cUL SYSTEM NO. C-AJ-2049

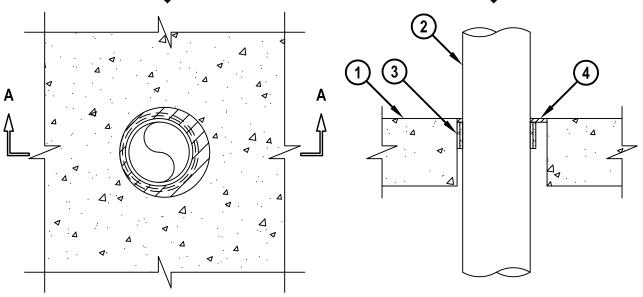
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PLASTIC PIPE THROUGH CONCRETE FLOOR/WALL ASSEMBLY

F-RATING = 2-HR. OR 3-HR. FT-RATING = 1/4-HR.

FH AND FTH-RATINGS = 0-HR.

NOTE: TESTED WITH A 50PA PRESSURE DIFFERENTIAL TOP VIEW SECTION A-A



- 1. CONCRETE FLOOR OR WALL ASSEMBLY (2-HR. OR 3-HR. FIRE-RATING):
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR OR WALL (MINIMUM 4-1/2" THICK).
 - B. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
- 2. NOMINAL 2", 3" OR 4" DIAMETER PVDF PLASTIC PIPE (SCHEDULE 40) (VENTED OR CLOSED PIPING SYSTEM).
- 3. HILTI CP 648E WRAP STRIP (NOMINAL 3/16" THICK x 1-3/4" WIDE) CONTINUOUSLY WRAPPED AROUND THE OUTER CIRCUMFERENCE OF THE PIPE, AS SPECIFIED IN THE TABLE BELOW, WITH ENDS BUTTED AND HELD IN PLACE WITH TAPE. WRAP STRIP RECESSED 2-1/2" FROM BOTTOM SURFACE OF FLOOR.
- 4. MINIMUM 1/4" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT.

NOMINALPIPE DIAMETER	MAXIMUM OPENING SIZE	ANNULAR SPACE		NO. OF LAYERS	F-RATING
		MINIMUM	MAXIMUM	OF CP 648E	r-RATING
2"	3"	3/16"	7/16"	1	3
3"	5"	3/8"	1-1/8"	2	2
4"	6"	3/8"	1-1/8"	2	2

NOTE: HILTI CP 648E WRAP STRIP(S) AND FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT ARE REQUIRED ON BOTH SIDES OF A WALL ASSEMBLY.



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Sheet	1 of 1
Scale	5/32" = 1"
Date	Jan. 17, 2015

Drawing No. CAJ2049b

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