

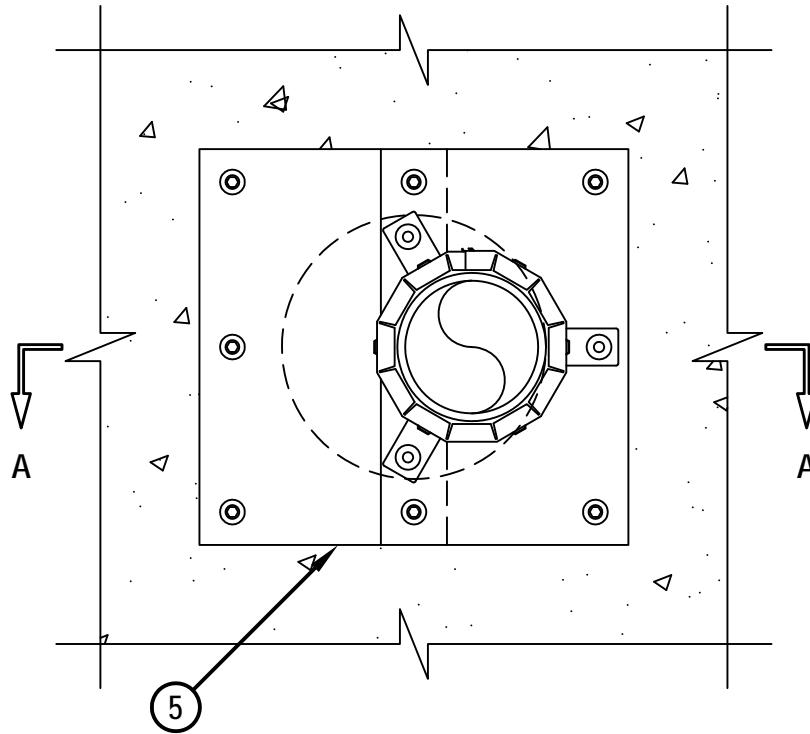
UL SYSTEM NO. C-AJ-2631

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

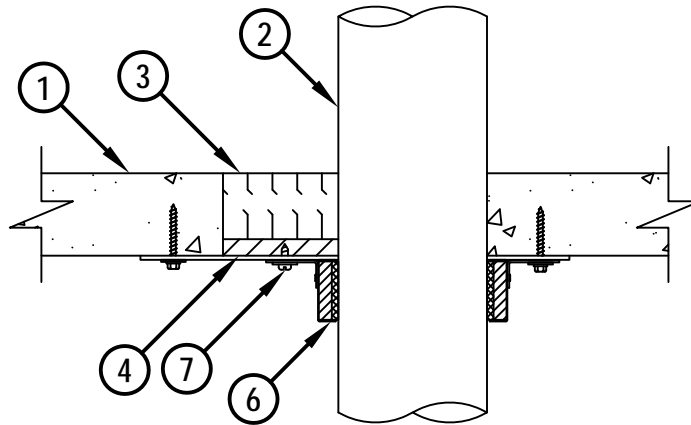
F-RATING = 2-HR.

T-RATING = 1-HR.

**BOTTOM VIEW**



**SECTION A-A**



CAJ2631b.010515



HILTI, Inc.  
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Sheet	1 of 2
Scale	1 1/64" = 1"
Date	Jan. 05, 2015

Drawing No.  
**CAJ  
2631b**

**Saving Lives through Innovation and Education**

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

F-RATING = 2-HR.

T-RATING = 1-HR.

CAJ2631b.010515

1. CONCRETE FLOOR OR WALL ASSEMBLY (2-HR. FIRE-RATING) :
  - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR OR WALL (MINIMUM 2-1/2" 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 CPVC PLASTIC PIPE (CLOSED PIPING SYSTEM ONLY).
  - C. MAXIMUM 4" NOMINAL DIAMETER ABS PLASTIC PIPE (CELLULAR OR SOLID CORE).
  - D. MAXIMUM 4" NOMINAL DIAMETER FRPP PLASTIC PIPE.
3. MINIMUM 2" THICKNESS MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED, RECESSED FROM BOTTOM SURFACE OF FLOOR, OR BOTH SURFACES OF WALL, TO ACCOMMODATE SEALANT.
4. MINIMUM 1/2" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT.
5. SHEET METAL COVER PLATE (MIN. 28 GA.) CONSISTING OF TWO HALVES WITH A MINIMUM 2" OVERLAP AT SEAM. COVER PLATE SIZED TO OVERLAP ONTO ASSEMBLY BY MINIMUM 1-1/2". THE OVERALL LENGTH AND WIDTH OF COVER PLATE NOT TO EXCEED OPENING DIAMETER PLUS 4". INSIDE DIAMETER OF COVER PLATE SHOULD BE MAXIMUM 1/4" LARGER THAN OUTSIDE DIAMETER OF PIPE. COVER PLATE SECURED TO UNDERSIDE OF CONCRETE FLOOR, OR BOTH SIDES OF WALL, WITH MINIMUM 1/4" DIAMETER BY MINIMUM 1-1/4" LONG STEEL EXPANSION BOLTS, MINIMUM 0.145" DIAMETER BY 1-1/4" LONG POWDER ACTUATED FASTENERS UTILIZING A 1-7/16" DIAMETER BY 1/16" THICK STEEL WASHER, HILTI 1/4" DIAMETER BY 1-1/4" LONG KWIK-CON II+ CONCRETE SCREW ANCHOR, OR HILTI 1/4" DIAMETER BY 1-3/4" LONG KWIK-BOLT 3 STEEL EXPANSION ANCHOR, OR HILTI X-DNI 27 P8 S15 POWDER ACTUATED FASTENER WITH INTEGRAL 9/16" DIAMETER WASHER. FASTENERS TO BE SPACED 5" O/C WITH ONE FASTENER REQUIRED AT EACH CORNER OF COVER PLATE AND AT EACH END OF SEAM.
6. HILTI CP 643N FIRESTOP COLLAR WITH FASTENING HOOKS.
7. FASTENING HOOKS TO BE SECURED TO METAL COVER PLATE WITH NO. 8 x 3/8" LONG OR NO. 10 x 1/2" LONG SELF TAPPING STEEL SCREWS WITH MINIMUM 1/2" DIAMETER STEEL WASHERS. FASTENING HOOKS TO BE SECURED TO CONCRETE FLOOR OR WALL WITH MINIMUM 1/4" DIAMETER BY MINIMUM 1-1/4" LONG STEEL EXPANSION BOLTS, MINIMUM 0.145" DIAMETER BY 1-1/4" LONG POWDER ACTUATED FASTENERS UTILIZING A 1-7/16" DIAMETER BY 1/16" THICK STEEL WASHER, HILTI 1/4" DIAMETER BY 1-1/4" LONG KWIK-CON II+ CONCRETE SCREW ANCHOR, OR HILTI 1/4" DIAMETER BY 1-3/4" LONG KWIK-BOLT 3 STEEL EXPANSION ANCHOR, OR HILTI X-DNI 27 P8 S15 POWDER ACTUATED FASTENER WITH INTEGRAL 9/16" DIAMETER WASHER.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 8".  
 2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 3-1/2".  
 3. CLOSED OR VENTED PIPING SYSTEM (PVC, ABS, FRPP = SCH 40; CPVC = SDR 13.5).  
 4. HILTI CP 643N FIRESTOP COLLARS, SHEET METAL COVER PLATE, AND HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT ARE REQUIRED ON BOTH SIDES OF A WALL.



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