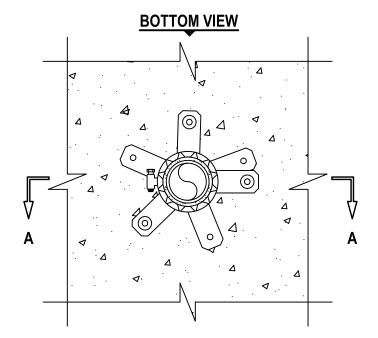
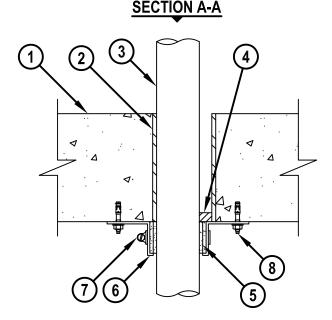
UL SYSTEM NO. C-BJ-2016

PLASTIC PIPE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL ASSEMBLY

F-RATING = 4-HR. T-RATING = 2-HR.





- 1. CONCRETE FLOOR ASSEMBLY OR WALL ASSEMBLY (4-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR OR WALL (MINIMUM 6" THICK).
 - **B. ANY UL CLASSIFIED CONCRETE BLOCK WALL.**
- 2. MAXIMUM 3" NOMINAL DIAMETER STEEL PIPE SLEEVE (SCHEDULE 40).
- 3. MAXIMUM 2" NOMINAL DIAMETER PVDF PLASTIC PIPE (SCHEDULE 40) (CLOSED OR VENTED PIPING SYSTEM).
- 4. MINIMUM 1/2" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT.
- 5. HILTI CP 648E WRAP STRIP (NOMINAL 3/16" THICK x 1-3/4" WIDE) CONTINUOUSLY WRAPPED AROUND THE OUTER CIRCUMFERENCE OF THE PIPE, COVERING TWO TIMES, WITH ENDS BUTTED AND HELD IN PLACE WITH TAPE.
- 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 1-3/4" LONG STEEL EXPANSION BOLTS, 3/16" x 1-3/4" LONG STEEL CONCRETE SCREW ANCHORS OR 0.145 DIAMETER x 1-1/4" LONG POWDER ACTUATED FASTENERS IN CONJUNCTION WITH 1-7/16" DIAMETER STEEL WASHERS (EX. HILTI KWIK-BOLT 3, KWIK-CON OR DX PINS).
 - NOTES: 1. MAXIMUM DIAMETER OF OPENING = 3".
 - 2. ANNULAR SPACE = MINIMUM 0". MAXIMUM 5/8".
 - 3. HILTI CP 648E WRAP STRIP WITH RETAINING COLLAR AND FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT ARE REQUIRED ON EACH SIDE OF A WALL ASSEMBLY.



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Scale	3/16" = 1"
Date	Jan. 06, 2015

CBJ 2016c

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