## **UL SYSTEM NO. F-A-2074**

## CLOSET FLANGE AND DRAIN PIPING THROUGH CONCRETE FLOOR ASSEMBLY

F-RATING = 2-HR. T-RATING = 0-HR.

BOTTOM VIEW

SECTION A-A

1
3
4
4
6
5
5

- 1. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR ASSEMBLY (MINIMUM 2-1/2" THICK) (2-HR. FIRE-RATING).
- 2. NOMINAL 4" DIAMETER ABS PLASTIC DRAIN PIPE (SCHEDULE 40) (VENTED PIPING SYSTEM).
- 3. ABS CLOSET FLANGE SIZED TO ACCOMMODATE DRAIN PIPE. CLOSET FLANGE SECURED TO CONCRETE FLOOR WITH STEEL SCREWS.
- 4. MINIMUM 1/2" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT.
- 5. HILTI CP 643 110/4" N FIRESTOP COLLAR WITH FASTENING HOOKS.
- 6. EACH FASTENING HOOK SECURED TO BOTTOM OF FLOOR WITH 1/4" x 1-1/4" LONG STEEL EXPANSION BOLTS, MIN. 0.145" x 1-1/4" POWDER ACTUATED FASTENERS WITH 1-7/16" DIAMETER STEEL WASHER, 1/4" x 1-1/4" HILTI KWIK-CON II+ CONCRETE SCREW ANCHOR, 1/4" x 1-3/4" HILTI KWIK-BOLT 3 STEEL EXPANSION ANCHOR, OR HILTI X-DNI 27 P8 S15 POWDER ACTUATED FASTENER WITH INTEGRATED WASHER.

NOTES: 1. MAXIMUM DIAMETER OF OPENING = 5".
2. ANNULAR SPACE = NOMINAL 1/4".



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

Sheet	1 of 1
Scale	11/64" = 1"
Date	Jan. 07, 2015

FA 2074e

FA2074e 010715

Saving Lives through Innovation and Education