



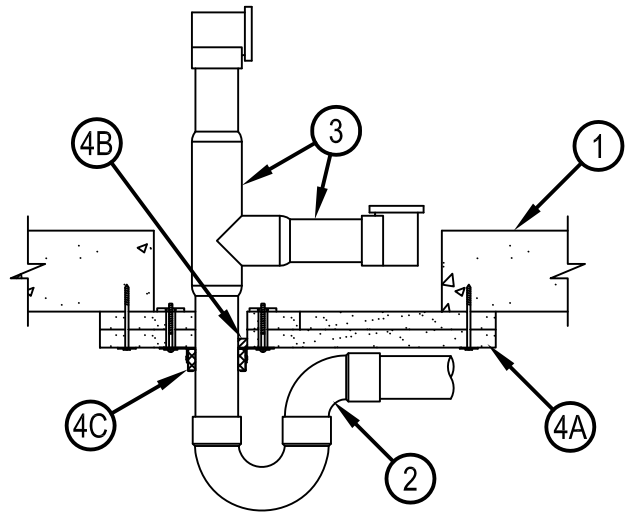
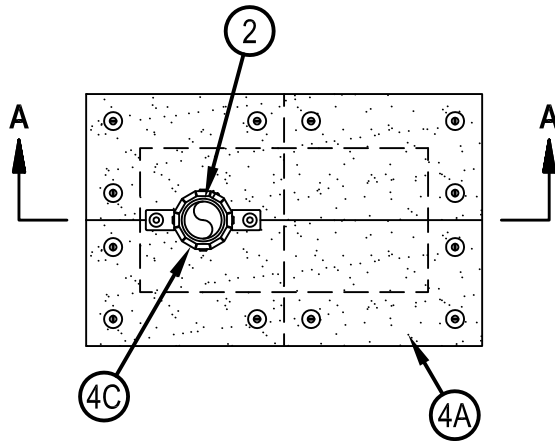
Classified by
Underwriters Laboratories, Inc.
to UL 1479

System No. F-A-2209

F Rating — 2 Hr

T Rating — 2 Hr

FA 2209



SECTION A-A

1. Floor Assembly — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. Maximum area of opening is 128 in² (826 cm²) with maximum dimension of 18 in. (457 mm).
2. Drain Piping — Nom 2 in. (51 mm) diam (or smaller) solid or cellular core Schedule 40 polyvinyl chloride (PVC) drain piping, with the appropriate fittings/bushings for connection to the waste/overflow piping/fitting, cemented together and routed through the firestop system. The annular space between drain piping and periphery of opening in floor shall be min 1/2 in. (13 mm). Drain piping rigidly supported below floor with suitable hangers.
3. Waste/Overflow Fitting — Nom 2 in. (51 mm) diam (or smaller) solid or cellular core Schedule 40 polyvinyl chloride (PVC) waste/overflow piping and fitting cemented together and cemented to drain piping.
4. Firestop System — The details of the firestop systems shall be as follows:
 - A. Firestop Device* — Board — Two layers of board to be installed at bottom of floor. Each layer of board to be cut in half and installed to wrap around drain piping, with seams in board layers located perpendicular to each other. Outside dimensions of board to be 6 in. (152 mm) greater than opening dimension such that overlap of board to concrete around periphery of opening is min 3 in. (76 mm). The annular space between the drain piping and the periphery of opening through board shall be min 0 in. (point contact) to max 1/4 in. (6 mm). Min 1/4 in. (6 mm) bead of fill material (Item 4B) to be applied to cut edge of board in each layer prior to butting together. Min 1/4 in. (6 mm) bead of fill material (Item 4B) to be applied around periphery of opening prior to installing first layer of board at bottom of floor. Double layer of board attached to concrete around perimeter of opening using min 3/16 in. (5 mm) diam by 2-1/4 in. (57 mm) long steel concrete screw anchors with 1-1/4 in. (32 mm) OD steel washers. Anchors to be located at each corner of board, and within 3/4 in. (19 mm) at each side of seam in both layers of board, and spaced maximum 6 in. (152 mm) OC in between.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 675T Firestop Board
 - B. Fill, Void or Cavity Materials* — Sealant — Min 1/2 in. (13 mm) thickness of fill material applied within the annulus between drain piping and periphery of opening in board (Item 4A), flush with bottom surface of bottom layer of board (Item 4A).
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE Sealant or FS-ONE MAX Intumescent Sealant
 - C. Firestop Device* — Firestop Collar — Firestop collar shall be sized for nom diam of penetrant and installed in accordance with the accompanying installation instructions. Collar to be installed and latched around the pipe at bottom of opening and secured to board (Item 4A) using min two anchor hooks provided with the collar. The anchor hooks are to be secured with min 1/8 in. (3 mm) diam by 3 in. (76 mm) long toggle bolts
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 643 50/1.5"N or CP643 63/2"

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



Hilti Firestop Systems

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