

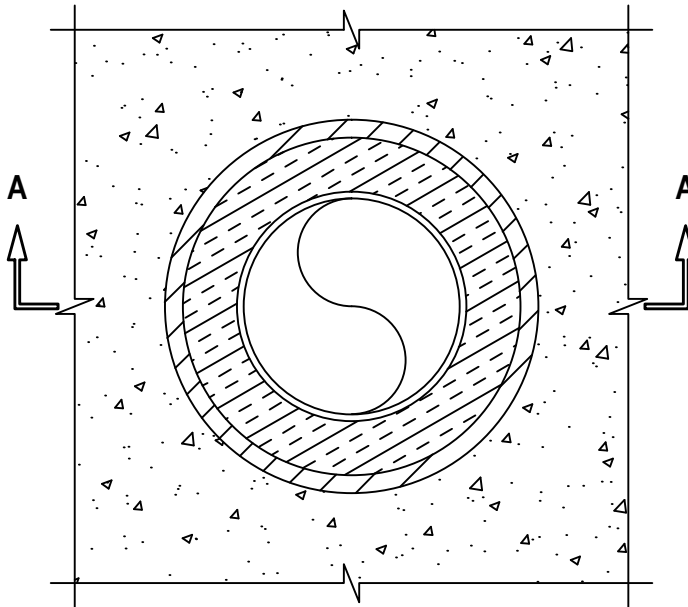
INSULATED METAL PIPE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL ASSEMBLY

F-RATING = 3-HR.

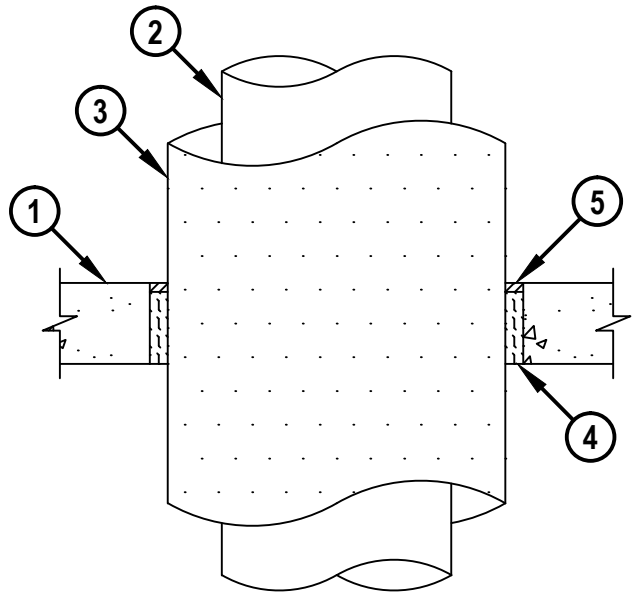
T-RATING = 1-3/4-HR. OR 2-HR.

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TOP VIEW



SECTION A-A



1. CONCRETE FLOOR OR WALL ASSEMBLY (3-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 4-1/2" THICK).
 - B. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 5" THICK).
 - C. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING :
 - A. MAXIMUM 24" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER) (T-RATING = 2-HR.).
 - B. MAXIMUM 6" NOMINAL DIAMETER COPPER PIPE (T-RATING = 1-3/4-HR.).
3. NOMINAL 3" THICKNESS UNFACED MINERAL FIBER PIPE INSULATION (SEE NOTE NO. 3 BELOW).
4. MINIMUM 4" THICKNESS MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED.
5. MINIMUM 1/2" DEPTH HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT, HILTI CFS-S SIL GG FIRESTOP SILICONE SEALANT, OR HILTI CFS-S SIL SL FIRESTOP SILICONE SEALANT.

- NOTES :**
1. MAXIMUM DIAMETER OF OPENING = 32".
 2. ANNULAR SPACE = MINIMUM 1/2", MAXIMUM 1-1/2".
 3. MINERAL FIBER PIPE INSULATION TO BE MANUFACTURED BY OWENS CORNING. INSULATION SECURED WITH NOMINAL 16 AWG STEEL WIRE SPACED MAXIMUM 12" ON CENTER.
 4. MINIMUM 1/2" DEPTH HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT OR HILTI CFS-S SIL GG FIRESTOP SILICONE SEALANT IS REQUIRED ON BOTH SIDES OF A WALL ASSEMBLY.



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Sheet	1 of 1
Scale	7/64" = 1"
Date	Feb. 22, 2018

Drawing No.

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