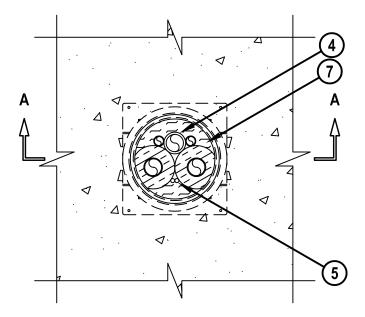
UL/cUL SYSTEM NO. F-A-8016

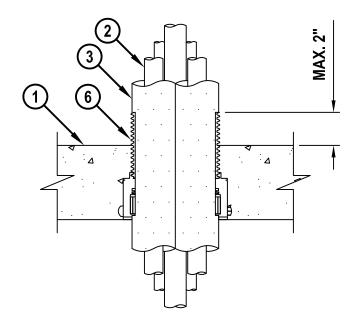
MULTIPLE HVAC LINE SET THROUGH CONCRETE FLOOR OR CONCRETE OVER METAL DECKING

F-RATING = 3-HR. T-RATING = 1/2-HR.

TOP VIEW

SECTION A-A





- 1. CONCRETE FLOOR ASSEMBLY (3-HR. FIRE-RATING):
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETÉ 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 DECK.
- 2. PENETRATING METALLIC ITEMS TO BE ANY OF THE FOLLLOWING (MAXIMUM QUANTITY = 4) (ONLY TWO PIPES MAY BE LARGER THAN 1/2" DIAMETER).
 - A. MAXIMUM 1" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
 - B. MAXIMUM 1" NOMINAL DIAMETER COPPER PIPE OR TUBING.
- 3. NOMINAL 3/4" THICK AB/PVC PIPE INSULATION INSTALLED ON ALL METALLIC PIPES GREATER THAN 1/2" DIAMETER.
- 4. MAXIMUM 1-1/4" NOMINAL DIAMETER (SCHEDULE 40) PVC PLASTIC PIPE (SOLID CORE) (VENTED PIPING SYSTEM).
- 5. MAXIMUM 4-PAIR NO. 8 AWG THERMOSTAT CABLE WITH PVC JACKET (MAXIMUM QUANTITY = 2).
- 6. HILTI CP 680-M [3" or 4"], CP 680-P [3" OR 4"], OR CP 680-PX [3"] CAST-IN FIRESTOP DEVICE CAST OR GROUTED INTO CONCRETE FLOOR.
- 7. MINIMUM 2" THICKNESS MINERAL WOOL (MINIMUM 4 PCF DENSITY) TIGHTLY PACKED AND FLUSH WITH TOP OF FIRESTOP DEVICE.

NOTES : 1. FOR CONCRETE FLOOR OVER METAL DECKING APPLICATIONS, A METAL DECK ADAPTER KIT IS REQUIRED.

2. ANNULAR SPACE BETWEEN PENETRANTS AND DEVICE = MINIMUM 0", MAXIMUM 3/4".



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Sheet	1 of 1
Scale	11/64" = 1"
Date	July 14, 2015

FA 8016c

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