



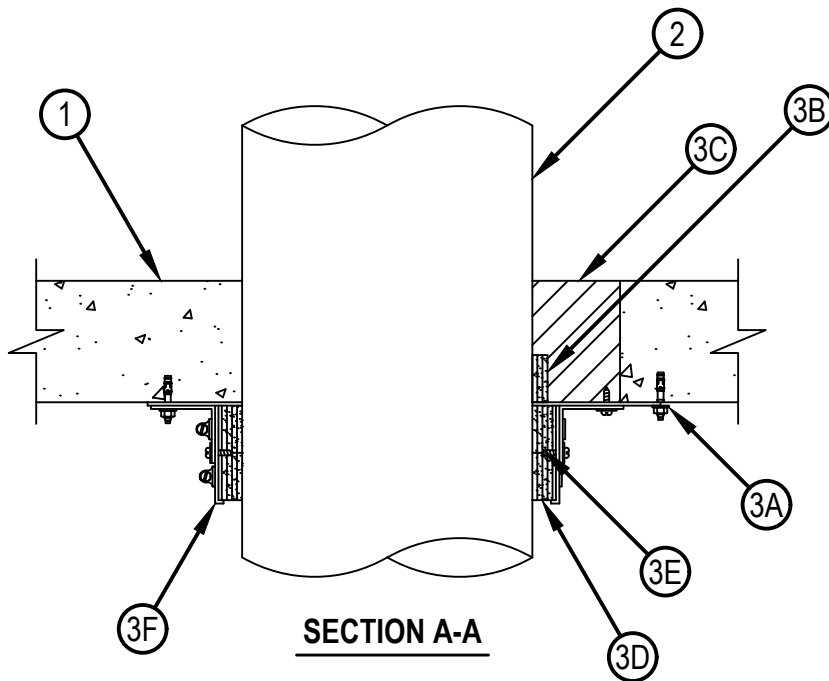
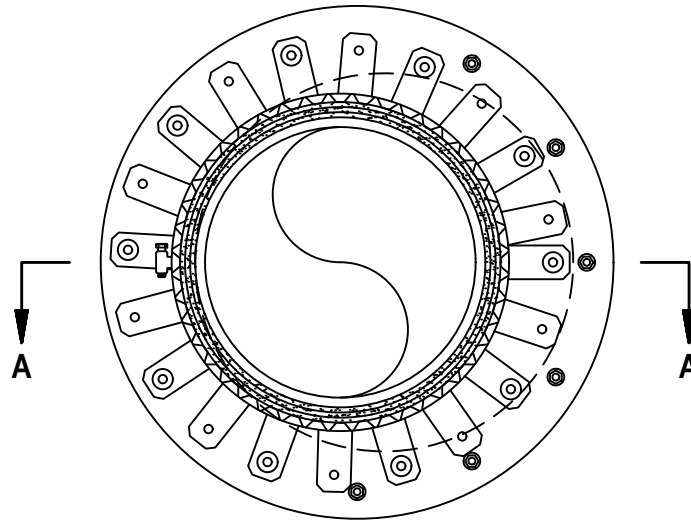
Classified by
Underwriters Laboratories, Inc.
to UL 1479

System No. C-AJ-2409

F Rating - 3 Hr

T Rating - 2 Hr

CAJ 2409



Hilti Firestop Systems

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April 26, 2017

System No. C-AJ-2409

CAJ 2409

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 diameter of opening is 14 in. (356 mm).
See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Flame Retardant Polypropylene Pipe (FRPP) — Nom 10 in. (254 mm) diameter (or smaller) flame retardant polypropylene pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems installed concentrically or eccentrically within the firestop system. Annular space between pipe and periphery of opening to be min 0 in. (point contact) and max 3-3/8 in. (86 mm). Pipe to be rigidly supported on both sides of floor or wall assembly.
3. Firestop System — The firestop system shall consist of the following:
 - A. Cover Plate — Min 0.046 in. (1.17 mm) (18 MSG) galv steel plate consisting of two pieces, overlapped min 1 in. (25 mm), cut to fit contour of pipe with min 2 in. (51 mm) lap onto the bottom surface of floor assembly and both surfaces of wall assembly around perimeter of through opening. Steel cover plate to be installed using 1/4 in. (6 mm) diam by 1-1/2 in. (38 mm) long expansion bolts in conjunction with steel nuts and washers, spaced 6 in. (152 mm) O.C.
 - B. Fill, Void or Cavity Material* - Wrap Strip — Nom 3/16 in. (4.8 mm) thick by 1-3/4 in. (44 mm) wide intumescent wrap strip. Three layers of wrap strip individually wrapped around pipe within opening where annular space exists and secured with tape. Wrap strip butted tightly against top surface of cover plate in floor or both cover plates in walls.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP648-E- W45/1-3/4" Wrap Strip
 - C. Fill, Void or Cavity Materials* - Sealant — Min 4-1/2 in. (114 mm) thickness of fill material applied within the annulus, flush with both surfaces of floor or wall.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 620 Fire Foam
 - D. Fill, Void or Cavity Material* - Wrap Strip — Nom 3/16 in. (4.8 mm) thick by 1-3/4 in. (44 mm) wide intumescent wrap strip. Four layers of wrap strip continuously wrapped around pipe with ends butted and held in place with tape. Two sets of four wrap strips butted tightly against bottom surface of the floor or both surfaces of wall.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP648-E- W45/1-3/4" Wrap Strip
 - E. Steel Sleeve — Min 0.016 in. (0.4 mm) thick (28 MSG) galv steel sleeve having a min 1 in. lap along longitudinal seam. Length of sleeve to be installed over wrap strip layers, extending 3-1/2 in. to 4 in. (89 to 102 mm) below bottom surface of floor or both surfaces of wall.
 - F. Steel Collar — Steel collar fabricated from coils of precut min 0.016 in. (0.4 mm) thick (No. 28 gauge) galv steel available from fill material manufacturer. Collar shall be nom 1-3/4 in. (44 mm) deep with 1 in. (25 mm) wide by 2 in. (51 mm) long anchor tabs on 2 in. (51 mm) centers for securement to the underside of floor or both surfaces of wall. In addition, collar contains retainer tabs 1/2 in. (13 mm) wide by 3/16 in. (4.8 mm) long, located opposite the anchor tabs. Lower collar shall be tightly wrapped over the sleeve and wrap strip, overlapping min 1 in. (25 mm) at seam and compressed with a min 0.028 in. (0.71 mm) thick stainless steel band located 1 in. (25 mm) above bottom of sleeve. The retainer tabs are prebent 90 deg towards the pipe to retain the wrap strip. A second steel collar shall be tightly wrapped over the lower collar and sleeve with a min 1 in. (25 mm) overlap at seam and compressed with a min 0.028 in. (0.71 mm) thick stainless steel band located 1 in. (25 mm) below floor assembly or from both wall surfaces. Collar secured to bottom surface of the floor by means of min 1/4 in. (6 mm) diam by 1-1/4 (32 mm) in. long steel expansion bolts in conjunction with steel nuts and washers and to the steel cover plate with sheet metal screws in conjunction with steel washers. Collar fastened to floor or wall at every other tab. Collars and steel sleeve secured together with steel sheet metal screws spaced max 4 in. (102 mm) OC.

* 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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