

UL/cUL SYSTEM NO. C-BJ-8013

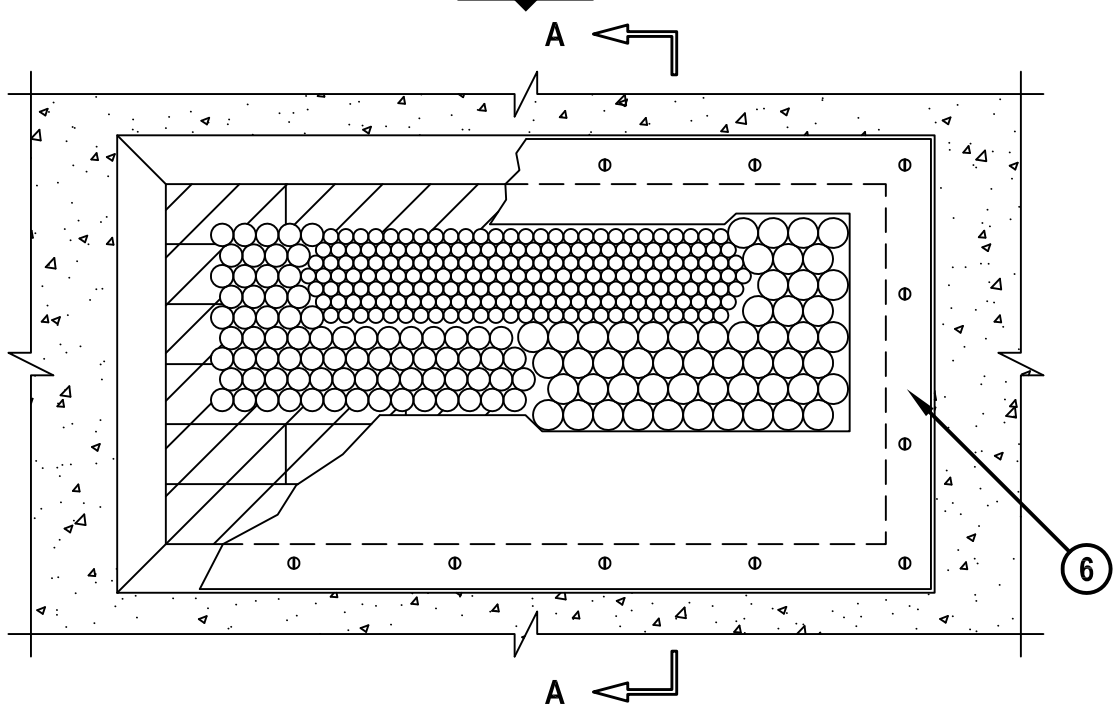
# CABLES THROUGH CONCRETE FLOOR OR WALL ASSEMBLY

F-RATING = 2-HR.

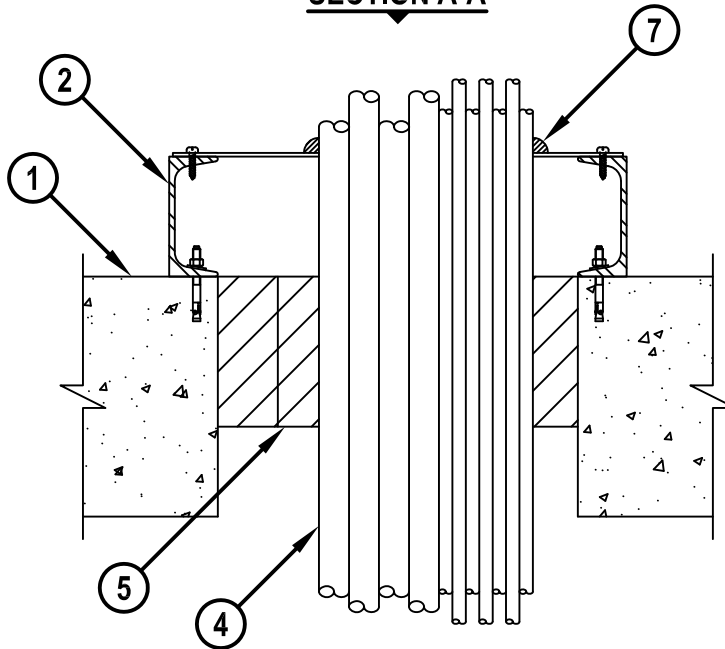
T-RATING = 0-HR., 1-HR., OR 2-HR.

NOTE : TESTED TO A 2.5 Pa PRESSURE DIFFERENTIAL

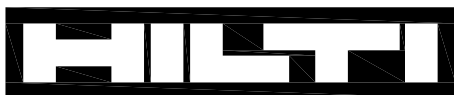
TOP VIEW



SECTION A-A



CBJ8013f.010915



**Hilti Firestop Systems**

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

Sheet 1 of 2

Scale 5/32" = 1"

Date Jan. 09, 2015

Drawing No.

**CBJ  
8013f**

*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 (MIN. 8" THICK) (2-HR. FIRE-RATING).
2. NOMINAL 4" x 1-1/2" x 3/16" THICK STRUCTURAL STEEL CHANNEL SHEATHING, SECURED TO FLOOR OR WALL ASSEMBLY WITH APPROPRIATE HILTI ANCHORS (6" TO 8" C/C SPACING).
3. CABLE RACK [NOT SHOWN] : MAX. 20" WIDE LADDER TYPE CABLE RACK, WELDED OR BOLTED TO TOP FLANGE OF SHEATHING CHANNEL.
4. CABLES TO BE A COMBINATION OF ANY OF THE FOLLOWING :
  - A. MAXIMUM 300 PAIR NO. 24 AWG TELEPHONE CABLE (T-RATING = 2 HR.).
  - B. MAXIMUM 750 KCMIL SINGLE CONDUCTOR POWER CABLE (T-RATING = 1 HR.).
5. 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 BLOCK TYPES MAY BE USED.
6. [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 STEEL CHANNEL SHEATHING (5" TO 7" 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).
7. WHEN SHEET METAL COVER PLATE IS USED, APPLY MINIMUM 1/2" BEAD HILTI CP 618 FIRESTOP PUTTY STICK OR FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT AT CABLE/COVER PLATE INTERFACE, OR APPLY HILTI CP 617 FIRESTOP PUTTY PAD AROUND PERIPHERY OF CABLE BUNDLE, EXTENDING MINIMUM 2" ONTO CABLES 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 1".
3. CABLES TO FILL MAXIMUM 34% OF CROSS-SECTIONAL AREA OF OPENING.
4. APPLY HILTI CP 617 PUTTY PADS OR HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT BETWEEN EACH ROW OF CABLES AND AROUND THE PERIMETER OF THE FINISHED CABLE RUN PRIOR TO INSTALLING HILTI FIRESTOP BLOCK/FIRE BLOCKS. CP 617 PUTTY PADS TO EXTEND 5" BELOW TOP SURFACE OF FLOOR.
5. [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.
6. [OPTIONAL] MAXIMUM 2" NOMINAL DIAMETER ENT (MAXIMUM QUANTITY = 2) SPACED MINIMUM 0" APART. ANNULAR SPACE BETWEEN CABLES AND THE ENT AND THE ENT AND THE PERIPHERY OF OPENING = 2" AND 5/8" RESPECTIVELY.



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