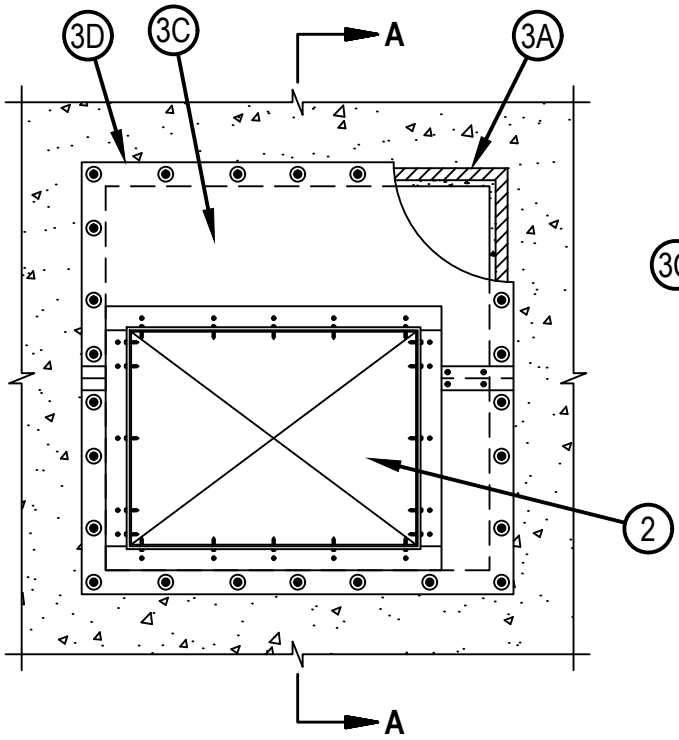
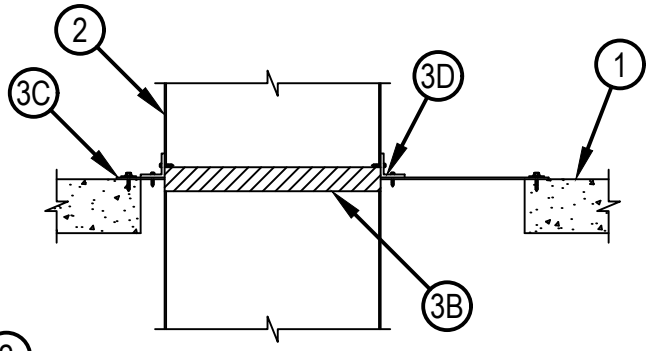
Classified by
Underwriters Laboratories, Inc.
to UL 1479 and CAN/ULC-S115

System No. C-AJ-7195

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





SECTION A-A

System No. C-AJ-7195

1. Floor or Wall Assembly — Min 4-1/2 in. (114mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete floor or wall. Wall may also be constructed of any min 6 in. (152 mm) thick UL Classified solid Concrete Blocks*. Max area of opening is 1024 in.2 (6606 cm2) with a max dimension of 32 in. (813).

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

2. Steel Duct — Max 24 in. by 18 in. (610 mm by 457 mm), min 24 gauge galv steel duct to be installed either concentrically or eccentrically within the firestop system. The duct shall be constructed and reinforced in accordance with SMACNA construction standards. The annular space between the steel duct and periphery of opening shall be min 2 in. (51 mm). Steel duct to be rigidly supported on both sides of the floor or wall assembly.

   2A. Through-Penetrants — Coated Ducts* — As an alternate to Item 2, rectangular steel air duct supplied coated with BW11 coating material. Max 24 by 18 in. (610 by 457 mm) duct size. One duct to be installed within the firestop system with an annular space of min 2 in. (51 mm). Reinforcement stiffener or transverse joint with bolted flanges shall be located approximately at the mid depth of the annular space. Duct to be rigidly supported on both sides of the floor or wall assembly. Duct sections shall be assembled using bolted flanges or SMACNA approved Transverse Joint Reinforcements.

      FIRESPRAY INTERNATIONAL LTD — FLAMEBAR BW11 FIRE RATED DUCTWORK

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

   A. Fill, Void or Cavity Materials* — Putty — One layer of 1 in. (25 mm) wide by 1/8 in. (3 mm) thick strip of putty applied under intumescent sheet around entire perimeter of through opening on surface of floor or wall. One layer of putty to be applied over butted seams or slits in the sheet.

      HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 619T Firestop Putty Roll

   B. Fill, Void or Cavity Materials* — Putty — Double stack of 1 in. (25 mm) wide by 1/8 in. (3 mm) thick strip of putty pressed tightly around contour of duct, extending 2 in. (51 mm) below composite sheet and 1 in. (25 mm) above composite sheet.

      HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 619T Firestop Putty Roll

   B1. Fill, Void or Cavity Materials* — Sealant — As an alternate to Item 3B, a min 1/2 in. (13 mm) bead of sealant shall be applied around contour of duct above the composite sheet to seal the retaining angles to the duct. In walls, sealant shall be used at both sides of opening.

      HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE MAX Intumescent Sealant

   C. Fill, Void or Cavity Materials* — Composite Sheet — Rigid aluminum foil-faced intumescent sheet with steel backer. Sheets cut to lap a min of 2 in. (51 mm) on the floor or wall surfaces and butt tight against the duct. Sheet to be installed on top surface of floor or both surfaces of wall, with the steel backer exposed (aluminum foil facing against floor or wall surfaces). Composite sheet to be secured to floor or wall surface with min 3/16 in. (4.8 mm) diam by 1-1/4 in. (32 mm) long steel anchor screws, in conjunction with min 1-1/4 in. (32 mm) diam steel fender washers. Max spacing of fasteners not to exceed 6 in. (152 mm) on center and max 2 in. (51 mm) from ends. When overlap of sheets to floor or wall is increased to 3 in. (76 mm), 1-1/16 in. (27 mm) long Hilti X-GN 27 MX nails in conjunction with min 1-1/4 in. (32 mm) diam steel fender washers may be used as an alternate fastener. The X-GN fasteners shall be spaced maximum 4 in. (102 mm) on center and max 1 in. (25 mm) from ends. Additional min 2 in. (51 mm) wide strips of composite sheet shall be centered over entire length of butt seams or slits in the composite sheet and secured with No. 10 (or larger) sheet metal screws with min 1 in. (25 mm) diam washers along each side of seam. Screws to be located at each end and max 3 in. (76 mm) on center.

      HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — Hilti CFS-COS Firestop Composite Sheet

   D. Retaining Angles — Min 2 by 2 in. (51 by 51 mm) by 20 gauge galv steel angles to be installed around four sides of duct at top of floor or both sides of wall with ends of angles butted. Angles to be secured to duct and composite sheet with No. 10 (or larger) sheet metal screws spaced max 1 in. (25 mm) from ends of duct and max 6 in. (152 mm) on center.

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.