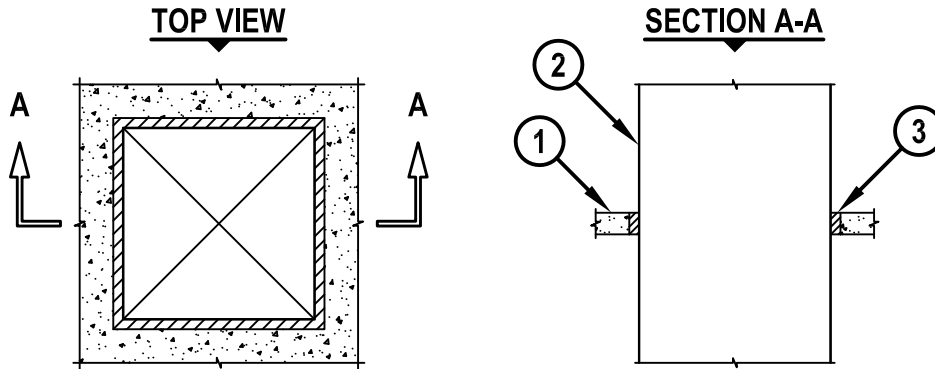


SHEET METAL DUCT THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL

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

CAJ7029a.022610



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. SHEET METAL DUCT (FLAMEBAR BW11 FIRE-RATED DUCT WORK, MANUFACTURED BY FIRESPRAY INTERNATIONAL LTD.) :
 - A. RECTANGULAR DUCT : MAXIMUM PERIMETER DIMENSION SHALL BE 13.3 FT., WITH A MAXIMUM DIMENSION OF 40".
 - B. ROUND DUCT : MAXIMUM 40" DIAMETER.
 - C. OVAL SHAPED DUCT : MAXIMUM 40" x 10".
3. HILTI CP 637 FIRESTOP MORTAR FLUSH WITH TOP AND BOTTOM SURFACES OF FLOOR, OR BOTH SURFACES OF A WALL.

NOTES :

1. MAXIMUM SIZE OF OPENING :
 - FOR RECTANGULAR DUCTS = MAXIMUM AREA OF OPENING SHALL BE 13.4 FT², WITH A MAXIMUM DIMENSION OF 44".
 - FOR ROUND DUCTS = MAXIMUM DIAMETER OF OPENING SHALL BE 44".
 - FOR OVAL SHAPED DUCTS = MAXIMUM DIMENSIONS OF OPENING SHALL BE 44" x 14".
2. ANNULAR SPACE = NOMINAL 2".
3. [OPTIONAL] STEEL ANGLES (L4 x 4 x 1/4" THICK) INSTALLED AROUND PERIMETER OF OPENING ON TOP SURFACE OF FLOOR, OR BOTH SURFACES OF WALL. STEEL ANGLES TO OVERLAP MINIMUM 2" ONTO ASSEMBLY AND ATTACHED TO DUCT WITH 3/8" DIA. x 1-1/4" LONG STEEL BOLTS AND 3/8" x 1-1/2" DIAMETER STEEL WASHERS (SPACED MAX. 6" O.C.) STEEL ANGLES TO BE ATTACHED TO ASSEMBLY WITH 5/16" x 1-3/4" LONG CONCRETE SCREWS AND 3/8" x 1-1/2" DIAMETER STEEL WASHERS (SPACED MAX. 6" O.C.).
4. [FORMING NOT SHOWN] USE A RIGID BOARD MATERIAL TO SUPPORT HILTI CP 637 FIRESTOP MORTAR DURING ITS INITIAL CURE (MINIMUM 24 HOURS).
5. REINFORCEMENT STIFFENER OR TRANSVERSE JOINT WITH BOLTED FLANGES SHALL BE LOCATED APPROXIMATELY AT THE MID-DEPTH OF THE ANNULAR SPACE. DUCT SECTIONS SHALL BE ASSEMBLED USING BOLTED FLANGES OR SMACNA APPROVED TRANSVERSE JOINT REINFORCEMENTS.



HILTI, Inc.
Tulsa, Oklahoma USA (800) 879-8000

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Scale	-
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Drawing No.
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