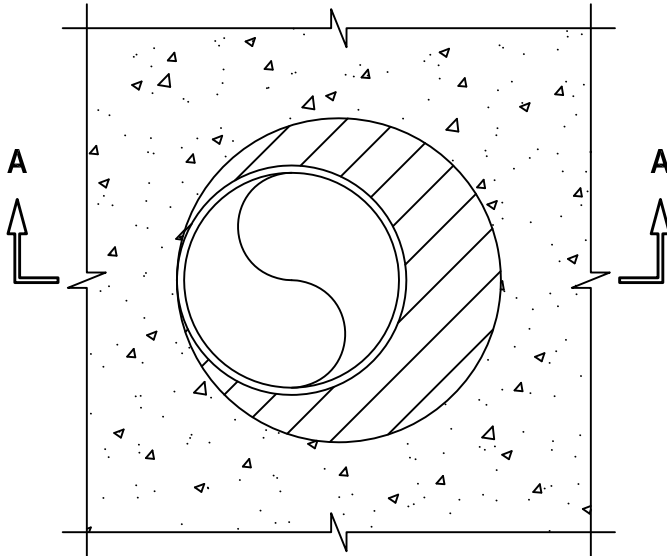


METAL PIPE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL ASSEMBLY

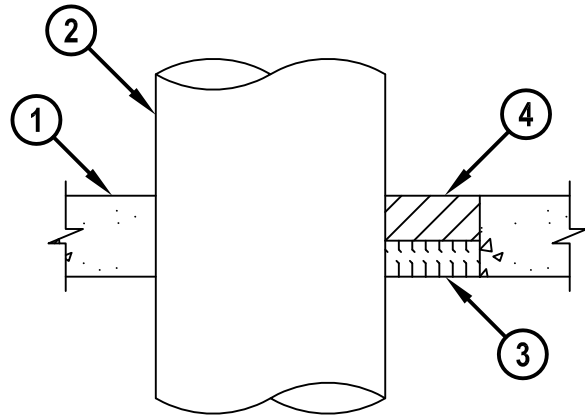
F-RATING = 2-HR.
 FT-RATING = 0-HR.
 FH-RATING = 0-HR.
 FTH-RATING = 0-HR.

cUL CAJ1663a.012716

TOP VIEW



SECTION A-A



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 (SOLID OR FILLED).
2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING :
 - A. MAXIMUM 12" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 40 OR HEAVIER).
 - B. MAXIMUM 12" NOMINAL DIAMETER CAST IRON PIPE.
 - C. MAXIMUM 4" NOMINAL DIAMETER COPPER PIPE OR TUBING.
 - D. MAXIMUM 6" NOMINAL DIAMETER STEEL CONDUIT.
 - E. MAXIMUM 4" NOMINAL DIAMETER EMT.
3. MINIMUM 2" THICKNESS MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED AND RECESSED TO ACCOMMODATE FIRESTOP FOAM.
4. MINIMUM 2-1/2" DEPTH HILTI CP 660 FIRESTOP FOAM FLUSH WITH TOP SURFACE OF FLOOR.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 18".
 2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 5-1/4".
 3. MINIMUM 2-1/2" DEPTH HILTI CP 660 FIRESTOP FOAM IS REQUIRED ON BOTH SIDES OF A WALL ASSEMBLY.



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

Sheet	1 of 1
Scale	3/32" = 1"
Date	Jan. 27, 2016

Drawing No.
cUL
CAJ1663a