

METAL PIPE THROUGH CONCRETE FLOOR ASSEMBLY

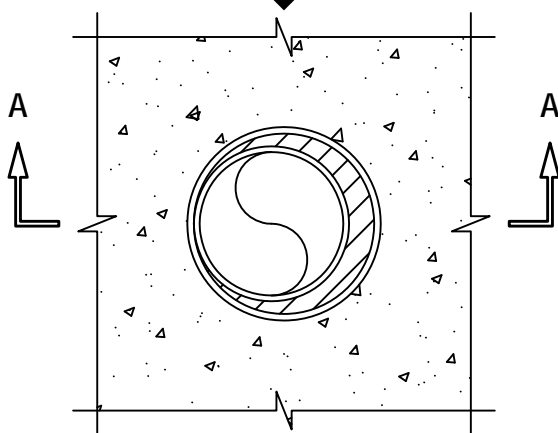
F-RATING = 2-HR.

T-RATING = 0-HR.

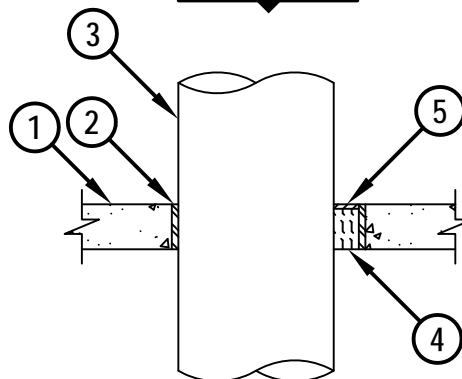
L-RATING AT AMBIENT = LESS THAN 1 CFM / SQ FT

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

TOP VIEW



SECTION A-A

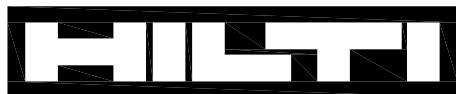


1. CONCRETE FLOOR ASSEMBLY (2-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 2-1/2" THICK).
 - B. ANY UL/cUL CLASSIFIED PRECAST (HOLLOW-CORE) CONCRETE FLOOR (MINIMUM 6" THICK).
2. [OPTIONAL IN CONCRETE FLOORS ONLY] ANY OF THE FOLLOWING STEEL SLEEVES MAY BE USED :
 - A. MAXIMUM 10" NOMINAL DIAMETER STEEL PIPE SLEEVE (SCHEDULE 40 OR HEAVIER).
 - B. MAXIMUM 6" (MIN. 26 GA.) OR MAXIMUM 10" (MIN. 24 GA.) DIAMETER GALVANIZED STEEL SLEEVE WITH SQUARE FLANGE SPOT WELDED TO BOTTOM OR MID-HEIGHT OF SLEEVE AND SIZED MINIMUM 2" LARGER THAN SLEEVE DIAMETER.
3. PENETRATING ITEM TO BE ONE OF THE FOLLOWING :
 - A. MAXIMUM 8" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
 - B. MAXIMUM 8" NOMINAL DIAMETER CAST OR DUCTILE IRON PIPE.
 - C. MAXIMUM 4" NOMINAL DIAMETER COPPER PIPE OR TUBING.
 - D. MAXIMUM 6" NOMINAL DIAMETER STEEL CONDUIT.
 - E. MAXIMUM 4" NOMINAL DIAMETER EMT.
4. MINIMUM 2" THICKNESS MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED AND RECESSED TO ACCOMMODATE SEALANT. WHEN PRECAST (HOLLOW-CORE) UNITS ARE USED, MINERAL WOOL SHOULD BE INSTALLED FLUSH WITH THE BOTTOM OF FLOOR.
5. MINIMUM 1/4" DEPTH HILTI CP 604 SELF-LEVELING FIRESTOP SEALANT, HILTI CFS-S SIL GG FIRESTOP SILICONE SEALANT, OR HILTI CFS-S SIL SL FIRESTOP SILICONE SEALANT.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 10-5/8" FOR NORMAL CONCRETE, 7" FOR PRECAST (HOLLOW-CORE) CONCRETE.

2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 2".

3. FOR L-RATING, APPLY A MINIMUM 1/4" BEAD OF HILTI CP 604 SELF-LEVELING FIRESTOP SEALANT, HILTI CFS-S SIL GG FIRESTOP SILICONE SEALANT, OR HILTI CFS-S SIL SL FIRESTOP SILICONE SEALANT AT PENETRANT/CONCRETE INTERFACE AND OVER TOP END OF SLEEVE TO OVERLAP ONTO CONCRETE FLOOR AROUND PERIPHERY OF OPENING.

**Hilti Firestop Systems**

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Sheet	1 of 1
Scale	3/32" = 1"
Date	Dec. 20, 2013

Drawing No.

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