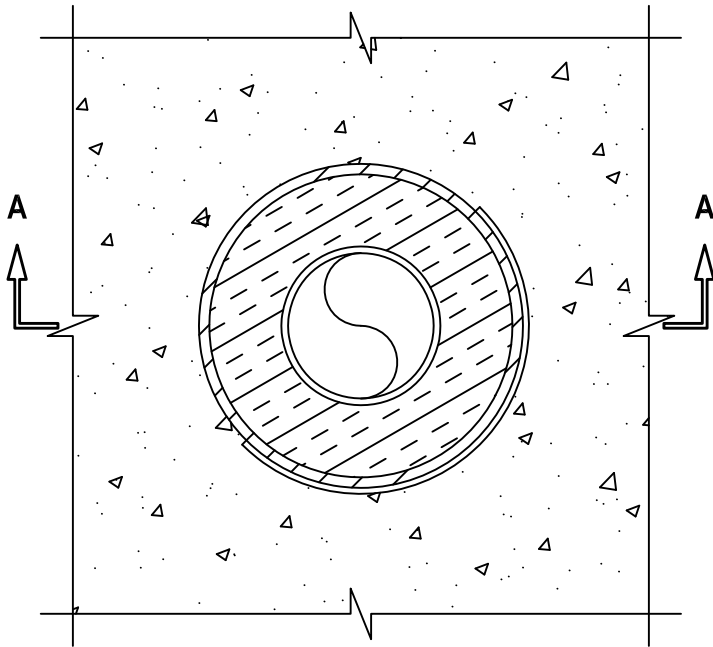


INSULATED METAL PIPE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL

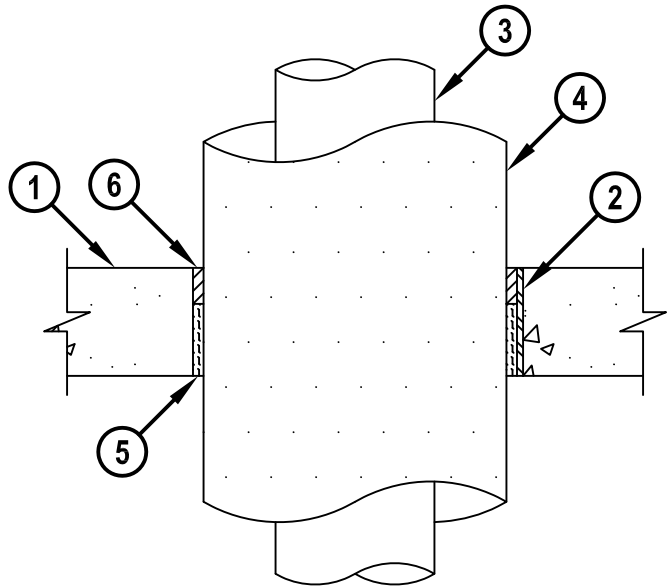
F-RATING = 2-HR.
T-RATING = 1-HR.

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TOP VIEW



SECTION A-A



1. CONCRETE FLOOR OR WALL ASSEMBLY (2-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 4-1/2" THICK).
 - B. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 6" THICK).
 - C. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
2. [OPTIONAL] MAXIMUM 14" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
3. PENETRATING ITEM TO BE ONE OF THE FOLLOWING :
 - A. MAXIMUM 6" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
 - B. MAXIMUM 4" NOMINAL DIAMETER COPPER PIPE.
4. MAXIMUM 3" THICK GLASS FIBER INSULATION.
5. MINIMUM 3" THICKNESS MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED.
6. MINIMUM 1-1/2" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT.
[NOT SHOWN] WHEN STEEL PIPE LARGER THAN 4" IS USED, A 1/2" x 1/2" BEAD OF HILTI FS-ONE MAX OR FS-ONE INSTALLED AROUND PERIPHERY OF PIPE.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 14".
 2. ANNULAR SPACE = 1/2".
 3. MINIMUM 1-1/2" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT IS REQUIRED ON BOTH SIDES OF A WALL.



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Sheet	1 of 1
Scale	1/8" = 1"
Date	Nov. 18, 2015

Drawing No.
**CAJ
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