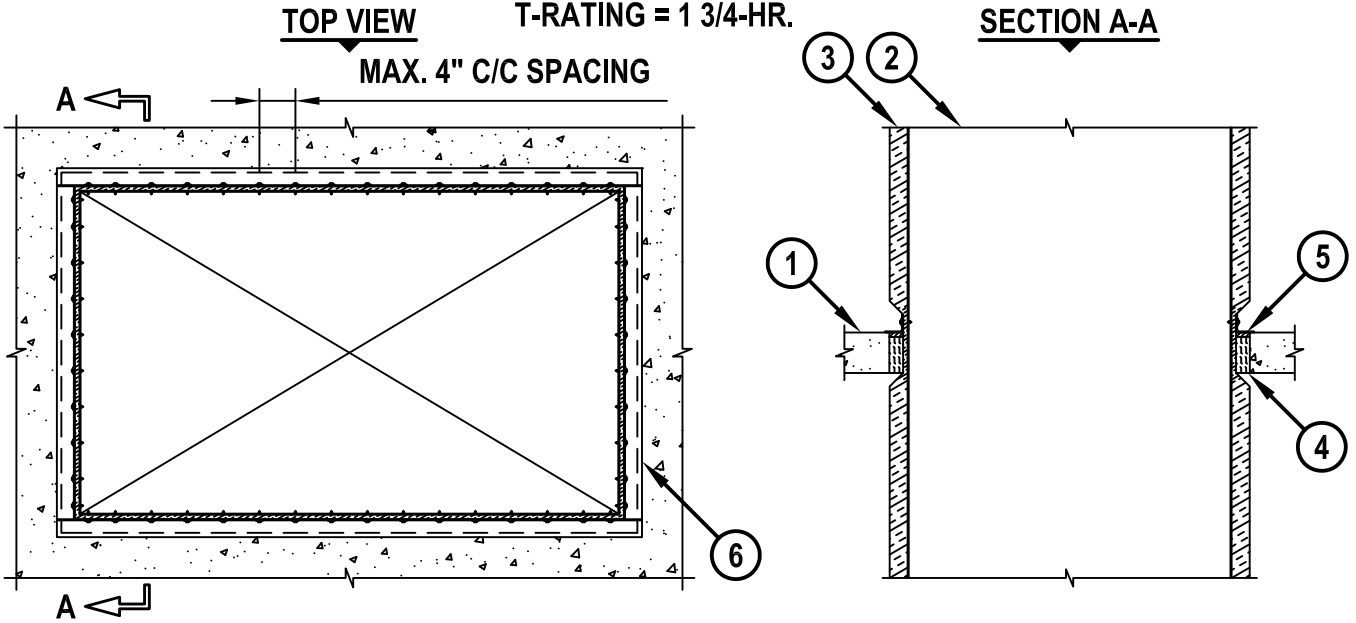


INSULATED DUCT THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL

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

CAJ7145b.010615



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. MAXIMUM 60" x 36" RECTANGULAR SHEET METAL DUCT (CONFORMING WITH SMACNA REQUIREMENTS).
3. NOMINAL 2" THICK GLASS-FIBER DUCT INSULATION (MIN. 3/4" PCF DENSITY) WITH FOIL-SCRIM-KRAFT FACING.
4. MINIMUM 4" THICKNESS MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED AND RECESSED TO ACCOMMODATE SEALANT (SEE NOTE NO. 2 BELOW).
5. MINIMUM 1/2" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT.
6. STEEL RETAINING ANGLE (SEE NOTE NO. 6 BELOW).

NOTES :

1. MAXIMUM AREA OF OPENING = 17.8 SQ. FT., WITH A MAXIMUM DIMENSION OF 64".
2. DUCT INSULATION TO BE COMPRESSED THROUGH THE ASSEMBLY SUCH THAT THE MAXIMUM OVERALL THICKNESS IS 1/2".
3. THE ANNULAR SPACE BETWEEN STEEL DUCT AND EDGES OF OPENING SHALL BE MINIMUM 2" TO MAXIMUM 6" WHEN MAXIMUM DUCT DIMENSION IS 28". OTHERWISE, MAXIMUM ANNULAR SPACE IS 2-1/2".
4. NOMINAL ANNULAR SPACE BETWEEN INSULATED DUCT AND PERIPHERY OF OPENING TO BE MINIMUM 0" TO MAXIMUM 1/2" PRIOR TO INSTALLATION OF MINERAL WOOL. WHEN MAXIMUM DUCT DIMENSION IS 28", MAXIMUM ANNULAR SPACE BETWEEN INSULATED DUCT AND PERIPHERY IS 4" PRIOR TO INSTALLATION OF MINERAL WOOL.
5. MINIMUM 1/2" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT AND STEEL ANGLES ARE REQUIRED ON BOTH SIDES OF A WALL.
6. AFTER SEALING SPACE BETWEEN INSULATED DUCT AND CONCRETE FLOOR/WALL WITH HILTI FS-ONE MAX OR FS-ONE, FASTEN STEEL ANGLE (L2 x 2 x MIN. 16 GA.) TO DUCT WITH NO. 10 (OR LARGER) STEEL SHEET METAL SCREWS SPACED 1" FROM EACH END AND MAXIMUM 4" C/C.



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Sheet	1 of 1
Scale	1/16" = 1"
Date	Jan. 06, 2015

Drawing No.
**CAJ
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