

INSULATED METAL PIPE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL

F-RATING = 2-HR.

T-RATING = 0-HR.

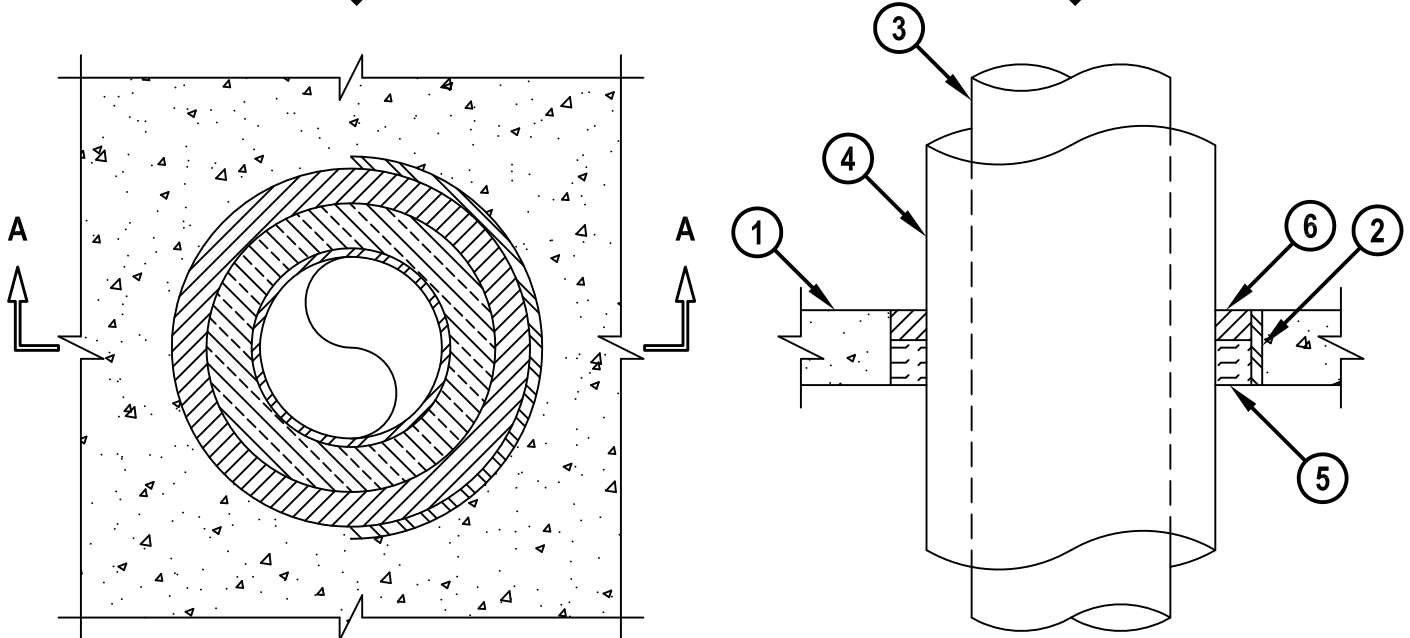
L-RATING AT AMBIENT = 4 CFM / SQ FT

L-RATING AT 400° F = LESS THAN 1 CFM / SQ FT

CAJ5096g.010615

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 2-1/2" THICK).
 - B. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
2. [OPTIONAL] MAXIMUM 18" NOMINAL DIAMETER STEEL PIPE SLEEVE (SCHEDULE 10 OR HEAVIER).
3. PENETRATING ITEM TO BE ANY ONE OF THE FOLLOWING :
 - A. MAXIMUM 12" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
 - B. MAXIMUM 6" NOMINAL DIAMETER COPPER PIPE.
4. MINIMUM 1/2" TO MAXIMUM 1-1/2" THICK GLASS-FIBER PIPE INSULATION.
5. MINIMUM 1-1/2" THICKNESS MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED.
6. MINIMUM 1" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 18".
 2. ANNULAR SPACE = MINIMUM 1/2", MAXIMUM 1-7/8".
 3. MINIMUM 1" 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	5/32" = 1"
Date	Jan. 06, 2015

Drawing No.

**CAJ
5096g**