

UL/cUL SYSTEM NO. C-AJ-4093

MULTIPLE CABLE TRAYS THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL

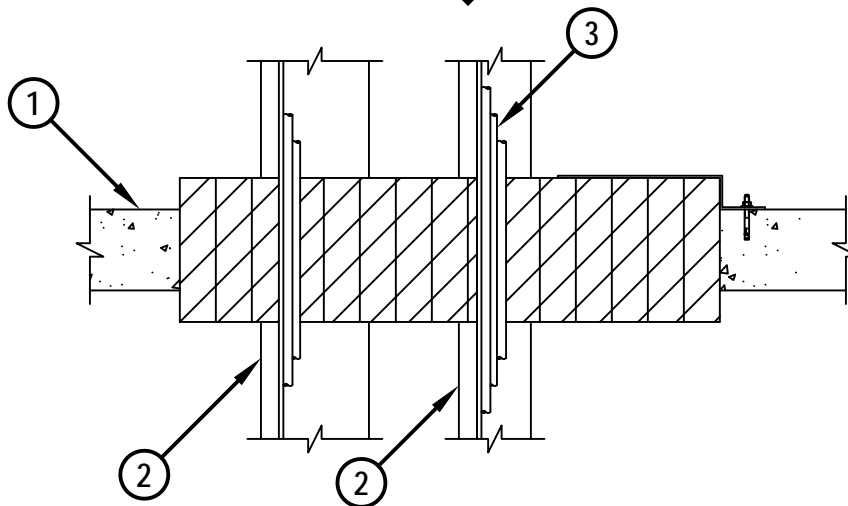
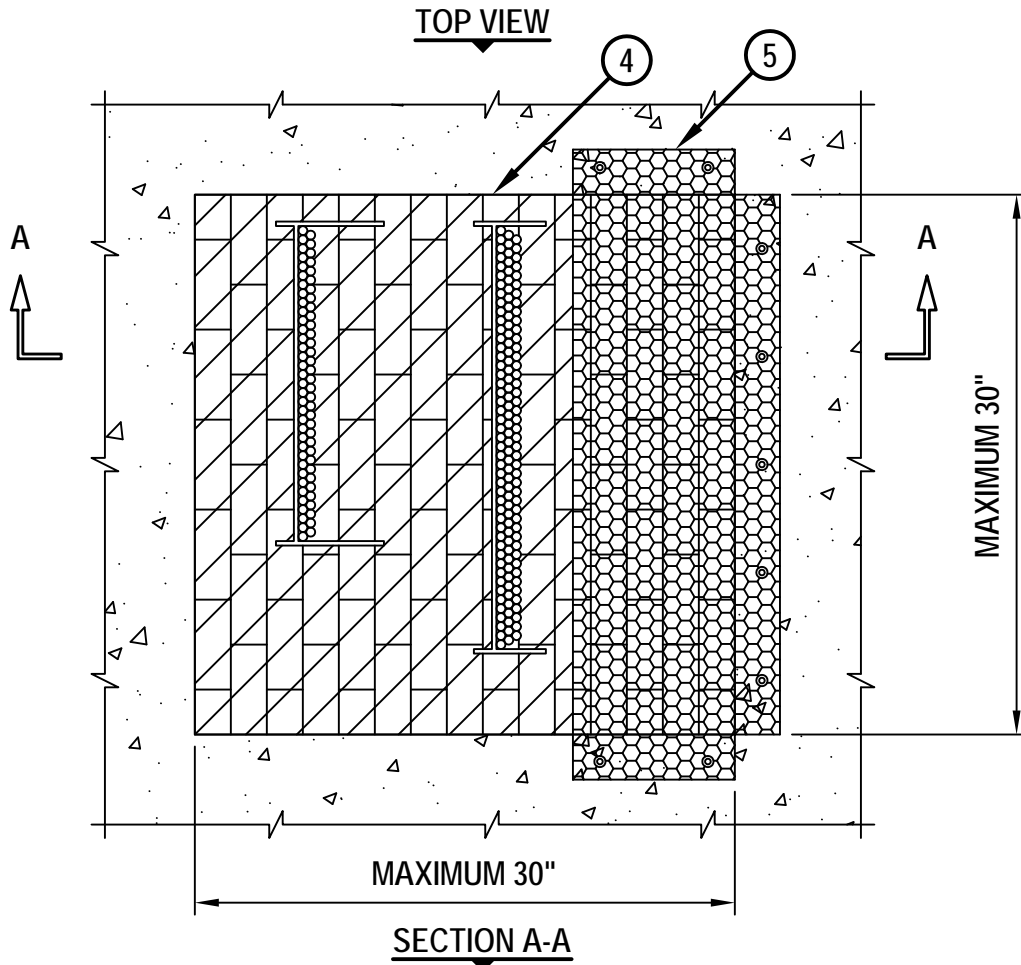
F-RATING = 3-HR.

T-RATING = 0-HR.

L-RATING AT AMBIENT = LESS THAN 5 CFM / SQ FT

L-RATING AT 400° F = LESS THAN 2 CFM / SQ FT

CAJ4093c.010615



HILTI, Inc.
Tulsa, Oklahoma USA (800) 879-8000

Sheet	1 of 2
Scale	3/32" = 1"
Date	Jan. 06, 2015

Drawing No.

**CAJ
4093c**

Saving Lives through Innovation and Education

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1. CONCRETE FLOOR OR WALL ASSEMBLY (3-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.
2. MAXIMUM 24" x 4" ALUMINUM OR STEEL OPEN LADDER OR SOLID BACK CABLE TRAY.
3. ANY OF THE FOLLOWING TYPES OF CABLES MAY BE USED :
 - A. MAXIMUM 7/C NO. 12 AWG COPPER CONDUCTOR CABLE WITH PVC JACKET.
 - B. MAXIMUM 300 PAIR NO. 24 AWG TELEPHONE CABLE WITH PVC JACKET.
 - C. MAXIMUM 350 KCMIL SINGLE CONDUCTOR POWER CABLE WITH PVC JACKET.
 - D. MAXIMUM 500 KCMIL SINGLE CONDUCTOR POWER CABLE WITH PVC JACKET.
 - E. 24 FIBER-OPTIC CABLE WITH PVC JACKET.
4. HILTI CFS-BL FIRESTOP BLOCK (2" THICK x 5" WIDE x 8" DEEP, REFERENCE : TOP VIEW) FIRMLY PACKED AND CENTERED WITHIN OPENING.
5. STEEL WIRE MESH (NOMINAL 1" HEXAGONAL [20 GA. OR HEAVIER] OR NOMINAL 2" SQUARES [NO. 16 SWG]) REQUIRED WHEN ANNULAR SPACE EXCEEDS 12" (INSTALL ON TOP OF FLOOR OR BOTH SIDES OF WALL). WIRE MESH CUT TO FIT WITHIN MAXIMUM 2" OF THE PENETRATING ITEM WITH A MINIMUM 3" OVERLAP BEYOND THE PERIPHERY OF THE OPENING. WIRE MESH SECURED TO TOP SURFACE OF FLOOR OR BOTH SURFACES OF WALL WITH 1/4" DIAMETER BY 1" LONG CONCRETE ANCHORS AND 1/4" x 1-1/2" DIAMETER FENDER WASHERS (SPACED 8" OC).

NOTES : 1. MAXIMUM AREA OF OPENING = 900 SQ. IN., WITH A MAXIMUM DIMENSION OF 30".
 2. MAXIMUM AREA OF CABLES SHALL BE 40% OF THE CROSS-SECTIONAL AREA OF CABLE TRAY, WITH A MAXIMUM 3" LOADING DEPTH.
 3. ANNULAR SPACE = MINIMUM 1-1/2", MAXIMUM 13-1/2".
 4. ANNULAR SPACE BETWEEN CABLE TRAYS = MINIMUM 5", MAXIMUM 12".
 5. APPLY HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT OR HILTI CP 618 FIRESTOP PUTTY STICK INTO INTERSTICES OF CABLES BETWEEN CABLES AND CABLE TRAYS, AND ANY VOIDS TO MAXIMUM EXTENT POSSIBLE.



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Scale	-
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