

UL/cUL SYSTEM NO. C-AJ-2420

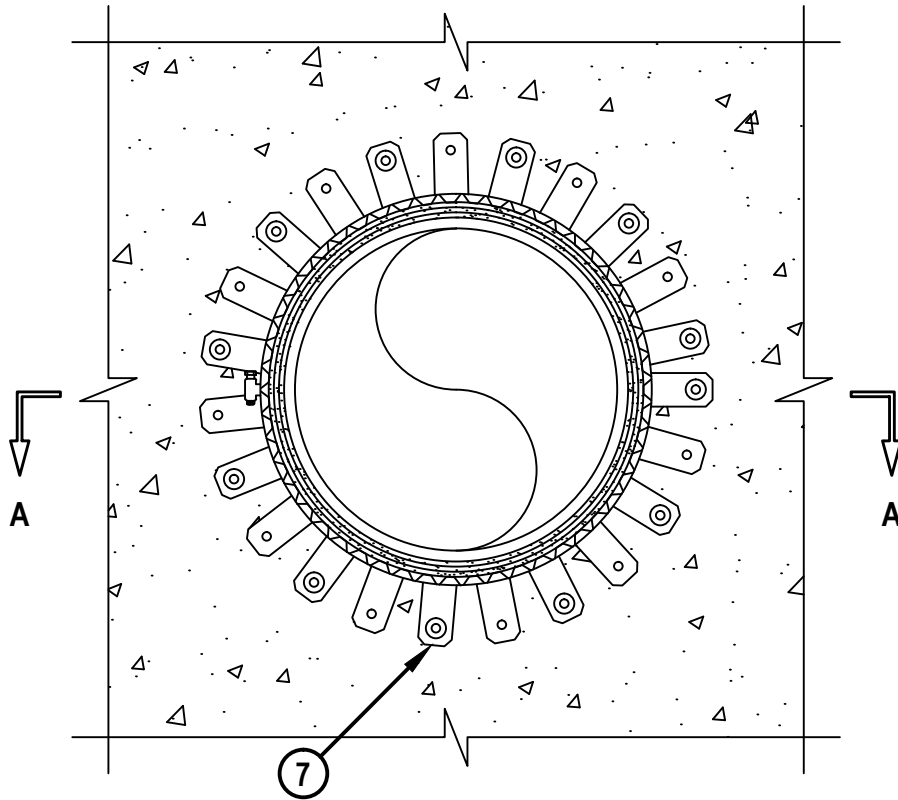
PLASTIC PIPE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL ASSEMBLY

F-RATING = 3-HR.

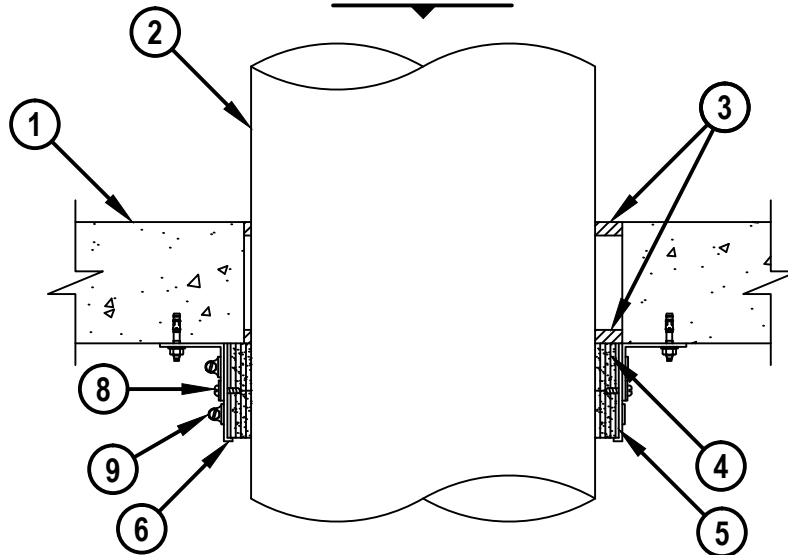
T-RATING = 3-HR.

NOTE : TESTED TO A 2.5 Pa PRESSURE DIFFERENTIAL

BOTTOM VIEW



SECTION A-A



CAJ2420f.013018



HILTI, Inc.
Plano, Texas USA (800) 879-8000

Sheet 1 of 2
Scale 9/64" = 1"
Date Jan. 30, 2018

Drawing No.
**CAJ
2420f**

Saving Lives through Innovation and Education

PLASTIC PIPE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL ASSEMBLY

F-RATING = 3-HR.

T-RATING = 3-HR.

NOTE : TESTED TO A 2.5 Pa PRESSURE DIFFERENTIAL

CAJ2420f.013018

1. CONCRETE FLOOR OR WALL ASSEMBLY (3-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR OR WALL (MINIMUM 4-1/2" THICK).
 - B. ANY UL CLASSIFIED CONCRETE BLOCK WALL.
2. PENETRATING ITEM TO CONSIST OF ONE OF THE FOLLOWING :
 - A. NOMINAL 10" OR 12" DIAMETER PVC PLASTIC PIPE (SCH 40) (SOLID CORE) (CLOSED OR VENTED SYSTEM).
 - B. NOMINAL 10" OR 12" DIAMETER CPVC PLASTIC PIPE (SDR 13.5) (CLOSED SYSTEM ONLY).
3. MINIMUM 1/2" DEPTH HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT INSTALLED FLUSH WITH BOTH SURFACES OF FLOOR OR 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. BUTTED ENDS IN SUCCESSIVE LAYER SHALL BE OFFSET. TWO STACKS OF FOUR LAYERS SHALL BE INSTALLED AND BUTTED TIGHTLY TO BOTTOM SURFACE OF FLOOR.
5. SHEET METAL SLEEVE (MIN. 28 GA.) WITH 1" OVERLAP ALONG LONGITUDINAL SEAM. SLEEVE INSTALLED OVER HILTI CP 648E WRAP STRIP AND TO EXTEND 3-1/2" BELOW BOTTOM SURFACE OF FLOOR OR BOTH SURFACES OF WALL.
6. FIRST HILTI RETAINING COLLAR SHALL BE WRAPPED AROUND BOTTOM OF SLEEVE WITH ENDS OVERLAPPING MINIMUM 1". RETAINER TABS ARE PREBENT 90° TOWARDS THE PIPE TO RETAIN THE WRAP STRIP. ANCHOR TABS TO BE LEFT UNBENT.
7. SECOND HILTI RETAINING COLLAR SHALL BE WRAPPED AROUND TOP OF SLEEVE AND ANCHOR TABS OF FIRST RETAINING COLLAR WITH ENDS OVERLAPPING MINIMUM 1". SECURE EVERY OTHER TAB TO BOTTOM SURFACE OF FLOOR WITH 1/4" x 1-1/4" LONG STEEL EXPANSION BOLTS AND MINIMUM 1-1/4" WASHERS (EX. HILTI KWIK-BOLT 3).
8. SECURE COLLARS AND STEEL SLEEVE TOGETHER WITH 1/4" STEEL SHEET METAL SCREWS (SPACED 4" O.C.).
9. NOMINAL 1/2" WIDE STAINLESS STEEL HOSE CLAMP(S) LOCATED AROUND RETAINING COLLARS 1" BELOW FLOOR ASSEMBLY AND 1" UP FROM BOTTOM OF SLEEVE.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 14".
 2. ANNULAR SPACE = MINIMUM 1/4", MAXIMUM 1".
 3. HILTI CP 648E WRAP STRIP(S) WITH RETAINING COLLAR(S) AND HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT ARE REQUIRED ON BOTH SIDES OF A WALL.



HILTI, Inc.
 Plano, Texas USA (800) 879-8000

Sheet	2 of 2
Scale	-
Date	Jan. 30, 2018

Drawing No.

**CAJ
2420f**