

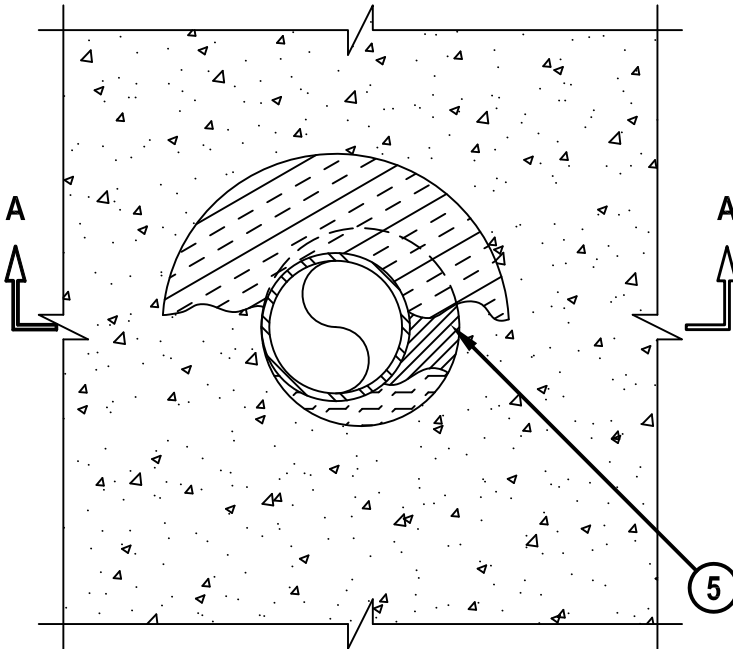
**INSULATED METAL PIPE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL**

F-RATING = 3-HR.

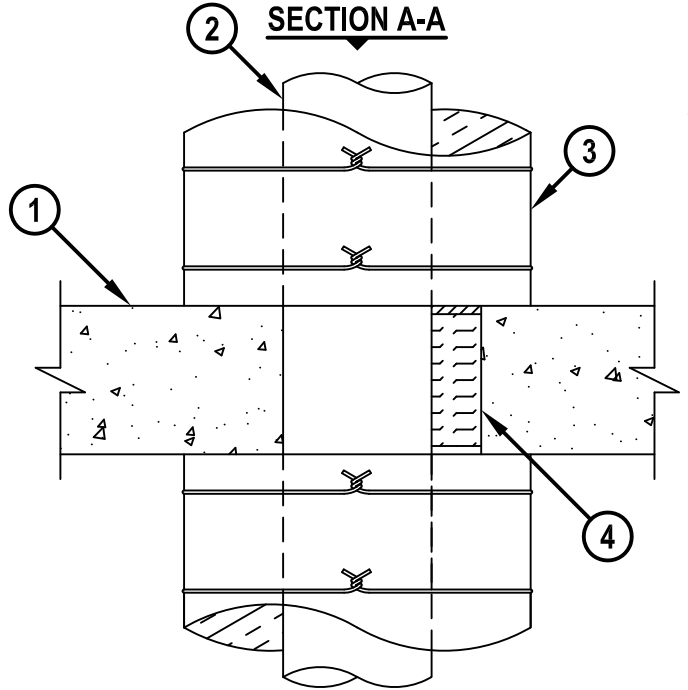
T-RATING = 1-HR. OR 2-HR.

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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 OR WALL (MINIMUM 4-1/2" THICK).
  - B. 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).
  - B. MAXIMUM 24" NOMINAL DIAMETER CAST IRON PIPE.
  - C. MAXIMUM 4" NOMINAL DIAMETER COPPER PIPE.
3. NOMINAL 3" THICKNESS MINERAL FIBER PIPE INSULATION BUTTED UP TO FIRESTOP SYSTEM ON BOTH SIDES OF ASSEMBLY (SEE NOTE NO. 3 AND 4 BELOW).
4. MINIMUM 4" THICKNESS MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED.
5. MINIMUM 1/4" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT.

- NOTES :**
1. MAXIMUM DIAMETER OF OPENING = 25-7/8".
  2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 1-7/8".
  3. WHEN PIPE INSULATION EXTENDS THE ENTIRE LENGTH OF THE PIPE, ON BOTH SIDES OF THE FLOOR, THE T-RATING IS 2-HR. WHEN THE PIPE INSULATION EXTENDS ONLY 12" ABOVE AND BELOW THE FLOOR, THE T-RATING IS 1-HR.
  4. MINERAL FIBER PIPE INSULATION TO BE MANUFACTURED BY OWENS CORNING. INSULATION SECURED WITH NOMINAL 16 AWG STEEL WIRE, SPACED MAXIMUM 12" ON CENTER WHEN INSULATION EXTENDS THE ENTIRE LENGTH OF PIPE AND AT 3" AND 9" ABOVE AND BELOW FLOOR WHEN INSULATION EXTENDS ONLY 12" ABOVE AND BELOW FLOOR.
  5. MINIMUM 1/4" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT IS REQUIRED ON BOTH SIDES OF A WALL ASSEMBLY.



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Sheet	1 of 1
Scale	11/64" = 1"
Date	Jan. 06, 2015

Drawing No.

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