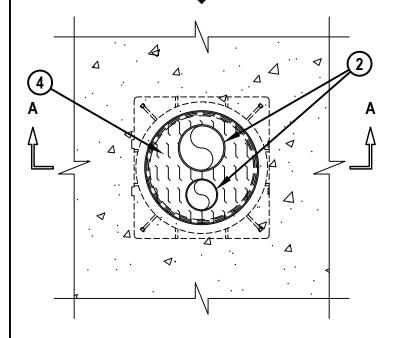
UL/cUL SYSTEM NO. F-A-1224

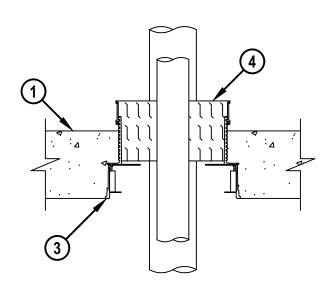
MULTIPLE PENETRANTS THROUGH CONCRETE FLOOR

F-RATING = 2-HR. T-RATING = 1/2-HR.

TOP VIEW

SECTION A-A





- 1. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 4-1/2" THICK) (2-HR. FIRE-RATING).
- 2. PENETRATING ITEMS TO BE ONE MAXIMUM 3" NOMINAL DIAMETER, AND ONE MAXIMUM 2" NOMINAL DIAMETER OF THE FOLLOWING :
 - A. STEEL PIPE (SCHEDULE 5 OR HEAVIER).
 - **B. CAST OR DUCTILE IRON PIPE.**
 - C. COPPER PIPE OR TUBING.
 - D. STEEL CONDUIT OR STEEL EMT.
- 3. HILTI CFS-CID U [2", 3", 4", OR 6"] OR CFS-CID U 2" CA CAST-IN FIRESTOP DEVICE CAST OR GROUTED INTO CONCRETE FLOOR WITH A MAXIMUM 2" EXTENSION ABOVE FLOOR.
- 4. MINIMUM 4" THICKNESS MINERAL WOOL (MINIMUM 4 PCF DENSITY) TIGHTLY PACKED INTO DEVICE, COMPLETELY FILLING ANNULAR SPACE AROUND METAL PENETRANTS.

NOTES: 1. MINIMUM ANNULAR SPACE BETWEEN PENETRANTS = 1/8".

2. ANNULAR SPACE BETWEEN PENETRANTS AND PERIPHERY OF FIRESTOP DEVICE = MINIMUM 1/2", MAXIMUM 2".



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Sheet	1 of 1
Scale	5/32" = 1"
Date	Sep. 27, 2023

FA 1224a

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