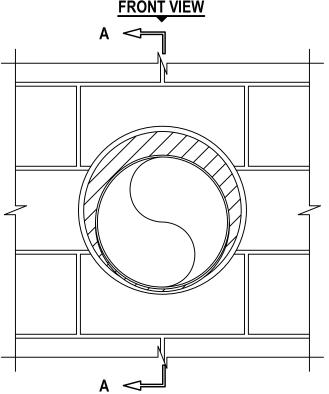
UL/cUL SYSTEM NO. W-J-1193

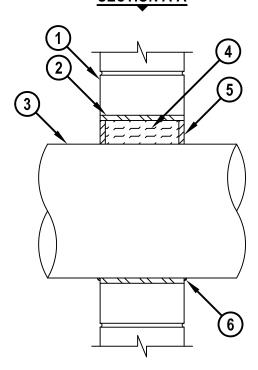
METAL PIPE THROUGH CONCRETE WALL OR CONCRETE BLOCK WALL ASSEMBLY

F-RATING = 2-HR. T-RATING = 0-HR.

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

L-RATING AT 400°F = 4 CFM / SQ FT **SECTION A-A**





- 1. CONCRETE WALL ASSEMBLY (2-HR. FIRE-RATING):
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 6" THICK).
 - B. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
- 2. MAXIMUM 16" NOMINAL DIAMETER STEEL PIPE SLEEVE (SCHEDULE 40 OR HEAVIER).
- 3. PENETRATING ITEM TO BE ONE OF THE FOLLOWING:
 - A. MAXIMUM 12" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
 - B. MAXIMUM 12" NOMINAL DIAMETER CAST OR DUCTILE IRON PIPE.
 - C. MAXIMUM 6" NOMINAL DIAMETER COPPER PIPE OR TUBE.
 - D. MAXIMUM 6" NOMINAL DIAMETER EMT OR STEEL CONDUIT.
- 4. MINIMUM 5" THICKNESS MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED AND RECESSED ON BOTH SIDES OF WALL.
- 5. MINIMUM 1/2" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT.
- MINIMUM 1/4" BEAD HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT APPLIED AT POINT OF CONTACT.

NOTES: 1. MAXIMUM DIAMETER OF OPENING = 16".

2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 3-7/8".



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Sheet	1 of 1
Scale	7/64" = 1"
Date	Jan. 08, 2015

Drawing No. WJ 1193b

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