

UL/cUL SYSTEM NO. C-AJ-7154

SHEET METAL DUCT THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL ASSEMBLY

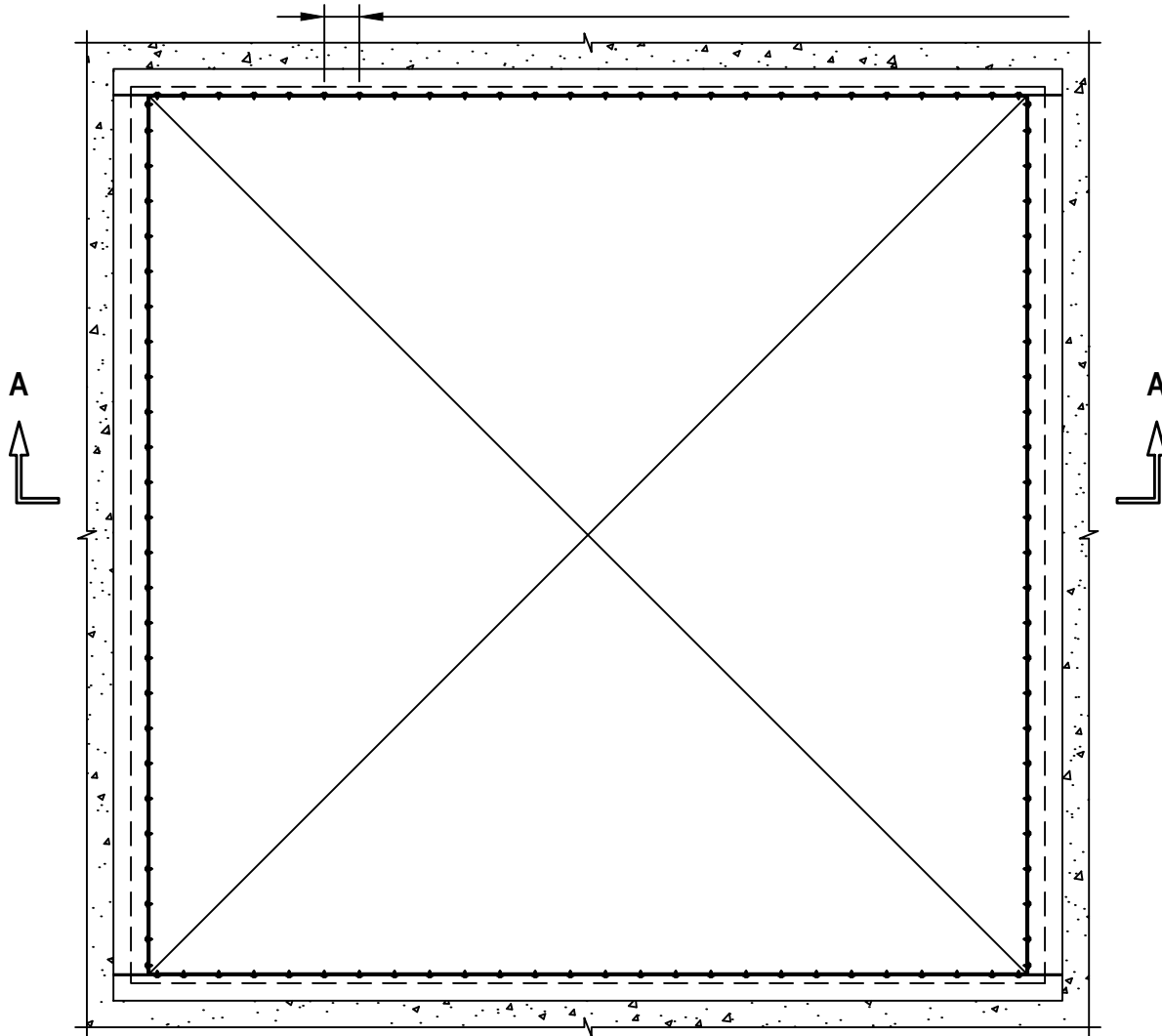
F-RATING = 2-HR.

T-RATING = 0-HR.

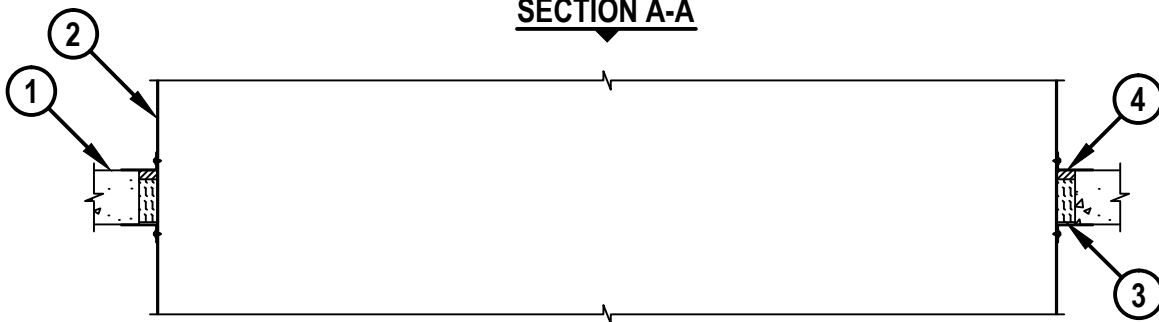
TOP VIEW

MAX. 4" C/C SPACING (SEE NOTE NO. 4 BELOW)

CAJ7154c.021218



SECTION A-A



HILTI, Inc.
Plano, Texas USA (800) 879-8000

Sheet	1 of 2
Scale	3/64" = 1"
Date	Feb. 12, 2018

Drawing No.

**CAJ
7154c**

Saving Lives through Innovation and Education

SHEET METAL DUCT THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL ASSEMBLY

F-RATING = 2-HR.
T-RATING = 0-HR.

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1. CONCRETE FLOOR OR WALL ASSEMBLY (2-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR OR WALL (MINIMUM 6" THICK).
 - B. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
2. PENETRATING ITEM TO CONSIST OF ONE OF THE FOLLOWING :
 - A. MAXIMUM 100" x 100" STEEL SHEET METAL AIR DUCT (MIN. 18 GA.) REINFORCED IN ACCORDANCE WITH SMACNA CONSTRUCTION STANDARDS.
 - B. MAXIMUM 40" x 40" RECTANGULAR SHEET METAL DUCT (CONSTRUCTED AND REINFORCED IN ACCORDANCE WITH SMACNA CONSTRUCTION STANDARDS) WITH BW11 COATING MATERIAL (FLAMEBAR BW11 FIRE RATED DUCTWORK BY FIRESPRAY INTERNATIONAL, LTD.).
3. MINIMUM 4-3/4" THICKNESS MINERAL WOOL SAFING (MIN. 4 PCF DENSITY) TIGHTLY PACKED.
4. MINIMUM 1" DEPTH HILTI CFS-S SIL GG FIRESTOP SILICONE SEALANT OR HILTI CFS-S SIL SL FIRESTOP SILICONE SEALANT (FLOORS ONLY) (SEE NOTE NO. 3 BELOW).
5. [NOT SHOWN] MINIMUM 1/2" BEAD HILTI CFS-S SIL GG FIRESTOP SILICONE SEALANT APPLIED AT POINT OF CONTACT, PRIOR TO ATTACHMENT OF STEEL ANGLES.

NOTES : 1. MAXIMUM AREA OF OPENING = 73.7 SQ. FT., WITH A MAXIMUM DIMENSION OF 104".
 2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 2".
 3. MINIMUM 5/8" DEPTH HILTI CFS-S SIL GG FIRESTOP SILICONE SEALANT IS REQUIRED ON BOTH SIDES OF A WALL ASSEMBLY.
 4. AFTER SEALING SPACE BETWEEN DUCT AND FLOOR/WALL WITH HILTI FIRESTOP SEALANT, FASTEN STEEL ANGLE (MIN. 10 GA.) TO DUCT WITH MINIMUM NO. 10 SHEET METAL SCREWS (SPACED MAXIMUM 1" FROM EACH END OF STEEL DUCT AND SPACED MAXIMUM 4" C/C). STEEL ANGLE TO OVERLAP DUCT AND FLOOR/WALL SURFACES BY MINIMUM 2". STEEL ANGLES ARE REQUIRED ON BOTH SIDES OF FLOOR/WALL ASSEMBLY.



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