

# PVC PLASTIC SHOWER DRAIN THROUGH CONCRETE FLOOR ASSEMBLY

F-RATING = 3-HR.

T-RATING = 0-HR. OR 2-HR. (SEE NOTE NO. 1 BELOW)

L-RATING AT AMBIENT = LESS THAN 1 CFM / SQ FT

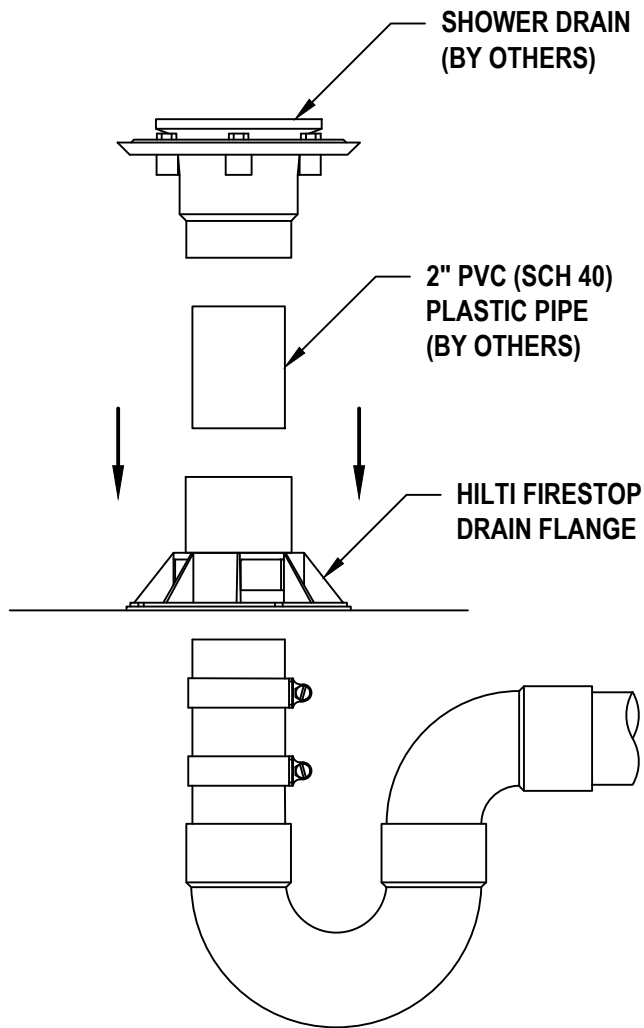
L-RATING AT 400° F = LESS THAN 1 CFM / SQ FT

W-RATING = CLASS I

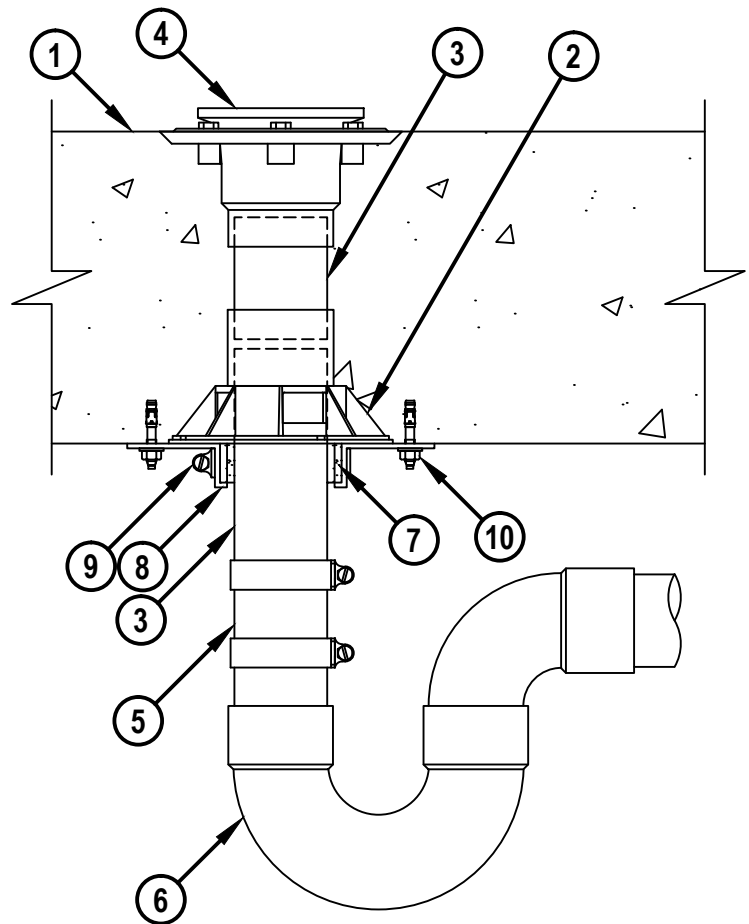
NOTE : TESTED WITH A 50 Pa PRESSURE DIFFERENTIAL

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## INSTALLATION PROCEDURE



## CROSS-SECTIONAL VIEW



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1. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR ASSEMBLY (MINIMUM 4-1/2" THICK) (3-HR. FIRE-RATING).
2. HILTI FIRESTOP DRAIN FLANGE CAST OR GROUTED IN CONCRETE FLOOR ASSEMBLY TO CONSIST OF ONE OF THE FOLLOWING:
  - A. HILTI CP 681 75/2" N TUB BOX FLANGE.
  - B. HILTI CP 681 SD-FD FIRESTOP DRAIN FLANGE (SEE NOTE NO. 2 BELOW).
3. NOMINAL 2" DIAMETER PVC PLASTIC DRAIN PIPE (SCHEDULE 40) (CELLULAR OR SOLID CORE) CEMENTED INTO HILTI FIRESTOP DRAIN FLANGE WITH PVC GLUE (PROVIDED BY OTHERS).
4. PVC PLASTIC SHOWER FITTING WITH CHROMED STEEL STRAINER (SIZED TO ACCOMMODATE PIPE) CEMENTED IN PVC DRAIN PIPE (PROVIDED BY OTHERS).
5. [OPTIONAL] NOMINAL 2" DIAMETER (MIN. 32 GA.) CORRUGATED STAINLESS STEEL SHIELDED RUBBER NO-HUB CONNECTOR.
6. [OPTIONAL] NOMINAL 2" DIAMETER CAST IRON PIPE AND P-TRAP SECURED TO PVC PIPE WITH NO-HUB COUPLER.
7. [OPTIONAL] HILTI CP 648E WRAP STRIP (NOMINAL 3/16" THICK x 1" WIDE) CONTINUOUSLY WRAPPED AROUND THE OUTER CIRCUMFERENCE OF THE PIPE, COVERING TWO TIMES, WITH ENDS BUTTED AND HELD IN PLACE WITH TAPE (SEE NOTE NO. 2 BELOW).
8. [OPTIONAL] HILTI 1" RETAINING COLLAR WRAPPED OVER WRAP STRIPS, OVERLAPPING MINIMUM 1" (SEE NOTE NO. 2 BELOW).
9. HILTI RETAINING COLLAR CLAMP FASTENED AT MID-HEIGHT OF RETAINING COLLAR, WHEN INSTALLED(SEE NOTE NO. 2 BELOW).
10. SECURE EVERY OTHER TAB OF RETAINING COLLAR, WHEN INSTALLED, TO CONCRETE FLOOR WITH 1/4" DIAMETER BY 1-1/4" LONG STEEL EXPANSION BOLTS, 1-1/4" LONG CONCRETE SCREW ANCHORS, 0.145" DIAMETER BY 1-1/4" LONG POWDER ACTUATED FASTENERS UTILIZING A 9/16" DIAMETER STEEL WASHER, HILTI 1/4" DIAMETER BY 1-1/4" LONG KWIK-CON II+ CONCRETE SCREW ANCHORS, HILTI 1/4" DIAMETER BY 1-3/4" LONG KWIK-BOLT 3 STEEL EXPANSION ANCHORS, OR HILTI X-DNI 27 P8 215 POWDER ACTUATED FASTENERS WITH INTEGRATED 9/16" DIAMETER STEEL WASHERS (SEE NOTE NO. 2 BELOW).

NOTES : 1. T-RATING IS 2-HR. WHEN HILTI CP 648E AND RETAINING COLLAR (ITEMS NO. 7 THROUGH 10) ARE INSTALLED.  
 2. WHEN HILTI CP 681 SD-FD FIRESTOP DRAIN FLANGE IS INSTALLED ITEMS NO. 7 THROUGH 10 ARE REQUIRED.



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Drawing No.

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