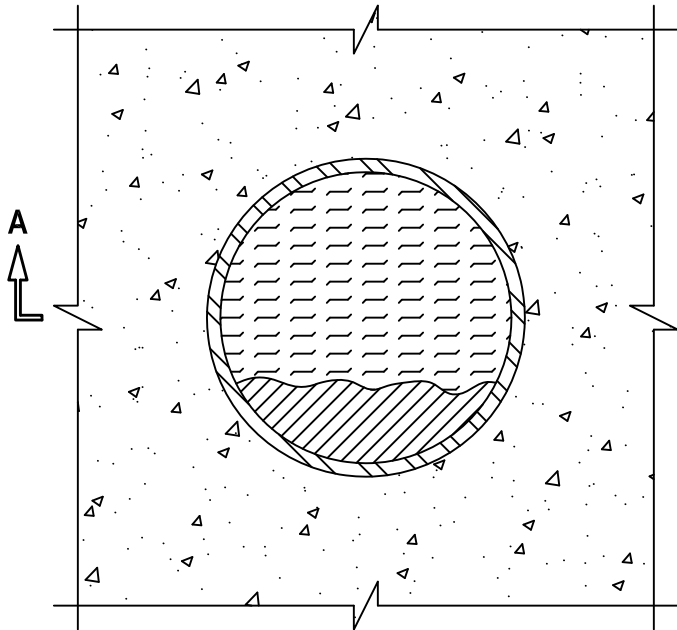


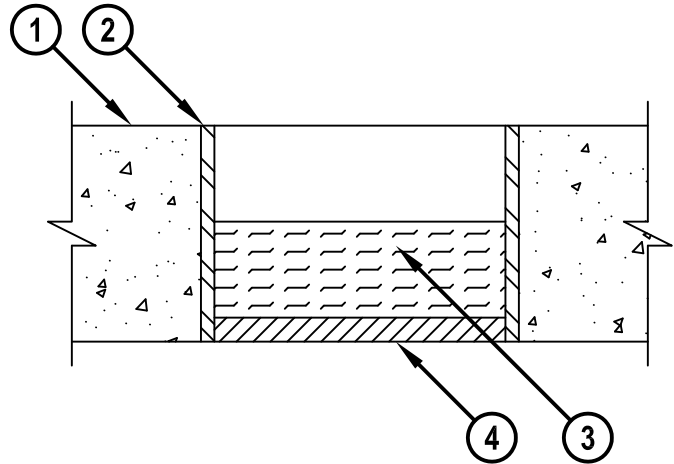
BLANK OPENING THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL

F-RATING = 3-HR.
 FT-RATING = 1-1/2 HR.
 FH AND FTH-RATING = 0-HR.

TOP VIEW



SECTION A-A



cUL CAJ0004b.011715

1. CONCRETE FLOOR OR WALL ASSEMBLY (3-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. [OPTIONAL] MAXIMUM 6" NOMINAL DIAMETER STEEL PIPE SLEEVE (SCHEDULE 10 OR HEAVIER).
3. MINIMUM 2" THICKNESS MINERAL WOOL (MINIMUM 4 PCF DENSITY) TIGHTLY PACKED.
4. MINIMUM 1/2" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT FLUSH WITH BOTTOM OF FLOOR.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 6".
 2. MINIMUM 1/2" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT IS REQUIRED ON BOTH SIDES OF A WALL ASSEMBLY.



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

Sheet	1 of 1
Scale	1/4" = 1"
Date	Jan. 17, 2015

Drawing No.
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