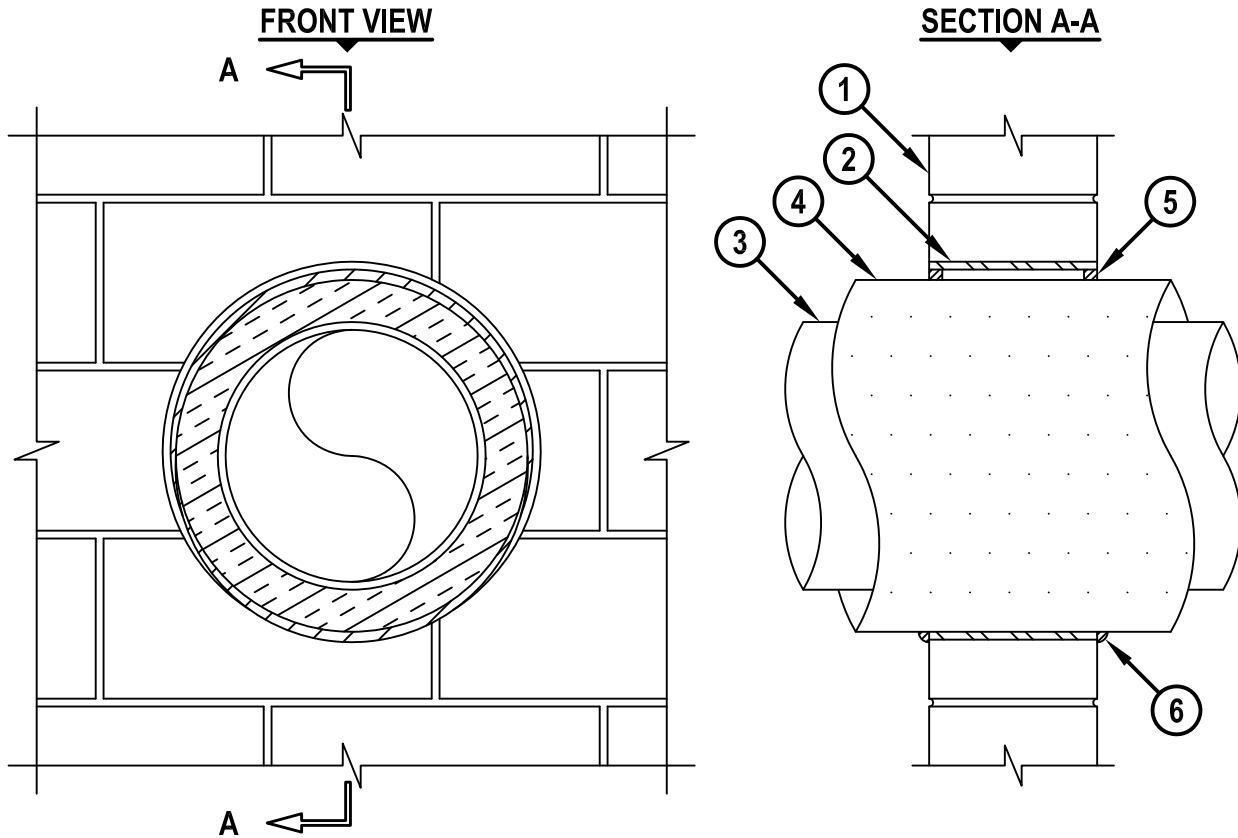


INSULATED METAL PIPE THROUGH CONCRETE WALL OR CONCRETE BLOCK WALL

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

T-RATING = 0-HR., 1/2-HR., OR 1-HR.

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1. CONCRETE WALL ASSEMBLY (1-HR. OR 2-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MIN. 3-3/4" THICK FOR 1-HR. FIRE-RATING).
 - B. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MIN. 5" THICK FOR 2-HR. FIRE-RATING).
 - C. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
2. [OPTIONAL] MAXIMUM 18" NOMINAL DIAMETER STEEL PIPE SLEEVE (SCH 40 OR HEAVIER).
3. PENETRATING ITEM TO BE ONE OF THE FOLLOWING :
 - A. MAXIMUM 12" NOMINAL DIAMETER STEEL PIPE (SCH 40 OR HEAVIER).
 - B. MAXIMUM 6" NOMINAL DIAMETER COPPER PIPE OR TUBING.
4. MAXIMUM 2" THICK GLASS-FIBER PIPE INSULATION.
5. MINIMUM 5/8" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT.
6. MINIMUM 1/2" BEAD HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT APPLIED AT POINT OF CONTACT.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 18".
 2. ANNULAR SPACE FOR INSULATED STEEL PIPE = MINIMUM 0", MAXIMUM 1/2".
 3. ANNULAR SPACE FOR INSULATED COPPER PIPE = MINIMUM 0", MAXIMUM 1-7/8".



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Sheet	1 of 1
Scale	7/64" = 1"
Date	Jan. 09, 2015

Drawing No.
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