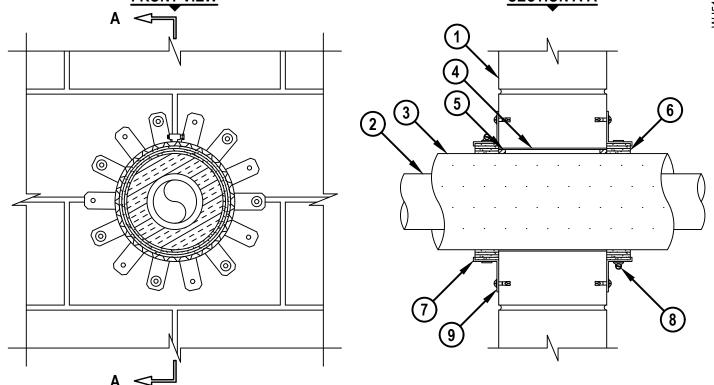
UL SYSTEM NO. W-J-5192 INSULATED PLASTIC PIPE THROUGH CONCRETE WALL OR CONCRETE BLOCK WALL ASSEMBLY F-RATING = 2-HR. T-RATING = 2-HR. SECTION A-A 4 5 6





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Scale	9/64" = 1"
Date	Sep. 15, 2017

WJ 5192b

UL SYSTEM NO. W-J-5192

INSULATED PLASTIC PIPE THROUGH CONCRETE WALL OR CONCRETE BLOCK WALL ASSEMBLY

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

WJ5192b.091517

- 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. MAXIMUM 4" NOMINAL DIAMETER PEX TUBING (SDR 9) (UPONOR AQUAPEX OR HEPEX) (CLOSED PIPING SYSTEM ONLY).
- 3. NOMINAL 1-1/2" THICK GLASS-FIBER PIPE INSULATION.
- 4. [OPTIONAL] MAXIMUM 7-5/8" DIAMETER STEEL SLEEVE (MIN. 28 GA. SHEET METAL) HAVING A MINIMUM 1" OVERLAP ALONG THE LONGITUDINAL SEAM.
- 5. MINIMUM 1/2" DEPTH HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT.
- 6. HILTI CP 648E WRAP STRIP (NOMINAL 3/16" THICK x 1-3/4" WIDE) CONTINUOUSLY WRAPPED AROUND THE OUTER CIRCUMFERENCE OF THE PIPE INSULATION, AS SPECIFIED IN THE TABLE BELOW, AND HELD IN PLACE WITH TAPE.
- 7. HILTI 1-3/4" RETAINING COLLAR WRAPPED OVER WRAP STRIPS, OVERLAPPING MINIMUM 1".
- 8. NOMINAL 1/2" WIDE STAINLESS STEEL HOSE CLAMP(S) FASTENED AT MID-HEIGHT OF RETAINING COLLAR (SEE NOTE NO. 3 BELOW).
- 9. EVERY OTHER TAB OF RETAINING COLLAR SECURED TO WALL WITH 1/4" x 1-1/4" LONG STEEL EXPANSION BOLTS, 1-1/4" LONG CONCRETE SCREW ANCHORS OR MIN. 0.145" x 1-1/4" LONG POWDER ACTUATED FASTENERS WITH 9/16" DIA. STEEL WASHERS, 1/4" x 1-1/4" LONG HILTI KWIK-CON II+ CONCRETE SCREW ANCHOR, 1/4" x 1-3/4" LONG HILTI KWIK-BOLT 3 STEEL EXPANSION ANCHOR, OR HILTI X-U 27 P8 S15 POWDER ACTUATED FASTENER WITH INTEGRAL WASHER.

NOMINAL PIPE DIAMETER	NO. OF LAYERS OF CP 648E
3" (OR SMALLER)	3
4"	4

NOTES: 1. MAXIMUM DIAMETER OF OPENING = 7-5/8".

- 2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 1/8".
- 3. AS AN ALTERNATIVE TO COLLAR CLAMP (ITEM 8) COLLAR MAY BE SECURED TOGETHER WITH TWO SHEET METAL SCREWS THROUGH THE OVERLAPPING PORTION OF THE COLLAR.

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Scale	•
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