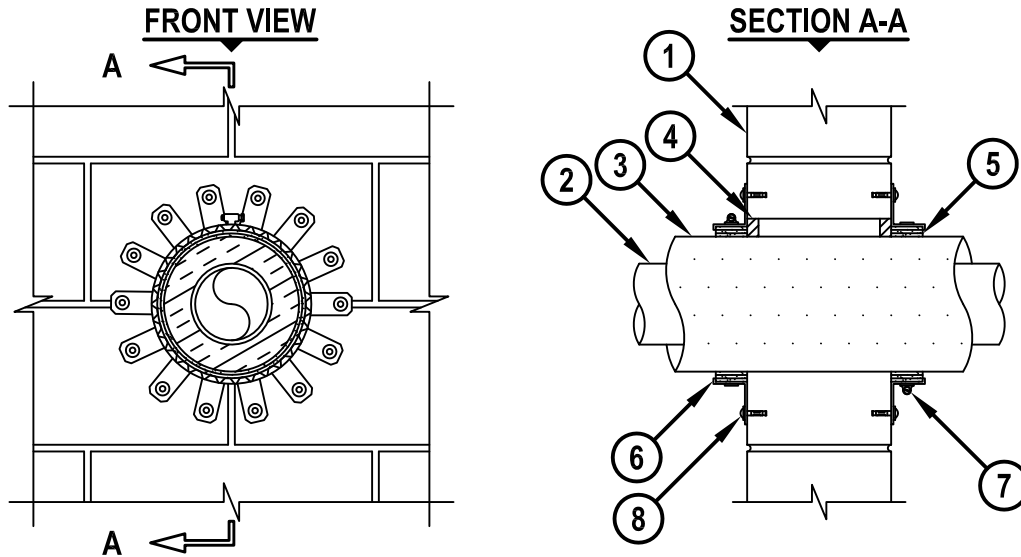


**INSULATED PLASTIC PIPE THROUGH CONCRETE WALL OR CONCRETE BLOCK WALL**

F-RATING = 2-HR.

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

WJ5145b.010915



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 4" NOMINAL DIAMETER PVC PLASTIC PIPE (SCHEDULE 40) (CELLULAR OR SOLID CORE) (CLOSED OR VENTED PIPING SYSTEM).
  - B. MAXIMUM 4" NOMINAL DIAMETER CPVC PLASTIC PIPE (SDR 13.5) (CLOSED PIPING SYSTEM ONLY).
3. PIPES MAY BE INSULATED WITH NOMINAL 1-1/2" THICK GLASS-FIBER PIPE INSULATION OR WITH MAXIMUM 1" THICK AB/PVC PIPE INSULATION.
4. MINIMUM 5/8" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT.
5. HILTI CP 648E FIRESTOP WRAP STRIPS (NOMINAL 3/16" THICK x 1-3/4" WIDE) CONTINUOUSLY WRAPPED AROUND THE OUTER CIRCUMFERENCE OF THE PIPE, AS SPECIFIED IN TABLE BELOW, WITH ENDS BUTTED AND HELD IN PLACE WITH TAPE.
6. HILTI 1-3/4" RETAINING COLLAR WRAPPED OVER WRAP STRIP, OVERLAPPING MINIMUM 1".
7. NOMINAL 1/2" WIDE STAINLESS STEEL HOSE CLAMP(S) FASTENED AT MID-HEIGHT OF RETAINING COLLAR.
8. EVERY TAB OF RETAINING COLLAR SECURED TO WALL WITH 1-1/4" LONG MASONRY ANCHORS IN CONJUNCTION WITH 1-1/4" DIAMETER FENDER WASHERS.

NOMINAL PIPE DIAMETER	NO. OF LAYERS OF CP 648E
2" (OR SMALLER)	1
4" (OR SMALLER)	3

**NOTES :** 1. MAXIMUM DIAMETER OF OPENING = 8-1/2".  
 2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 1".



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Sheet	1 of 1
Scale	3/32" = 1"
Date	Jan. 09, 2015

Drawing No.  
**WJ**  
**5145b**