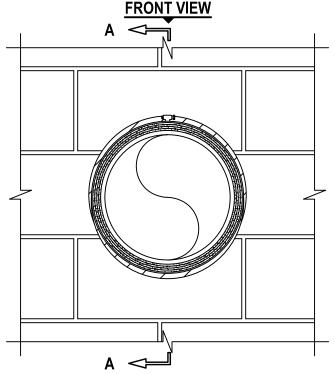
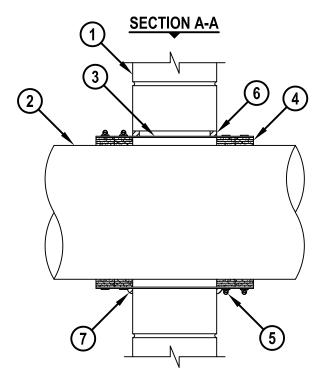
UL SYSTEM NO. W-J-2121

PLASTIC PIPE THROUGH CONCRETE WALL OR BLOCK WALL ASSEMBLY

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





- 1. CONCRETE WALL ASSEMBLY (2-HR. FIRE-RATING):
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 6" THICK).
 - **B. ANY UL CLASSIFIED CONCRETE BLOCK WALL.**
- 2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING:
 - A. MAXIMUM 12" NOMINAL DIAMETER PVC PLASTIC PIPE (CELLULAR OR SOLID CORE).
 - B. MAXIMUM 12" NOMINAL DIAMETER CPVC PLASTIC PIPE (CLOSED PIPING SYSTEM ONLY).
- 3. MAXIMUM 14-1/2" NOMINAL DIAMETER SHEET METAL SLEEVE (MIN. 28 GA. STEEL) HAVING A MIN. 2" LAP ALONG LONGITUDINAL SEAM. LENGTH OF SLEEVE TO EXTEND 3-1/2" BEYOND EACH SURFACE OF WALL.
- 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 FOUR TIMES, WITH ENDS BUTTED AND HELD IN PLACE WITH TAPE. TWO SETS OF WRAP STRIP INSTALLED WITHIN THE STEEL SLEEVE ON EACH SIDE OF THE WALL.
- 5. NOMINAL 1/2" WIDE STAINLESS STEEL HOSE CLAMPS FASTENED AROUND SHEET METAL SLEEVE AT THE CENTER OF EACH WRAP STRIP.
- 6. MINIMUM 5/8" DEPTH HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT.
- 7. MINIMUM 1/2" BEAD HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT APPLIED AT POINT OF CONTACT.

NOTES: 1. MAXIMUM DIAMETER OF OPENING = 15".

- 2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 3/4".
- 3. CLOSED OR VENTED PIPING SYSTEM (PVC = SCH 40; CPVC = SDR 13.5).



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Sheet	1 of 1
Scale	7/64" = 1"
Date	Nov. 16, 2016

WJ 2121d

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