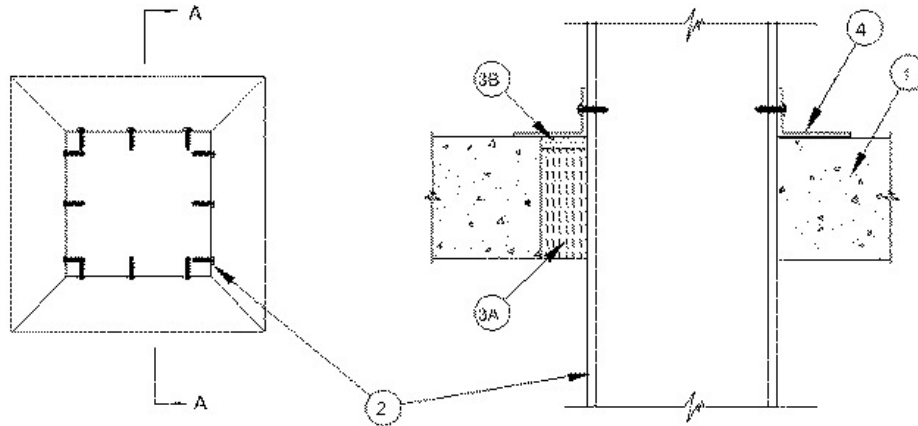


ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Ratings — 2 and 3 Hr (See Items 2 and 2A)	F Ratings — 2 and 3 Hr (See Items 2 and 2A)
T Rating — 0 Hr	FT Rating — 0 Hr
	FH Ratings — 2 and 3 Hr (See Items 2 and 2A)
	FTH Rating — 0 Hr



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. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max area of opening is 72.25 ft² (6.7m²) with max dimension of 102 in. (2591 mm).

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

2. Steel Duct — Max 30 by 30 in. (762 by 762 mm) by No. 24 gauge (or heavier) galv steel duct or max 100 by 100 in. (2.5 by 2.5 m) steel duct to be installed within the opening. The duct shall be constructed and reinforced in accordance with SMACNA construction standards. One steel duct to be positioned within the firestop system. The annular space shall be min 0 in. to max 2 in. (51 mm). Duct to be rigidly supported on both sides of floor or wall assembly.

The F and FH Ratings are 2 hr for all ducts with any dimension greater than 30 in. (762 mm).

2A. Batts and Blankets* — (Optional, not shown) — Nom 1-1/2 or 2 in. (38 or 51 mm) thick glass fiber batt or blanket (min 3/4 pcf or 12 kg/m³) jacketed on the outside with a foil-scrim-kraft facing. Longitudinal and transverse joints sealed with aluminum foil tape. During the installation of the fill material, the batt or blanket shall be compressed minimum 50 percent such that the annular space within the firestop system shall be min 1/2 in. (13 mm) to max 2 in. (51 mm).

See **Batts and Blankets (BKNV)** category in the Building Materials Directory for names of manufacturers. Any batt or blanket meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index 50 or less may be used.

The F and FH Ratings are 2 hr for all ducts provided with Item 2A.

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

A. Packing Material — Min 4 in. (102 mm) thickness of min 4.0 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 to accommodate the required thickness of fill material.

B. Fill, Void or Cavity Material* — Caulk — Min 1/4 in. (6 mm) thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall.

RECTORSEAL — [Metacaulk 350i](#), [Metacaulk MC 150+](#), or [Metacaulk 1000](#)

4 Steel Retaining Angle — Nom 2 by 4 in. (51 by 102 mm) by No. 22 gauge (or heavier) steel angles attached to steel duct on all four sides on the top surface of floor or both surfaces of wall. For ducts greater than 30 by 30 in. (762 by 762 mm), the angles shall be min 16 gauge. The 2in. (51 mm) legs of the angles shall be attached to the duct with No. 8 (or larger) steel sheet metal screws spaced max of 2 in. (51 mm) from each end of duct and a max 4-1/2 in. (114 mm) OC elsewhere.

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification

(such as Canada), respectively.