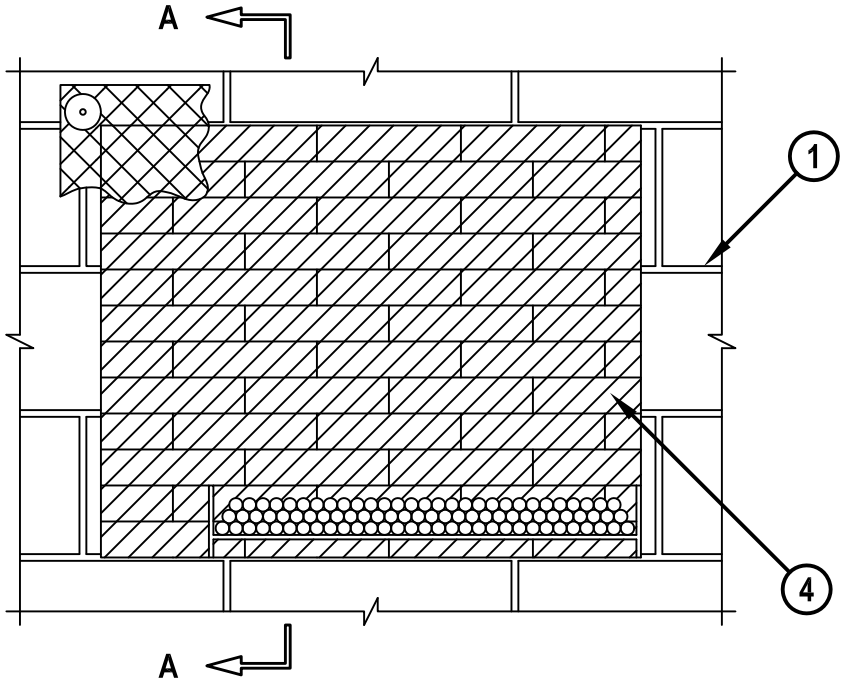
UL/cUL SYSTEM NO. W-J-4029

CABLE TRAY THROUGH CONCRETE WALL OR BLOCK WALL ASSEMBLY

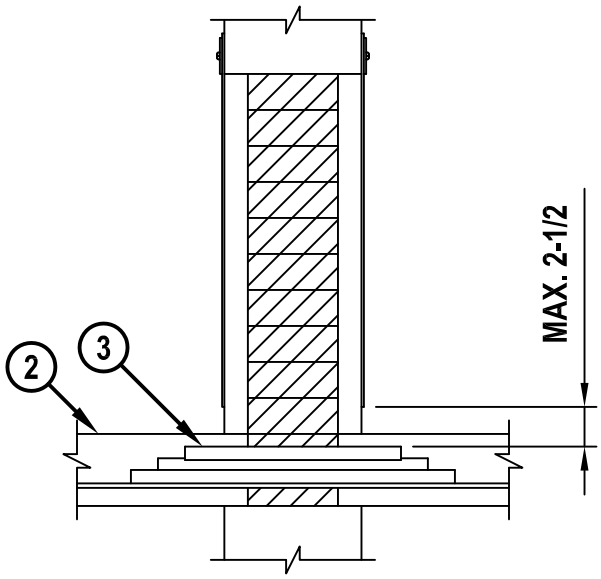
F-RATING = 2-HR.
T-RATING = 0-HR.

WJ4029e.020916

FRONT VIEW



SECTION A-A



Hilti Firestop Systems	HILTI, Inc. Plano, Texas USA (800) 879-8000	Sheet: 1 of 2 Scale: 1/8" = 1" Date: Feb. 09, 2016	Drawing No. WJ 4029e

Saving Lives through Innovation and Education

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CABLE TRAY THROUGH CONCRETE WALL OR BLOCK WALL ASSEMBLY

F-RATING = 2-HR.
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WJ4029e.020916

1. CONCRETE WALL ASSEMBLY (2-HR. FIRE-RATING) :
   A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 5" THICK).
   B. ANY UL/cUL CLASSIFIED SOLID OR FILLED CONCRETE BLOCK WALL.
2. MAXIMUM 24" WIDE x 4" DEEP, ALUMINUM OR STEEL, OPEN LADDER OR SOLID BACK CABLE TRAY.
3. CABLES TO BE ANY COMBINATION OF THE FOLLOWING :
   A. MAXIMUM 300 PAIR NO. 24 AWG TELEPHONE CABLE.
   B. MAXIMUM 750 KCMIL SINGLE CONDUCTOR POWER CABLE.
   C. MAXIMUM 1/2" DIAMETER FIBER-OPTIC CABLE (24 FIBER).
   D. MAXIMUM 3/C NO. 12 AWG METAL-CLAD CABLE.
4. HILTI CFS-BL FIRESTOP BLOCK (2" THICK x 8" WIDE x 5" DEEP, REFERENCE : FRONT VIEW) FIRMLY PACKED AND CENTERED WITHIN OPENING OR FLUSH WITH ONE SIDE.

NOTES : 1. MAXIMUM AREA OF OPENING = 900 SQ. IN., WITH A MAXIMUM DIMENSION OF 30".
2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 26".
3. CABLES TO FILL MAXIMUM 45% OF CROSS-SECTIONAL AREA OF CABLE TRAY.
4. APPLY HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT, HILTI CP 618 FIRESTOP PUTTY STICK, HILTI CP 620 FIRE FOAM OR HILTI CP 660 FIRESTOP FOAM IN ANY VOID THAT MAY EXIST (INTO INTERSTICES OF CABLES, BETWEEN CABLES AND CABLE TRAY, AND ANY VOIDS, TO MAXIMUM EXTENT POSSIBLE.
5. WHEN ANNULAR SPACE EXCEEDS 4", ABOVE OR BELOW THE CABLE TRAY, OR 6" BETWEEN TRAY AND SIDE OF OPENING, A NOMINAL 2" x 2" STEEL WIRE MESH (16 GA.) SHALL BE ATTACHED TO BOTH SIDES OF THE WALL WITH 1/4" DIAMETER x 1" LONG STEEL CONCRETE ANCHORS AND 1-1/2" DIA. FENDER WASHERS (SPACED MAX. 8" C/C).
6. [NOT SHOWN] AS AN ALTERNATE TO WIRE MESH, STEEL PLATE (MIN. 22 GA.) MAY BE USED. STEEL PLATE SHALL BE ATTACHED TO STEEL STRUTS (13/16" DEEP x 12 GA.) WITH 1/4" DIA. STEEL NUTS (SPACED 8" C/C). STRUT SHALL BE SECURED TO BOTH SURFACES OF THE WALL ASSEMBLY WITH 1/4" DIA. x 1" LG. STEEL CONCRETE ANCHORS WITH STEEL NUTS (SPACED MAX. 12" C/C).
7. STEEL WIRE MESH/STEEL PLATE SHALL BEGIN MAXIMUM 2-1/2" FROM THE PENETRANT AND OVERLAP MINIMUM 3" BEYOND THE PERIPHERY OF THE OPENING.