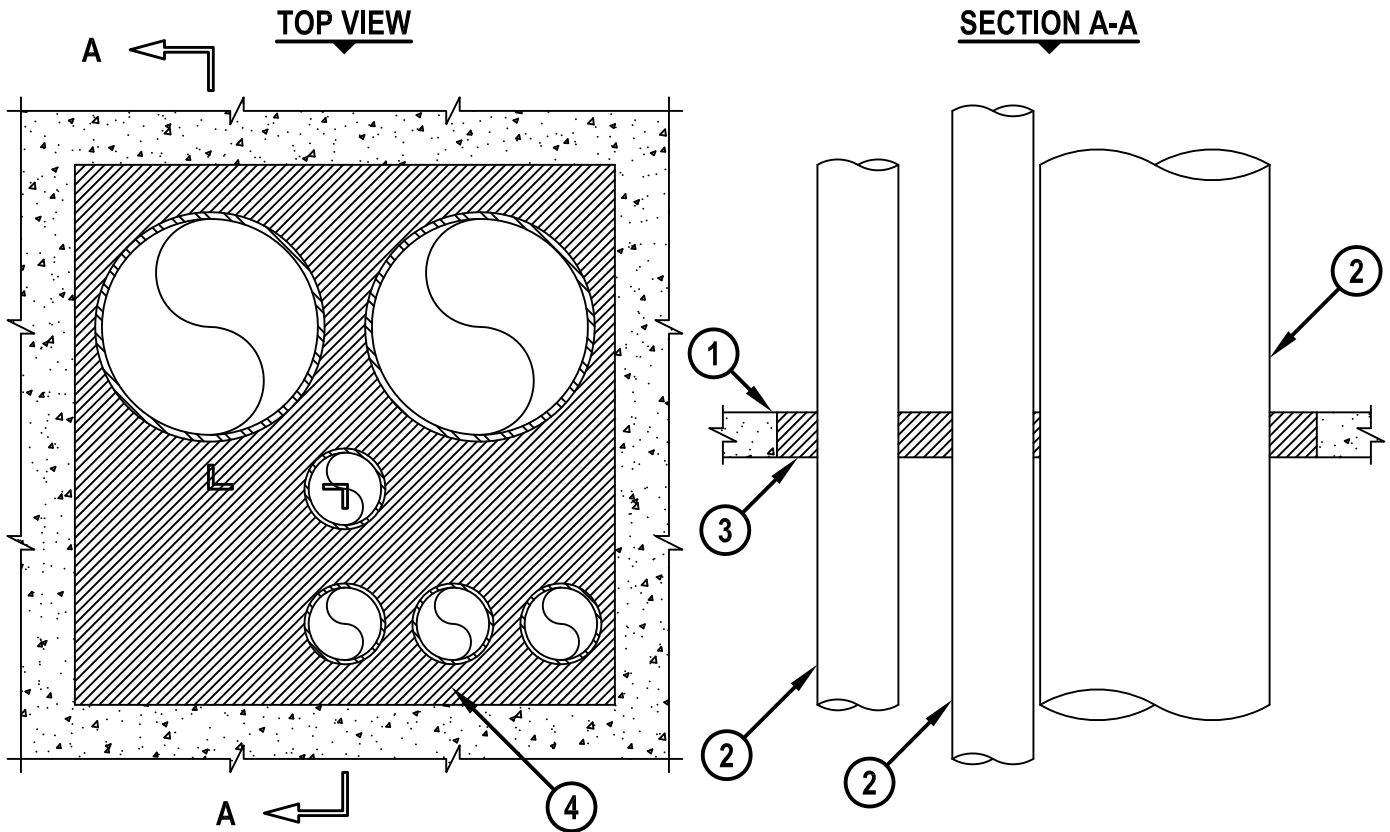


MULTIPLE METAL PIPES THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL

F-RATING = 3-HR.
T-RATING = 0-HR.

CAJ114j.061608



1. CONCRETE FLOOR OR WALL ASSEMBLY (3-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR OR WALL (MINIMUM 2-1/2" THICK).
 - B. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
2. ONE OR MORE OF THE FOLLOWING PENETRATING ITEMS MAY BE INSTALLED WITHIN THE OPENING :
 - A. MAXIMUM 12" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
 - B. MAXIMUM 4" NOMINAL DIAMETER COPPER PIPE, STEEL CONDUIT, OR EMT.
3. [FORMING NOT SHOWN] USE A RIGID BOARD MATERIAL TO SUPPORT HILTI CP 637 FIRESTOP MORTAR DURING ITS INITIAL CURE (MINIMUM 24 HOURS) (SEE NOTE NO. 5 BELOW).
4. MINIMUM 2-1/2" DEPTH HILTI CP 637 FIRESTOP MORTAR.

NOTES : 1. MAXIMUM AREA OF OPENING = 1024 SQ. IN. WITH A MAXIMUM DIMENSION OF 32".
 2. MINIMUM CLEARANCE BETWEEN PIPES = 0".
 3. MINIMUM CLEARANCE BETWEEN 4" PIPES (OR SMALLER) AND PERIPHERY OF OPENING = 0".
 4. MINIMUM CLEARANCE BETWEEN PIPES LARGER THAN 4" AND PERIPHERY OF OPENING = 1".
 5. AS AN ALTERNATE TO RIGID BOARD MATERIAL, MINERAL WOOL MAY BE USED IN FLOORS GREATER THAN 2-1/2" THICK. THE MINERAL WOOL IS TO BE TIGHTLY PACKED WITHIN THE OPENING AS TEMPORARY OR PERMANENT FORMING AND RECESSED FROM TOP SURFACE OF CONCRETE FLOOR TO ACCOMMODATE FIRESTOP MORTAR.



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Sheet	1 of 1
Scale	3/32" = 1"
Date	June 16, 2008

Drawing No.

**CAJ
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