

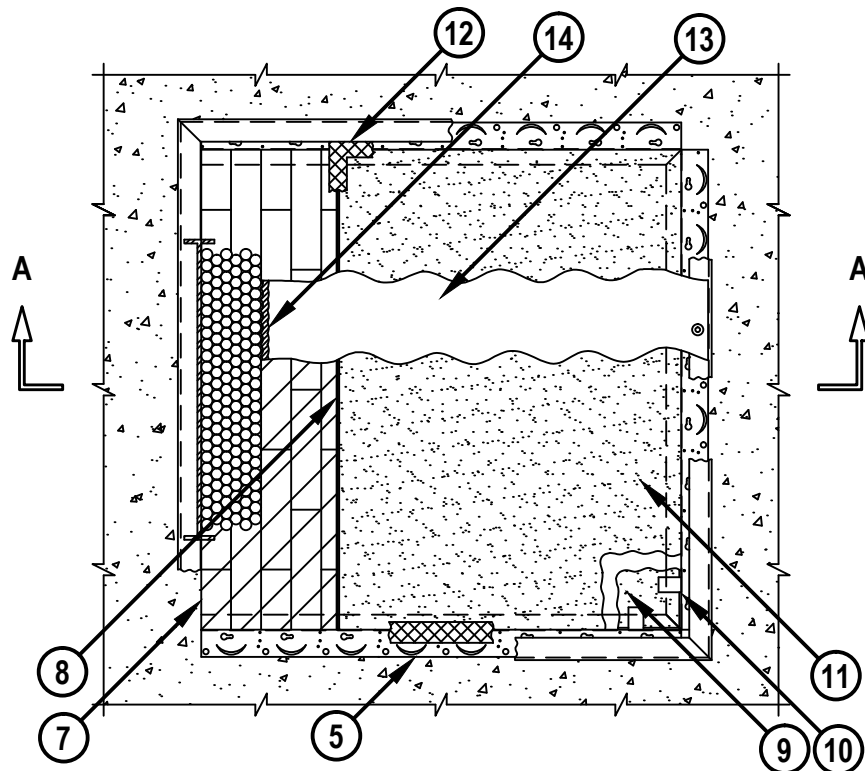
UL/cUL SYSTEM NO. F-B-4006

SINGLE CABLE RACK THROUGH CONCRETE FLOOR ASSEMBLY

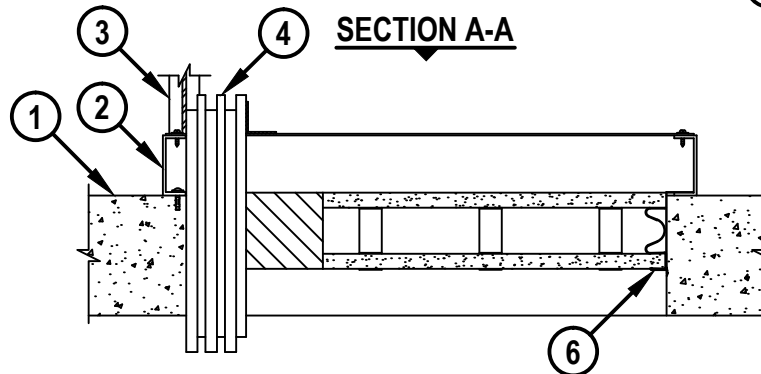
F-RATING = 2-HR.

T-RATING = 1-HR.

TOP VIEW



SECTION A-A



1. CONCRETE FLOOR ASSEMBLY (MINIMUM 8" THICK) (2-HR. FIRE-RATING).
2. NOMINAL 4" x 1-1/2" x 3/16" THICK STRUCTURAL STEEL CHANNEL SHEATHING SECURED TO CONCRETE FLOOR WITH 1/4" x 1-1/4" LONG CONCRETE SCREW ANCHORS SPACED MAXIMUM 10" C/C.
3. MAXIMUM 20" WIDE CABLE RACK WITH 2" x 3/8" THICK SOLID STEEL RAILS WELDED OR BOLTED TO TOP FLANGE OF STEEL CHANNEL SHEATHING.
4. CABLES TO BE A COMBINATION OF ANY OF THE FOLLOWING (CABLE LOADING NOT TO EXCEED 4"):
 - A. MAXIMUM 750 KCMIL RHW/RHH POWER CABLE WITH PVC JACKET.
 - B. MAXIMUM 300 PAIR NO. 24 AWG TELEPHONE CABLE WITH PVC JACKET.

HILTI
Hilti Firestop Systems

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

Sheet 1 of 2
Scale 5/64" = 1"
Date Jan. 10, 2012

Drawing No.

**FB
4006c**

Saving Lives through Innovation and Education

FB4006c.011012

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5. HILTI CP 675T FIRESTOP Z-FRAME CUT TO LENGTH FOR THREE SIDES OF THE OPENING. EACH PIECE OF Z-FRAME FASTENED TO INSIDE FLANGE OF STEEL SHEATHING WITH 3/16" x 1-1/4" LONG STEEL CONCRETE SCREW ANCHORS AT MAXIMUM 12" OC.
6. HILTI CP 619T FIRESTOP PUTTY ROLL APPLIED TO THE BACK LIP OF THE Z-FRAME.
7. HILTI CFS-BL FIRESTOP BLOCK OR HILTI FS 657 FIRE BLOCK TO FILL AREA BETWEEN CABLE RACK/CABLES, FLOOR, AND T-BAR (ITEM 9) MAXIMUM 2-1/2 ROWS OF BLOCKS INSTALLED BETWEEN THE CABLE AND T-BAR. BLOCKS TO BE FIRMLY PACKED AND INSTALLED WITH 5" DIMENSION PROJECTING THROUGH OPENINGS FLUSH WITH BACK LIP OF Z-FRAME (ITEM 5). EITHER ONE OR A COMBINATION OF BLOCK TYPES MAY BE USED.
8. HILTI CP 675T T-BAR CUT 1/4" SHORTER THAN OPENING DIMENSION. T-BAR LOCATED MINIMUM 1-1/2" TO MAXIMUM 5" FROM CABLES AND DIRECTLY ADJACENT TO THE FIRESTOP/FIRE BLOCKS (ITEM 7). T-BAR MAY BE FASTENED TO BACK LIP OF Z-FRAME WITH ONE 3/8" LONG x NO. 8 STEEL SCREW AT EACH END.
9. HILTI CP 675T FIRESTOP BOARD (BOARD 1) CUT TO FIT OPENING ABOVE UPPER T-BAR WITH MAXIMUM 1/4" GAP AROUND PERIMETER.
10. HILTI CP 675T DISTANCE HOLDERS CLIPPED OVER FIRST LAYER OF BOARD (ITEM 9), SPACED 8" OC AROUND PERIMETER OF BOARD. SLIDE FIRESTOP BOARD 1 WITH DISTANCE HOLDERS INTO OPENING AND PUSH BACK FLUSH WITH BACK LIP OF Z-FRAME.
11. HILTI CP 675T FIRESTOP BOARD (BOARD 2) CUT TO FIT WITHIN OPENING ABOVE T-BAR WITH MAXIMUM 1/4" GAP AROUND PERIMETER. SLIDE FIRESTOP BOARD 2 INTO OPENING AGAINST DISTANCE HOLDERS. FIRESTOP BOARD 2 SHOULD BE FLUSH WITH TOP SURFACE OF FLOOR (SEE NOTE NO. 4 BELOW).
12. HILTI CP 619T FIRESTOP PUTTY ROLL APPLIED AROUND PERIMETER OF CP 675T FIRESTOP BOARD (BOARD 2) OVERLAPPING 1/2" ONTO THE BOARD, Z-FRAME, AND FIRESTOP/FIRE BLOCKS.
13. CABLE HOLE SHALL BE COVERED WITH A MINIMUM 22 GA. STEEL COVER THAT IS CUT TO APPROXIMATE SHAPE OF THE INSTALLED CABLE BUNDLE. COVER PLATE TO BE FASTENED TO TOP SURFACE OF SHEATHING WITH STEEL BOLTS OR SCREWS SPACED MAXIMUM 12" OC. DISTANCE BETWEEN PLATE AND CABLES SHALL NOT EXCEED 1".
14. SINGLE LAYER OF HILTI CP 617 PUTTY PADS SHALL BE FIRMLY PLACED AROUND THE PERIMETER OF CABLE BUNDLE EXTENDING A MINIMUM 2" ONTO CABLES AND OVERLAPPING COVER PLATE OR STEEL SHEATHING A MINIMUM 1/2".

- NOTES :**
1. MAXIMUM SIZE OF OPENING = 30" x 30".
 2. ANNULAR SPACE BETWEEN CABLE RACK AND PERIPHERY OF OPENING = MINIMUM 0", MAXIMUM 28".
 3. HILTI Z-FRAME LATCHES MAY BE USED AT 8" C/C AND ROTATED AND LOCKED IN PLACE SO THAT THE LATCHES EXTEND OVER THE SECOND LAYER OF FIRESTOP BOARD.
 4. APPLY HILTI FIRESTOP PUTTY IN ANY VOID THAT MAY EXIST (BETWEEN CABLES, BETWEEN CABLES AND FIRESTOP/FIRE BLOCKS, BETWEEN FIRESTOP/FIRE BLOCKS, BETWEEN FIRESTOP/FIRE BLOCKS AND PERIPHERY OF OPENING) TO MAXIMUM EXTENT POSSIBLE.



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