

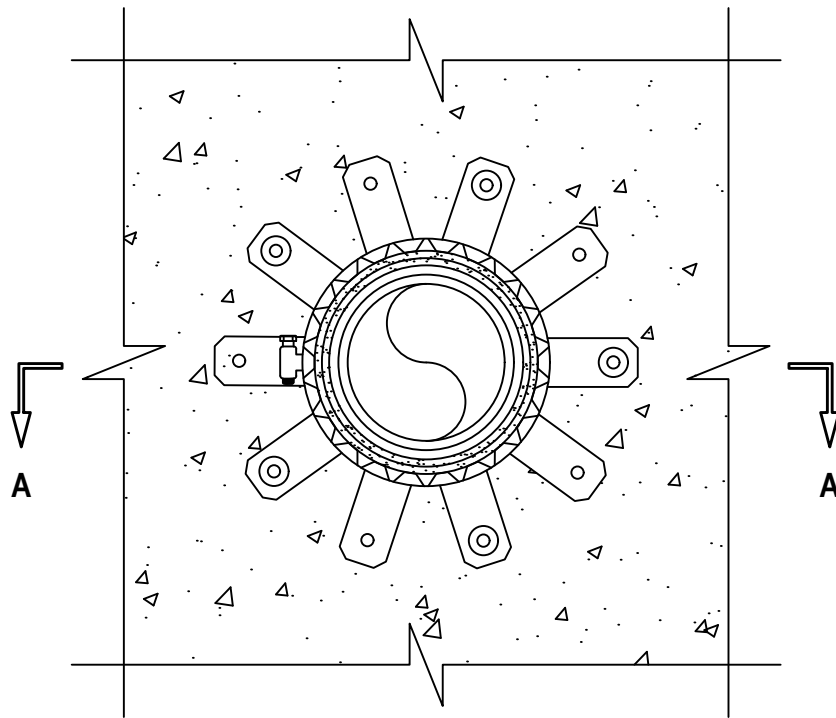
UL SYSTEM NO. C-AJ-2336

**PLASTIC PIPE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL**

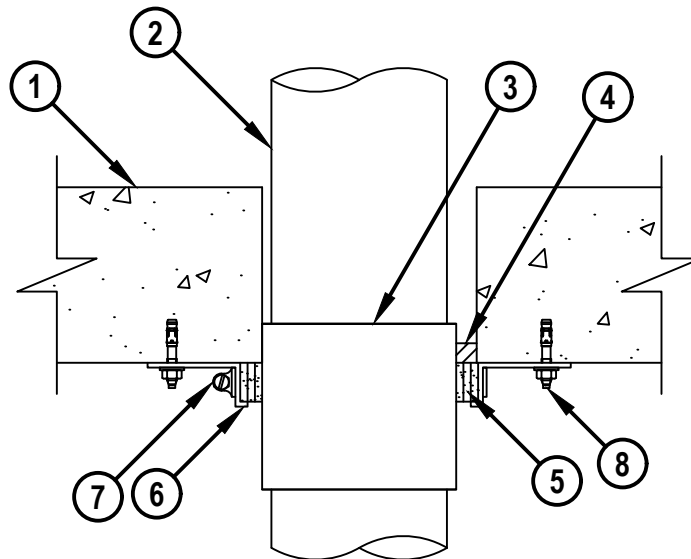
F-RATING = 3-HR.

T-RATING = 2-HR.

**BOTTOM VIEW**



**SECTION A-A**



CAJ2336g.010317



Hilti Firestop Systems

HILTI, Inc.  
Plano, Texas USA (800) 879-8000

Sheet	1 of 2
Scale	13/64" = 1"
Date	Jan. 03, 2017

Drawing No.

**CAJ  
2336g**

*Saving Lives through Innovation and Education*

**PLASTIC PIPE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL**

F-RATING = 3-HR.

T-RATING = 2-HR.

CAJ2336g.010317

1. CONCRETE FLOOR OR WALL ASSEMBLY (3-HR. FIRE-RATING) :
  - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR OR WALL (MINIMUM 4-1/2" THICK).
  - B. ANY UL CLASSIFIED CONCRETE BLOCK WALL.
2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING :
  - A. MAXIMUM 4" NOMINAL DIAMETER PVC PLASTIC PIPE (CELLULAR OR SOLID CORE).
  - B. MAXIMUM 4" NOMINAL DIAMETER ABS PLASTIC PIPE (CELLULAR OR SOLID CORE).
  - C. MAXIMUM 4" NOMINAL DIAMETER CPVC PLASTIC PIPE (CLOSED PIPING SYSTEM ONLY).
  - D. MAXIMUM 4" NOMINAL DIAMETER FRPP PLASTIC PIPE.
3. [OPTIONAL] NOMINAL 4" DIAMETER PIPE COUPLING TO EXTEND MAXIMUM 1" INTO OPENING OF FLOOR ASSEMBLY OR EITHER SIDE OF WALL ASSEMBLY.
4. MINIMUM 1/2" DEPTH HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT FLUSH WITH TOP OR BOTTOM SURFACE OF FLOOR.
5. HILTI CP 648E WRAP STRIP CONTINUOUSLY WRAPPED AROUND THE OUTER CIRCUMFERENCE OF THE PIPE, AS SPECIFIED IN TABLE BELOW, WITH ENDS BUTTED AND HELD IN PLACE WITH TAPE. BUTTED ENDS IN SUCCESSIVE LAYER SHALL BE OFFSET.
6. HILTI RETAINING COLLAR WRAPPED OVER WRAP STRIPS, OVERLAPPING MINIMUM 1".
7. NOMINAL 1/2" WIDE STAINLESS STEEL HOSE CLAMP(S) FASTENED AT MID-HEIGHT OF HILTI RETAINING COLLAR.
8. EVERY OTHER TAB OF RETAINING COLLAR SECURED TO BOTTOM OF FLOOR WITH 1/4" x 1-1/4" LONG STEEL EXPANSION BOLTS, 3/16" x 1-1/2" LONG CONCRETE SCREW ANCHORS, MIN. 0.145" x 1-1/4" POWDER ACTUATED FASTENERS WITH 1-7/16" DIAMETER STEEL WASHER, 1/4" x 1-1/4" HILTI KWIK-CON II+ CONCRETE SCREW ANCHOR, 1/4" x 1-3/4" HILTI KWIK-BOLT 3 STEEL EXPANSION ANCHOR, OR HILTI X-DNI 27 P8 S15 POWDER ACTUATED FASTENER WITH INTEGRATED WASHER.

MAXIMUM PIPE DIAMETER	PRODUCT DESCRIPTION	NO. OF LAYERS OF CP 648E
3"	CP 648E W25/1"	2
3"	CP 648E W45/1-3/4"	1
4"	CP 648E W25/1"	3
4"	CP 648E W45/1-3/4"	2

- NOTES :**
1. MAXIMUM DIAMETER OF OPENING = 5-1/2".
  2. ANNULAR SPACE BETWEEN PLASTIC PIPE/COUPLING AND PERIPHERY OF OPENING = MINIMUM 0", MAXIMUM 1/2".
  3. CLOSED OR VENTED PIPING SYSTEM (PVC, ABS, FRPP = SCHEDULE 40; CPVC = SDR 13.5).
  4. HILTI CP 648E WRAP STRIP WITH RETAINING COLLAR AND HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT ARE REQUIRED ON EACH SIDE OF A WALL ASSEMBLY.



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