

INSULATED METAL PIPE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL

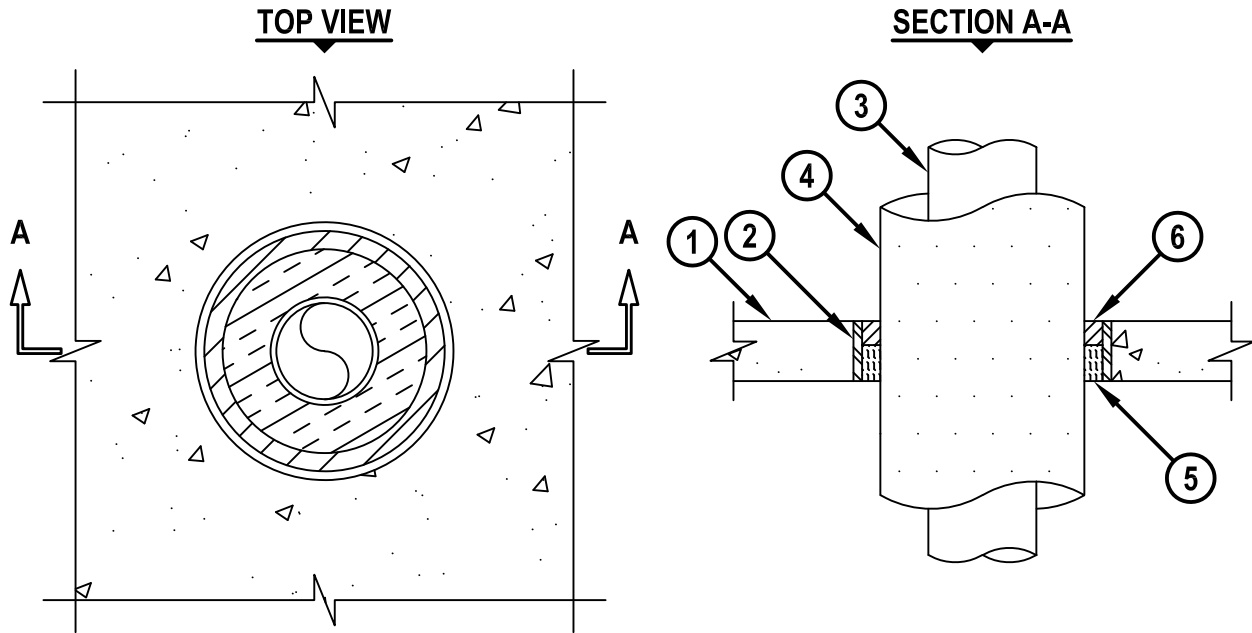
F-RATING = 2-HR.

T-RATING = 1/2-HR. OR 3/4-HR.

L-RATING AT AMBIENT = 4 CFM / SQ FT

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

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1. CONCRETE FLOOR OR WALL ASSEMBLY (2-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 2-1/2" THICK).
 - B. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
2. [OPTIONAL] ANY OF THE FOLLOWING STEEL SLEEVES MAY BE USED :
 - A. MAXIMUM 10" NOMINAL DIAMETER STEEL PIPE SLEEVE (SCHEDULE 10 OR HEAVIER).
 - B. MAXIMUM 6" (MIN. 26 GA.) OR 10" (MIN. 24 GA.) DIAMETER GALVANIZED STEEL SLEEVE WITH SQUARE FLANGE SPOT WELDED TO BOTTOM OF SLEEVE AND SIZED MINIMUM 2" LARGER THAN SLEEVE DIAMETER. SLEEVE MAY EXTEND MAXIMUM 1" ABOVE TOP SURFACE OF FLOOR.
3. PENETRATING ITEM TO BE ONE OF THE FOLLOWING :
 - A. MAXIMUM 4" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
 - B. MAXIMUM 4" NOMINAL DIAMETER CAST OR DUCTILE IRON PIPE.
 - C. MAXIMUM 2" NOMINAL DIAMETER COPPER PIPE OR TUBING.
4. MINIMUM 1/2" TO 2" THICK GLASS-FIBER PIPE INSULATION.
5. MINIMUM 1-1/2" THICKNESS MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED AND RECESSED TO ACCOMMODATE SEALANT.
6. MINIMUM 1" DEPTH HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 10".
 2. ANNULAR SPACE = MINIMUM 1/4", MAXIMUM 1-1/8".
 3. MINIMUM 1" DEPTH HILTI FIRESTOP SEALANT IS REQUIRED ON BOTH SIDES OF A WALL.



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Sheet	1 of 1
Scale	1/8" = 1"
Date	Jan. 16, 2019

Drawing No.
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