**UL SYSTEM NO. F-A-2071** 

## CLOSET FLANGE AND DRAIN PIPING THROUGH CONCRETE FLOOR OR CONCRETE OVER METAL DECKING

F-RATING = 3-HR. T-RATING = 0-HR.

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

- 1. CONCRETE FLOOR ASSEMBLY (3-HR. FIRE-RATING) :
  - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 4-1/2" THICK).
  - B. STEEL FLOOR UNIT/FLOOR ASSEMBLY LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 4-1/2" THICK) OVER METAL DECKING.
- 2. DRAIN PIPING AND FITTINGS TO BE ONE OF THE FOLLOWING:
  - A. NOMINAL 4" DIAMETER PVC PLASTIC PIPE (CELLULAR OR SOLID CORE).
  - B. NOMINAL 4" DIAMETER ABS PLASTIC PIPE (CELLULAR OR SOLID CORE).
- 3. PVC OR ABS CLOSET FLANGE SIZED TO ACCOMMODATE DRAIN PIPE. CLOSET FLANGE SECURED TO CONCRETE FLOOR WITH 1/4" DIAMETER STEEL EXPANSION BOLTS IN CONJUNCTION WITH STEEL NUTS AND 3/4" DIAMETER STEEL WASHERS.
- 4. HILTI CP 680-P 4" CAST-IN FIRESTOP DEVICE, CAST OR GROUTED INTO CONCRETE FLOOR.

NOTES: 1. PVC AND ABS PLASTIC PIPE = SCHEDULE 40.

2. FOR CONCRETE FLOOR OVER METAL DECKING APPLICATIONS, A METAL DECK ADAPTER KIT IS REQUIRED.



HILTI, Inc. Tulsa, Oklahoma USA (800) 879-8000

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|-------|---------------|
| Scale | 3/16" = 1"    |
| Date  | Dec. 10, 2007 |

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