

UL/cUL SYSTEM NO. C-BJ-8014

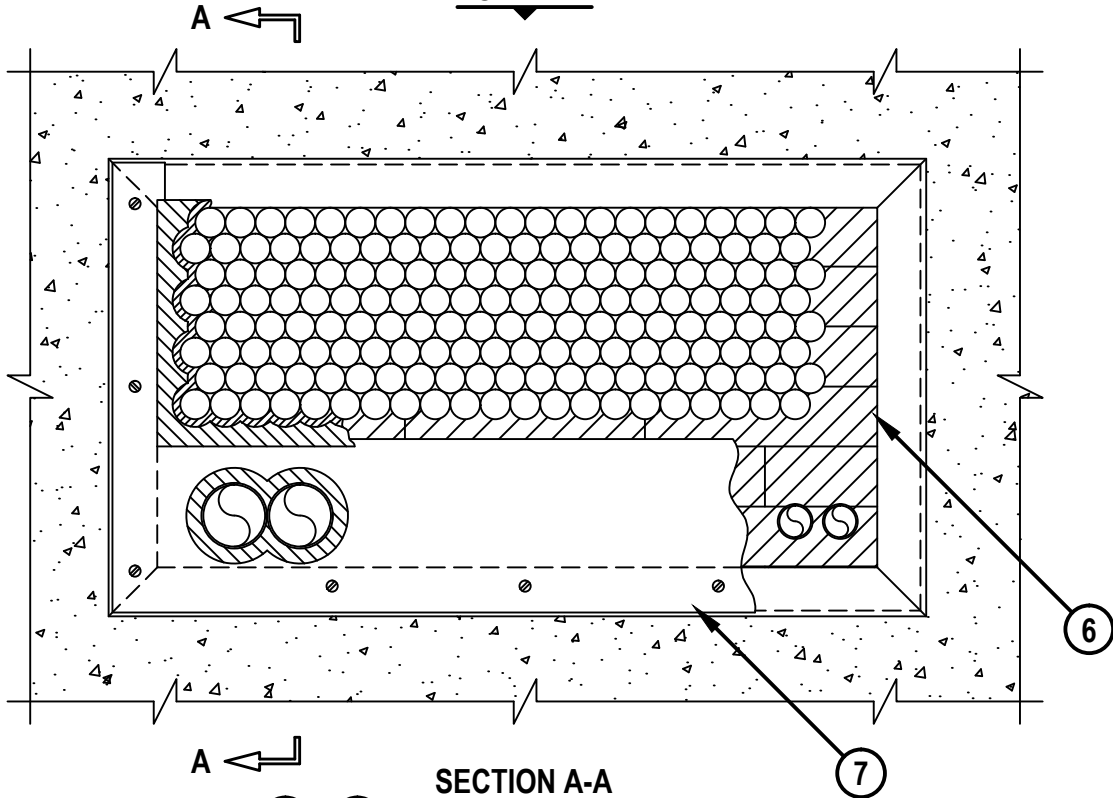
# CABLES THROUGH CONCRETE FLOOR OR WALL ASSEMBLY

F-RATING = 2-HR.

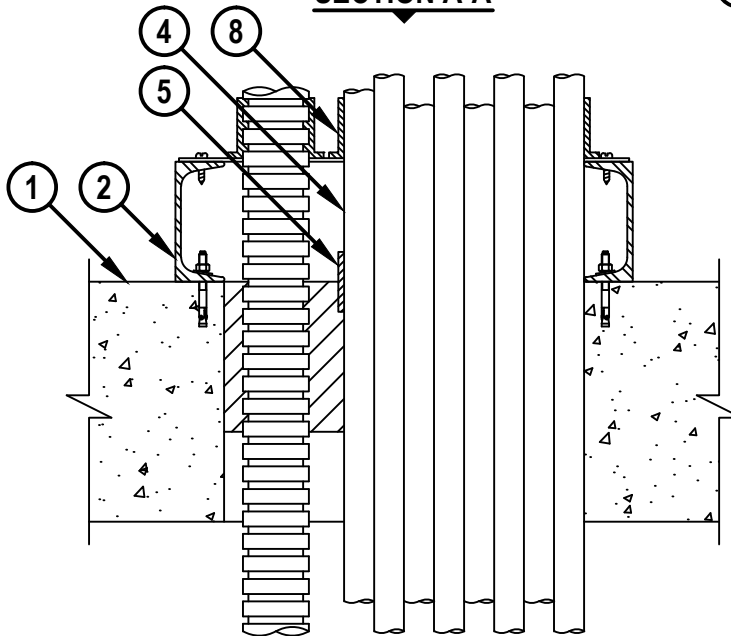
T-RATING = 0-HR., 1-HR., OR 2-HR.

NOTE : TESTED TO A 2.5 Pa PRESSURE DIFFERENTIAL

**TOP VIEW**



**SECTION A-A**



CBJ8014d.010612



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

Sheet	1 of 2
Scale	5/32" = 1"
Date	Jan. 06, 2012

Drawing No.  
**CBJ  
8014d**

*Saving Lives through Innovation and Education*

**CABLES THROUGH CONCRETE FLOOR OR WALL ASSEMBLY**

F-RATING = 2-HR.

T-RATING = 0-HR., 1-HR., OR 2-HR.

NOTE : TESTED TO A 2.5 Pa PRESSURE DIFFERENTIAL

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1. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR OR WALL 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 ASSEMBLY WITH APPROPRIATE HILTI ANCHORS (6" TO 8" C/C SPACING).
3. CABLE RACK [NOT SHOWN] : MAXIMUM 20" WIDE, LADDER TYPE CABLE RACK WELDED OR BOLTED TO TOP FLANGE OF STEEL CHANNEL SHEATHING.
4. CABLES TO CONSIST OF ANY OF THE FOLLOWING :
  - A. MAXIMUM 300 PAIR NO. 24 AWG TELEPHONE CABLE WITH PVC JACKET (T-RATING = 2-HR).
  - B. MAXIMUM 750 KCMIL POWER CABLE WITH PVC JACKET (T-RATING = 1-HR).
5. HILTI CP 617 FIRESTOP PUTTY PADS APPLIED AROUND THREE ACCESSIBLE SIDES OF CABLE BUNDLE. PUTTY PAD TO EXTEND MINIMUM 2" ABOVE AND BELOW THE TOP SURFACE OF CONCRETE FLOOR ASSEMBLY.
6. HILTI CFS-BL FIRESTOP BLOCK OR HILTI FS 657 FIRE BLOCK (2" THICK x 8" WIDE x 5" DEEP, REFERENCE : TOP VIEW) FIRMLY PACKED AND FLUSH WITH THE TOP SURFACE OF FLOOR, OR EITHER SURFACE OF WALL. EITHER ONE OR A COMBINATION OF THE BLOCK TYPES MAY BE USED.
7. [OPTIONAL] GALVANIZED SHEET METAL COVER PLATE (MIN. 22 GA.) CUT TO FIT THE CONTOUR OF THE CABLE BUNDLE WITHIN 1". COVER PLATE TO BE SECURELY FASTENED TO TOP OF CHANNEL SHEATHING WITH 1/4-20 BOLTS OR SCREWS, OR SOUTHCO® MEDIUM BAIL STYLE QUARTER-TURN STEEL STUD RECEPTACLE FASTENERS (MAX. 12 C/C SPACING). COVER PLATE IS NOT REQUIRED WHEN DISTANCE BETWEEN CABLE BUNDLE AND SHEATHING IS 1" OR LESS. (T-RATING IS 0-HR. WHEN COVER PLATE IS NOT USED).
8. WHEN SHEET METAL COVER PLATE IS USED, HILTI CP 617 FIRESTOP PUTTY PAD TO BE APPLIED AROUND PERIPHERY OF CABLE BUNDLE, EXTENDING MINIMUM 2" ONTO PENETRANTS AND OVERLAPPING COVER PLATE BY MINIMUM 1/2".

- NOTES :
1. MAXIMUM SIZE OF OPENING = 24" x 12".
  2. ANNULAR SPACE BETWEEN CABLES AND PERIPHERY OF OPENING = MINIMUM 0".
  3. CABLES TO FILL MAXIMUM 34% OF CROSS-SECTIONAL AREA OF OPENING.
  4. [OPTIONAL] MAXIMUM 1" NOMINAL DIAMETER EMT (MAXIMUM QUANTITY = 2) SPACED MINIMUM 1/2" APART. ANNULAR SPACE BETWEEN CABLES AND THE EMT AND THE EMT AND THE PERIPHERY OF OPENING = 1-3/4" AND 3/4" RESPECTIVELY.
  5. [OPTIONAL] MAXIMUM 2" NOMINAL DIAMETER ENT (MAXIMUM QUANTITY = 2) SPACED MINIMUM 0" APART. ANNULAR SPACE BETWEEN CABLES AND THE ENT AND THE ENT AND PERIPHERY OF THE OPENING = 2" AND 5/8" RESPECTIVELY.
  6. APPLY HILTI CP 618 FIRESTOP PUTTY STICK IN ANY VOID THAT MAY EXIST (AROUND PENETRANTS, BETWEEN FIRESTOP BLOCKS/FIRE BLOCKS, OR BETWEEN FIRE BLOCKS AND PERIPHERY OF OPENING).



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