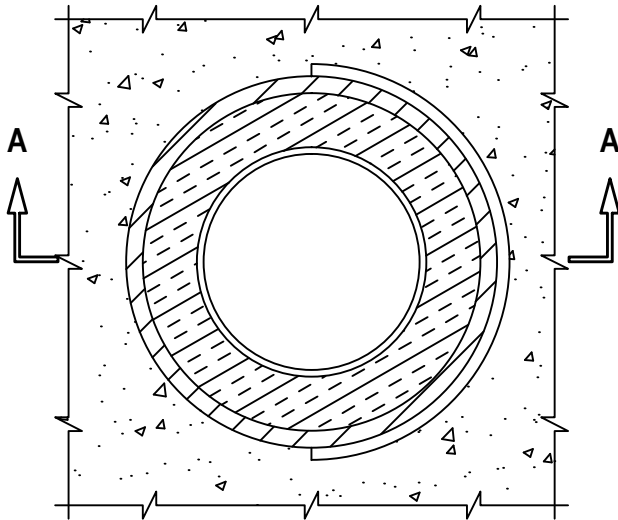


**INSULATED METAL PIPE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL**

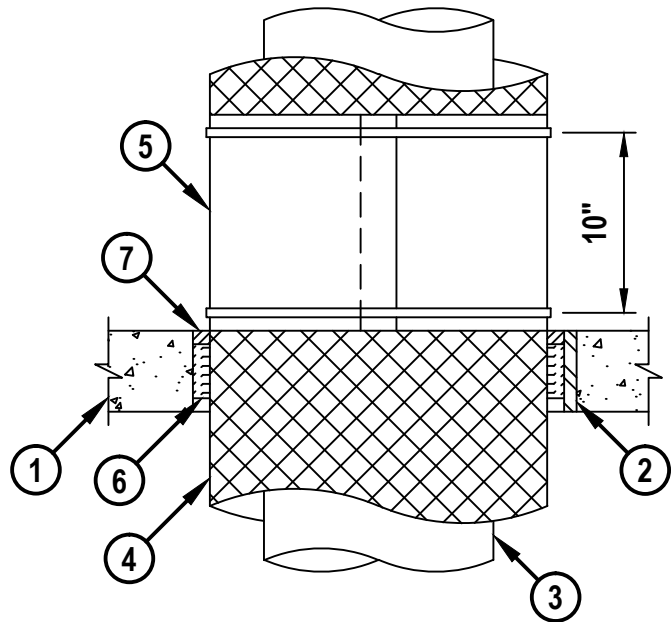
F-RATING = 2-HR.

T-RATING = 0-HR. OR 1-HR.

**TOP VIEW**



**SECTION A-A**



CAJ5069j\_013018

1. CONCRETE FLOOR OR WALL ASSEMBLY (2-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. {OPTIONAL} MAXIMUM 22" NOMINAL DIAMETER STEEL PIPE SLEEVE (SCHEDULE 40).
3. PENETRATING ITEM TO BE ONE OF THE FOLLOWING :
  - A. MAXIMUM 12" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 40 OR HEAVIER).
  - B. MAXIMUM 6" NOMINAL DIAMETER COPPER PIPE.
4. FOAMGLASS® PIPE INSULATION (1-1/2" TO 3" THICKNESS).
5. MINIMUM 12" LONG JACKET FORMED OF MINIMUM 0.010" THICKNESS STEEL OR ALUMINUM SHEET SECURED IN PLACE WITH 2 STEEL BAND CLAMPS. ENDS OF JACKET TO OVERLAP BY A MINIMUM 2".
6. MINIMUM 3" THICKNESS MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED.
7. MINIMUM 3/4" DEPTH HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT.

**NOTES : 1. ANNULAR SPACE = MINIMUM 3/4", MAXIMUM 3".**  
**2. MINIMUM 3/4" DEPTH HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT AND SHEET METAL JACKET ARE REQUIRED ON BOTH SIDES OF A WALL ASSEMBLY.**



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Sheet	1 of 1
Scale	3/32" = 1"
Date	Jan. 30, 2018

Drawing No.  
**CAJ  
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