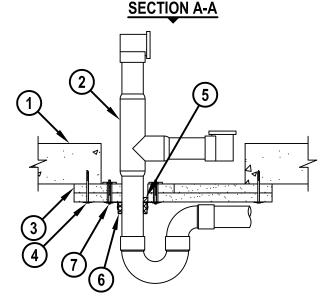
## **UL SYSTEM NO. F-A-2209**

## PLASTIC PIPE AND TUB FITTINGS THROUGH CONCRETE FLOOR ASSEMBLY

F-RATING = 2-HR. T-RATING = 2-HR.



- 1. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 4-1/2" THICK) (2-HR. FIRE-RATING).
- 2. MAXIMUM 2" NOMINAL DIAMETER PVC PLASTIC PIPE (SCH 40) WITH WASTE/OVERFLOW FITTINGS.
- 3. TWO LAYERS HILTI CP 675T FIRESTOP BOARD WITH EACH LAYER OF BOARD TO BE CUT IN HALF AND INSTALLED TO WRAP AROUND DRAIN PIPING WITH SEAMS IN BOARD LAYERS LOCATED PERPENDICULAR TO EACH OTHER. CP 675T TO OVERLAP ONTO CONCRETE FLOOR MINIMUM 3" BEYOND OPENING EDGES.
- 4. CP 675T BOARDS TO BE SECURED TO CONCRETE FLOOR WITH MINIMUM 3/16" x 2-1/4" LONG STEEL CONCRETE SCREWS AND 1-1/4" DIAMETER STEEL WASHERS. ANCHORS TO BE LOCATED AT EACH CORNER OF BOARD AND WITHIN 3/4" AT EACH SEAM IN BOTH BOARDS (SPACED MAXIMUM 6" O.C.).
- 5. MINIMUM 1/2" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT FLUSH WITH BOTTOM SURFACE OF HILTI CP 675T FIRESTOP BOARD.
- 6. HILTI CP 643N FIRESTOP COLLAR WITH FASTENING HOOKS.
- 7. EACH FASTENING HOOK SECURED TO CP 675T FIRESTOP BOARD WITH MINIMUM 1/8" DIAMETER BY 3" LONG TOGGLE BOLTS.

NOTES: 1. MAXIMUM AREA OF OPENING IS 128 SQ. IN., WITH A MAXIMUM DIMENSION OF 18".

- 2. ANNULAR SPACE BETWEEN PENETRANT AND CONCRETE FLOOR = MINIMUM 1/2".
- 3. ANNULAR SPACE BETWEEN PENETRANT AND CP 675T = MINIMUM 0", MAXIMUM 1/4".
- 4. [NOT SHOWN] MINIMUM 1/4" BEAD HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT APPLIED TO CUT EDGE OF BOARD IN EACH LAYER PRIOR TO BUTTING TOGETHER. MINIMUM 1/4" BEAD HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT TO BE APPLIED AROUND PERIPHERY OF OPENING PRIOR TO INSTALLING FIRST LAYER OF BOARD AT BOTTOM OF FLOOR.



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| Sheet | 1 of 1        |
|-------|---------------|
| Scale | 3/32" = 1"    |
| Date  | Jan. 07, 2015 |

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