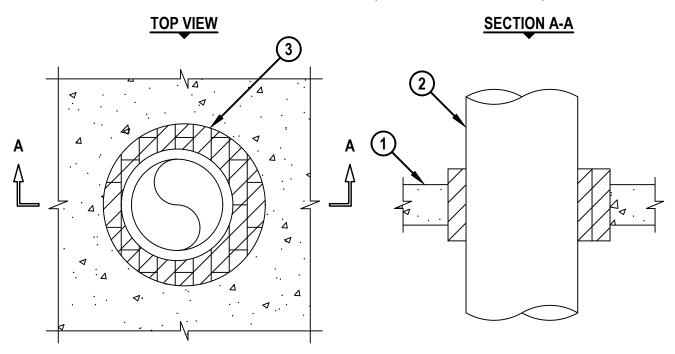
UL SYSTEM NO. F-A-2322

NONMETALLIC PIPE THROUGH CONCRETE FLOOR ASSEMBLY

F-RATING = 2-HR.

T-RATING = 1-3/4-HR. OR 2-HR. (SEE NOTE NO. 4 BELOW)



- 1. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR ASSEMBLY (MINIMUM 4-1/2" THICK) (2-HR. FIRE-RATING).
- 2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING:
 - A. NOMINAL 12" DIAMETER AQUATHERM BLUEPIPE POLYPROPYLENE (PP-R) (SDR 11) (CLOSED PIPING SYSTEM).
 - B. NOMINÁL 12" DIAMETER MULTI CLIMA POLYPROPYLENE (PP-RCT) (SDR 7.3) MANUFACTURED BY NIRON (CLOSED PIPING SYSTEM).
- 3. HILTI CFS-BL FIRESTOP BLOCK (2" THICK x 5" WIDE x 8" DEEP, REFERENCE : TOP VIEW) FIRMLY PACKED AND CENTERED WITHIN OPENING.

NOTES: 1. MAXIMUM DIAMETER OF OPENING = 18".

- 2. ANNULAR SPACE = MINIMUM 1/2", MAXIMUM 5".
- 3. APPLY HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT IN ANY VOID THAT MAY EXIST AROUND PENETRANT OR FIRESTOP BLOCKS ON TOP SIDE OF FLOOR.
- 4. WHEN PENETRANT TYPE 2A IS USED, T-RATING IS 1-3/4-HR. WHEN PENETRANT TYPE 2B IS USED, T-RATING IS 2-HR.



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Scale	3/32" = 1"
Date	Sep. 13, 2022

FA 2322b

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