



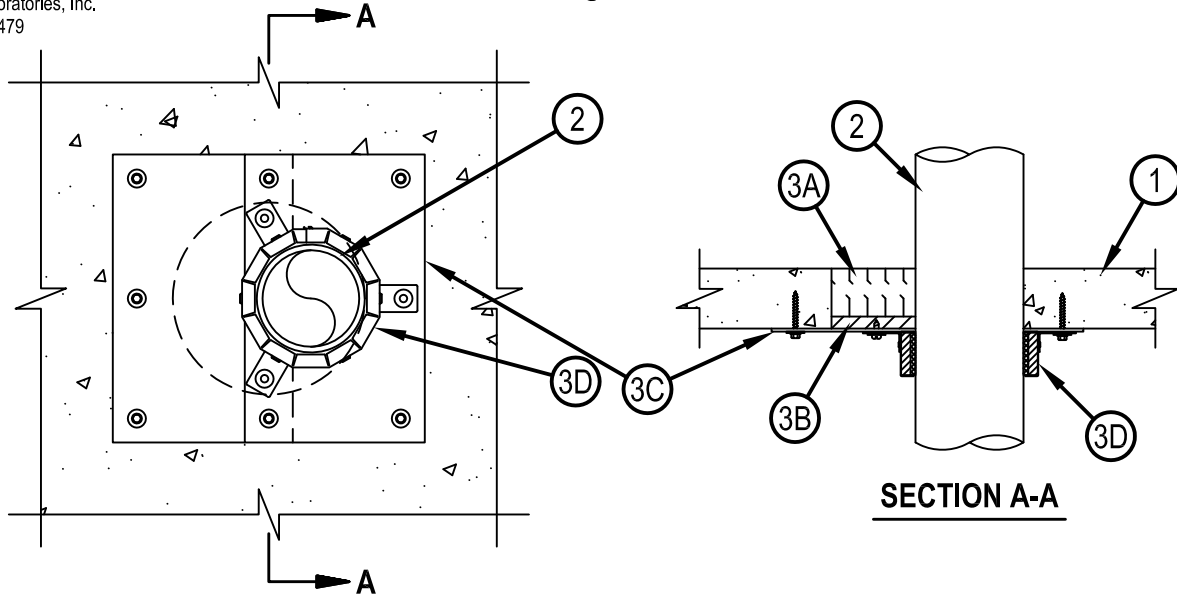
Classified by  
Underwriters Laboratories, Inc.  
to UL 1479

## System No. C-AJ-2631

F Rating — 2 Hr

T Rating — 1 Hr

CAJ 2631



1. Floor or Wall Assembly — Min 2-1/2 in. (64 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m<sup>3</sup>) concrete. Wall may also be constructed of any UL Classified Concrete Blocks\*. Max diam of opening is 8 in. (203 mm). See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Through Penetrants — One nonmetallic pipe to be installed either concentrically or eccentrically within the firestop system. The annular space between pipe and opening shall be min 0 in. (point contact) to max 3-1/2 in. (89 mm). Pipe to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of nonmetallic pipes may be used:
  - A. Polyvinyl Chloride (PVC) Pipe — Nom. 4 in. (102 mm) diam (or smaller) Schedule 40 solid-core or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.
  - B. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 4 in. (102 mm) diam (or smaller) SDR13.5 CPVC pipe for use in closed (process or supply) piping systems.
  - C. Acrylonitrile Butadiene Styrene (ABS) Pipe — Nom 4 in. (102 mm) diam (or smaller) Schedule 40 solid-core or cellular core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
  - D. Flame Retardant Polypropylene (FRPP) Pipe — Nom 4 in. (102 mm) diam (or smaller) Schedule 40 FRPP pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
3. Firestop System — The firestop system shall consist of the following:
  - A. Packing Material — Min 2 in. (51 mm) thickness of min 4 pcf (64 kg/m<sup>3</sup>) mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from bottom surface of floor or both surfaces of wall to accommodate the required thickness of fill material (Item 3B).
  - B. Fill, Void or Cavity Material\* — Sealant — Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with bottom surface of floor or both surfaces of wall.  
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE Intumescent Sealant or FS-ONE MAX Intumescent Sealant
  - C. Metal Cover Plate — Min 28 ga. galv steel rectangular cover plate consisting of two halves with min 2 in. (51 mm) overlap at seam. Cover plate sized to overlap floor or wall surfaces by min 1-1/2 in. (38 mm). Overall length and width of cover plate shall not exceed opening diam plus 4 in. (102 mm). Cover plate cut to an ID that is max 1/4 in. (6 mm) larger than OD of pipe. Installed at underside of floor or both sides of wall between collar and floor or wall surfaces. Secured to floor or wall surfaces with min 1/4 in. (6 mm) diam by min 1-1/4 in. (32 mm) long steel expansion bolts or min 0.145 in. (3.7 mm) diam by 1-1/4 in. (32 mm) long powder actuated fasteners utilizing a 1-7/16 in. (36 mm) diam by 1/16 in. (1.6 mm) thick steel washer. As alternates to the anchors specified above, Hilti 1/4 in. (6 mm) diam by 1-1/4 in. (32 mm) long KWIK-CON II+ concrete screw anchor, or Hilti 1/4 in. (6 mm) diam by 1-3/4 in. (44 mm) long KWIK-BOLT 3 steel expansion anchor or Hilti X-DNI 27 P8 S15 powder actuated floor pin with integral nom 9/16 in. (14 mm) diam washer may be used. One fastener required at each corner of cover plate and at each end of seam. Intermediate fasteners shall be provided around periphery of plate such that spacing between fasteners does not exceed 5 in. (127 mm).



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D. Firestop Device\* — Firestop Collar — Firestop collar to be sized for nom diam of penetrant and to be installed in accordance with the accompanying installation instructions. Collar to be installed and latched around the pipe and secured to the cover plate at underside of floor or both sides of wall using the anchor hooks provided with the collar. (Minimum 2 anchor hooks for 1-1/2 and 2 in. (38 and 51 mm) diam pipes, 3 anchor hooks for 3 and 4 in. (76 and 102 mm) diam pipes). The anchor hooks are to be secured to metal cover plate with no. 8 x 3/8 in. (10 mm) long or no. 10 x 1/2 in. (13 mm) long self tapping steel screws with min 1/2 in. (13 mm) diam steel washers. For anchor hooks located over concrete floor or wall, hooks are to be secured through the cover plate and into the concrete with min 1/4 in. (6 mm) diam by min 1-1/4 in. (32 mm) long steel expansion bolts or min 0.145 in. (3.7 mm) diam by 1-1/4 in. (32 mm) long powder actuated fasteners utilizing a 1-7/16 in. (36 mm) diam by 1/16 in. (1.6 mm) thick steel washer or Hilti 1/4 in. (6 mm) diam by 1-1/4 in. (32 mm) long KWIK-CON II+ concrete screw anchor, or Hilti 1/4 in. (6 mm) diam by 1-3/4 in. (44 mm) long KWIK-BOLT 3 steel expansion anchor or Hilti X-DNI 27 P8 S15 powder actuated floor pin with integral nom 9/16 in. (14 mm) diam washer.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 643 50/1.5"N, CP 643 63/2"N, CP 643 90/3"N, CP 643 110/4"N Firestop Collar.

\* 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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