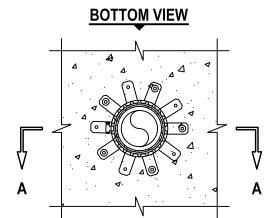
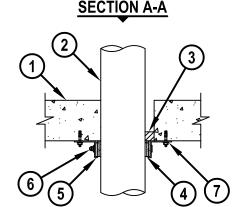
## **UL SYSTEM NO. C-AJ-2599**

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

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





- 1. CONCRETE FLOOR OR WALL ASSEMBLY (2-HR. FIRE-RATING):
  - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 4-1/2" THICK).
  - B. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 5" THICK).
  - C. PRECAST (HOLLOW-CORE) CONCRETE FLOOR (MINIMUM 6" THICK).
  - D. ANY UL CLASSIFIED CONCRETE BLOCK WALL.
- 2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING:
  - A. MAXIMUM 5" [127mm] NOMINAL DIAMETER FUSIOTHERM® (SDR 11 OR SDR 7.4 WITH FASER) PP PLASTIC PIPE (MANUFACTURED BY AQUATHERM, INC.) (CLOSED OR VENTED PIPING SYSTEM).
  - B. MAXIMUM 4" [125mm] NOMINAL DIAMETER POLYSTAR™ CT-WHITE (SDR 11, SDR 9, OR SDR 7.4) PP PLASTIC PIPE (MANUFACTURED BY ORION) (CLOSED PIPING SYSTEM).
- 3. MINIMUM 1" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT.
- 4. HILTI CP 648E WRAP STRIP (NOMINAL 3/16" THICK x 1-3/4" WIDE CONTINUOUSLY WRAPPED AROUND THE OUTER CIRCUMFERENCE OF THE PIPE, COVERING THREE TIMES, WITH ENDS BUTTED AND HELD IN PLACE WITH TAPE. WRAP STRIP TO BE BUTTED TIGHTLY AGAINST BOTTOM SURFACE OF FLOOR.
- 5. HILTI 1-3/4" RETAINING COLLAR WRAPPED OVER THE WRAP STRIPS, OVERLAPPING MINIMUM 1".
- 6. NOMINAL 1/2" WIDE STAINLESS STEEL HOSE CLAMP FASTENED AT MID-HEIGHT OF RETAINING COLLAR.
- 7. EVERY OTHER TAB OF RETAINING COLLAR SECURED TO BOTTOM OF FLOOR WITH 1/4" x 1-1/4" LONG STEEL EXPANSION BOLTS, 1-1/4" LONG STEEL CONCRETE SCREW ANCHORS, OR 0.145" DIAMETER x 1-1/4" LONG POWDER ACTUATED FASTENERS IN CONJUNCTION WITH 9/16" DIAMETER STEEL WASHERS, 1/4" x 1-3/4" LONG HILTI KWIK-BOLT 3, 1/4" x 1-1/4" LONG KWIK-CON II, OR HILTI X-DNI 27 P8S15 POWDER ACTUATED FASTENERS WITH INTEGRATED WASHERS.

NOTES: 1. MAXIMUM DIAMETER OF OPENING = 6".

- 2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 1".
- 3. HILTI CP 648E WRAP STRIP WITH RETAINING COLLAR, AND HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT ARE REQUIRED ON BOTH SIDES OF A WALL.



HILTI, Inc. Tulsa, Oklahoma USA (800) 879-8000

Sheet	1 of 1
Scale	3/32" = 1"
Date	Jan. 05, 2015

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