

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

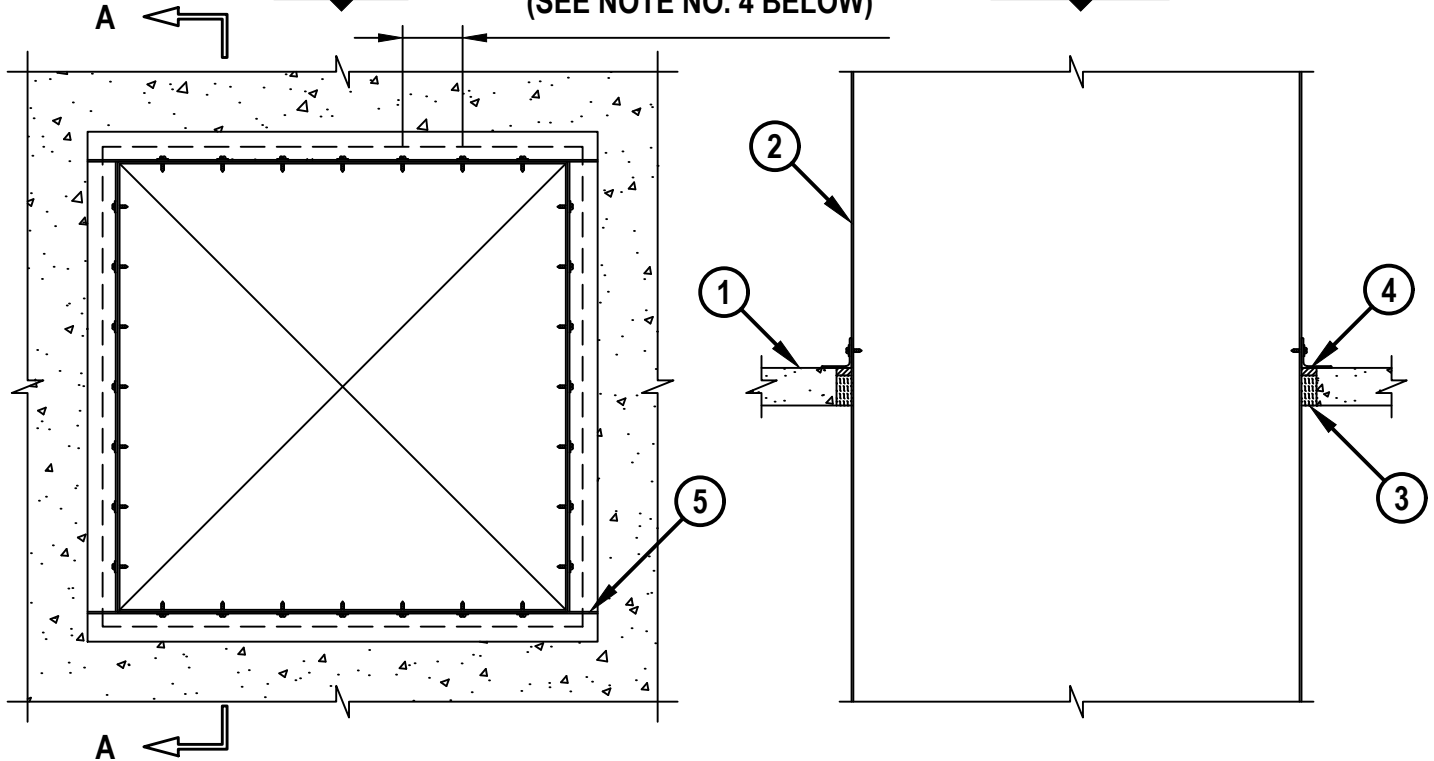
F-RATING = 2-HR.

T-RATING = 0-HR.

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

SECTION A-A

TOP VIEW



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.
4. MINIMUM 1/2" DEPTH HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT.
5. SEE NOTE NO. 4 BELOW.

NOTES : 1. MAXIMUM SIZE OF OPENING = 32"x 32".
 2. ANNULAR SPACE = MINIMUM 1/4", MAXIMUM 1-3/4".
 3. MINIMUM 1/2" DEPTH HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT AND STEEL ANGLES ARE REQUIRED ON BOTH SIDES OF A WALL ASSEMBLY.
 4. AFTER SEALING SPACE BETWEEN DUCT AND CONCRETE FLOOR/WALL ASSEMBLY WITH HILTI FS-ONE MAX OR FS-ONE, 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.

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Sheet	1 of 1
Scale	5/64" = 1"
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Drawing No.
**CAJ
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