

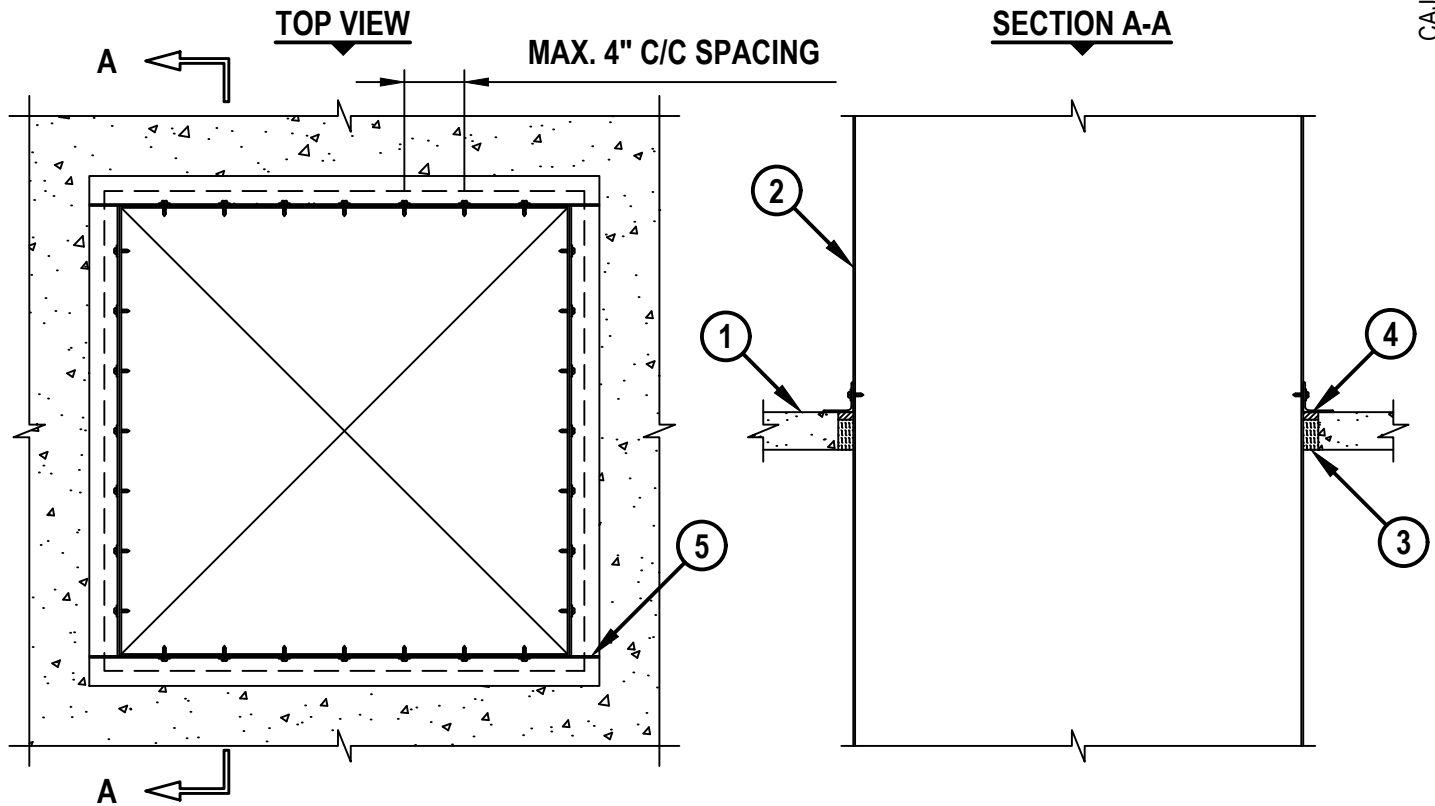
UL/cUL SYSTEM NO. C-AJ-7111

**METAL DUCT (WITHOUT DAMPER) THROUGH CONCRETE FLOOR/WALL
OR BLOCK WALL**

F-RATING = 2-HR.

T-RATING = 0-HR.

CAJ7111e.112625



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

Sheet	1 of 2
Scale	5/64" = 1"
Date	Nov. 26, 2025

Drawing No.

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1. CONCRETE FLOOR OR WALL ASSEMBLY (2-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 2-1/2" THICK).
 - B. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 3" THICK).
 - C. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
2. MAXIMUM 30" x 30" RECTANGULAR STEEL DUCT (MINIMUM 24 GAUGE).
(NOTE: NOT FOR USE IN DUCT SYSTEMS CONTAINING A DAMPER).
3. MINIMUM 2" THICKNESS MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED AND RECESSED FROM TOP OF FLOOR TO ACCOMMODATE SEALANT.
4. MINIMUM 1/2" DEPTH HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT.
5. AFTER SEALING SPACE BETWEEN DUCT AND CONCRETE FLOOR/WALL ASSEMBLY WITH HILTI FS-ONE MAX, FASTEN STEEL ANGLE (L2 x 2 x MIN. 16 GA.) TO DUCT WITH NO. 8 x 3/4" (OR LARGER) STEEL SHEET METAL SCREWS. ANGLE DOES NOT HAVE TO BE FASTENED TO CONCRETE FLOOR/WALL ASSEMBLY.

SIZE OF STEEL DUCT	MIN ANNULAR SPACE	MAX ANNULAR SPACE
30" x 30"	1/4"	1-3/4"
28" x 28"	1/8"	3-7/8"

NOTE : MINIMUM 1/2" DEPTH HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT AND STEEL ANGLES ARE REQUIRED ON BOTH SIDES OF A WALL ASSEMBLY.



Hilti Firestop Systems

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Sheet 2 of 2

Scale -

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