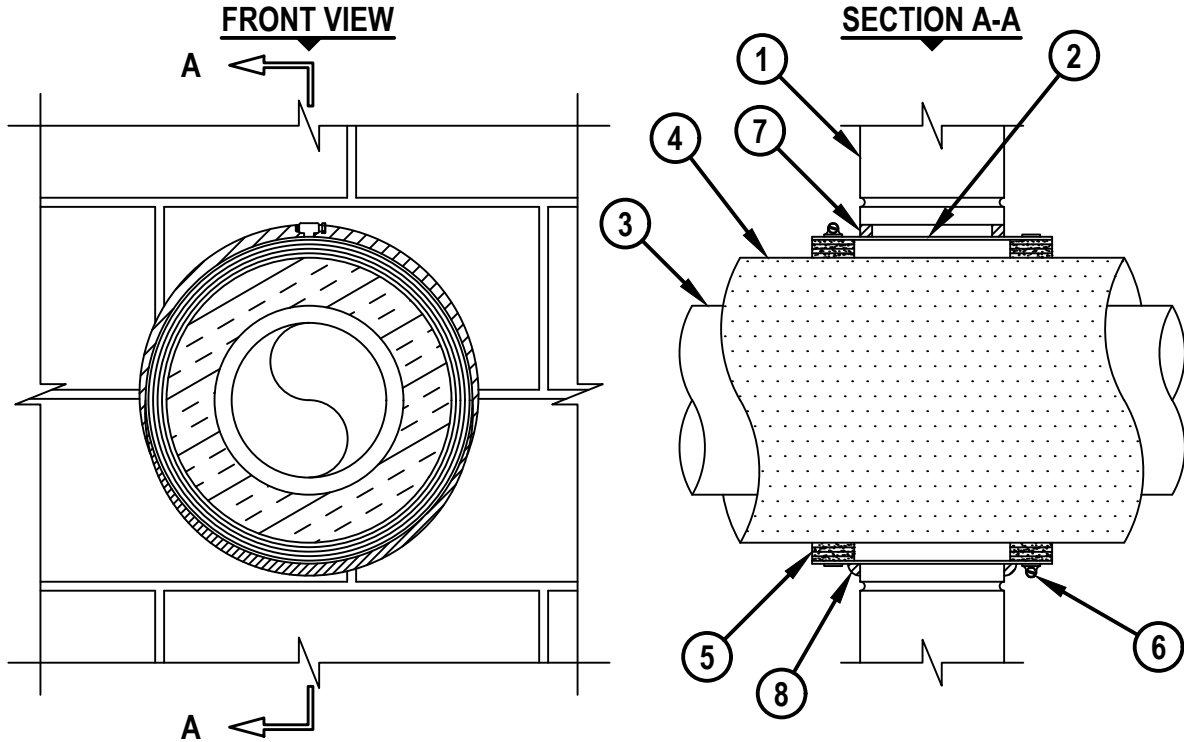


**INSULATED PLASTIC PIPE THROUGH CONCRETE WALL OR CONCRETE BLOCK WALL ASSEMBLY**

F-RATING = 2-HR.

T-RATING = 0-HR., 1-HR., OR 2-HR.



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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 13-1/2" DIAMETER STEEL SLEEVE (MIN. 28 GA. SHEET METAL) WITH 1" OVERLAP ALONG LONGITUDINAL SEAM. SLEEVE TO EXTEND MAXIMUM 2" BEYOND WALL SURFACES.
3. MAXIMUM 8" (200 mm) DIAMETER AQUATHERM BLUEPIPE PP (SDR 11) (CLOSED PIPING SYSTEM).
4. PIPE INSULATION TO CONSIST OF ONE OF THE FOLLOWING :
  - A. NOMINAL 2" THICK CELLULAR GLASS PIPE INSULATION.
  - B. NOMINAL 1" THICK GLASS-FIBER PIPE INSULATION.
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 FOUR TIMES, WITH ENDS BUTTED AND HELD IN PLACE WITH TAPE. WRAP STRIP INSERTED INTO SLEEVE, FLUSH WITH SLEEVE ENDS ON BOTH SIDES OF WALL.
6. NOMINAL 1/2" WIDE STAINLESS STEEL HOSE CLAMP SECURED TO THE SLEEVE AT CENTER OF EACH WRAP STRIP.
7. MINIMUM 1/2" DEPTH HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT.
8. MINIMUM 1/2" BEAD HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT APPLIED AT POINT OF CONTACT.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 14".  
 2. ANNULAR SPACE [AROUND SLEEVE] = MINIMUM 0", MAXIMUM 1/2".



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Sheet	1 of 1
Scale	1/8" = 1"
Date	Apr. 20, 2018

Drawing No.

**WJ**  
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