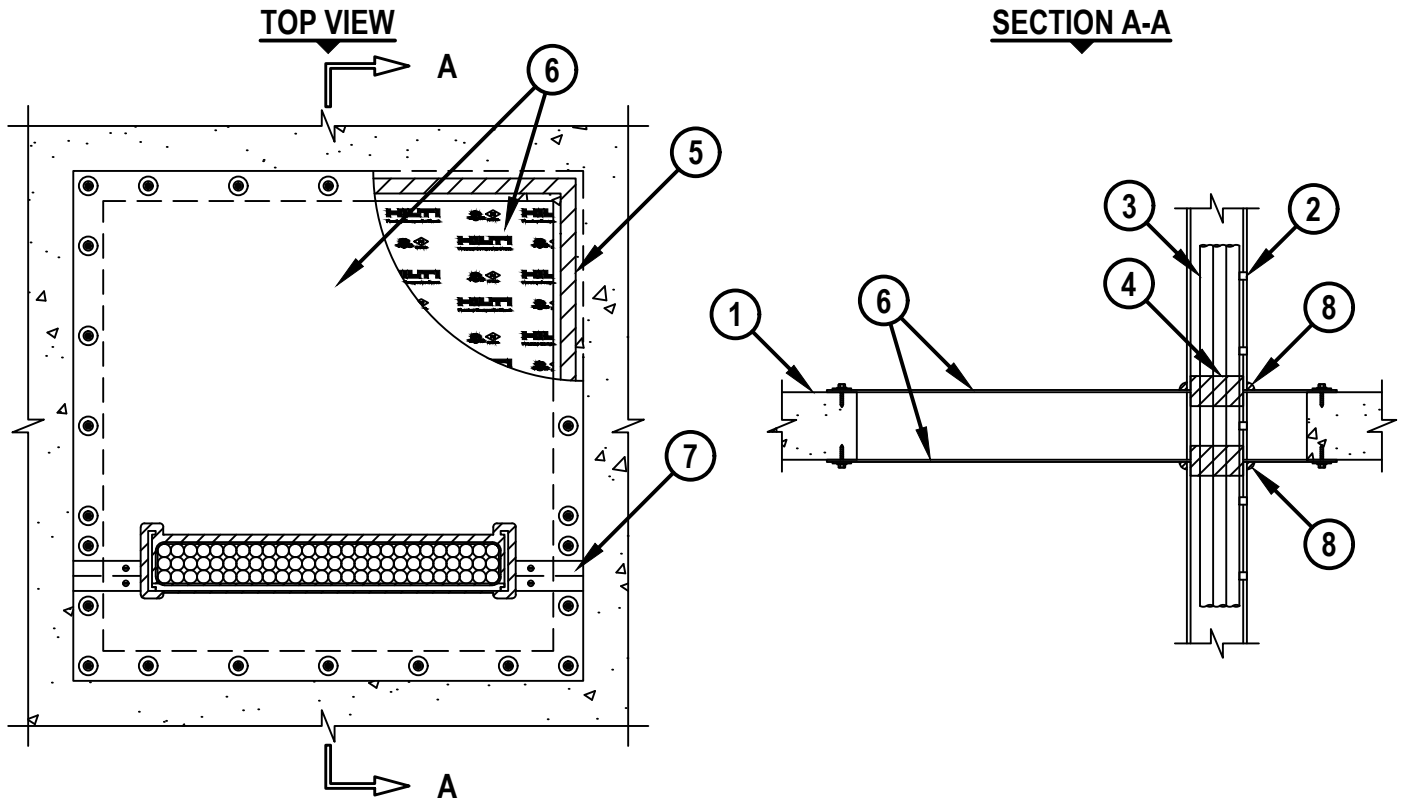


**CABLE TRAY THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL ASSEMBLY**

F-RATING = 2-HR., 3-HR., OR 4-HR.

T-RATING = 0-HR.

CAJ4107c.091818



1. CONCRETE FLOOR OR WALL ASSEMBLY (2-HR., 3-HR., OR 4-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" STEEL OR ALUMINUM OPEN LADDER CABLE TRAY (SEE TABLE BELOW).
3. CABLES TO BE A COMBINATION OF ANY OF THE FOLLOWING (SEE NOTE NO. 6 BELOW).
  - A. MAXIMUM 750 MCM POWER CABLES, THHN OR THWN JACKETED.
  - B. MAXIMUM 8/C NO. 12 AWG MULTICONDUCTOR POWER AND CONTROL CABLE.
  - C. MAXIMUM 300 PAIR NO. 24 AWG COPPER CONDUCTOR COMMUNICATION CABLE WITH PVC JACKET.
  - D. MULTIPLE FIBER OPTIC COMMUNICATION CABLE WITH PVC JACKET.
  - E. MAXIMUM 25 PAIR NO. 24 AWG TELEPHONE CABLE WITH PVC JACKET.
4. WHEN F-RATING IS 2-HR. OR 3-HR. HILTI CP 619T FIRESTOP PUTTY ROLL TO BE DOUBLE STACKED AND INSTALLED TO TIGHTLY FOLLOW THE CONTOUR OF THE CABLE TRAY AND CABLE FILL AROUND ITS ENTIRE PERIMETER. 2" WIDE LAYER OF PUTTY REQUIRED ON EACH SIDE OF THE FLOOR OR WALL ASSEMBLY AND SHOULD PROJECT 1" BEYOND EACH FACE OF THE COMPOSITE SHEET.



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Sheet	1 of 2
Scale	5/64" = 1"
Date	Sep. 18, 2018

Drawing No.

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**CABLE TRAY THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL ASSEMBLY**

F-RATING = 2-HR., 3-HR., OR 4-HR.

T-RATING = 0-HR.

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5. ONE LAYER HILTI CP 619T PUTTY ROLL OR MINIMUM 1/2" BEAD HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT APPLIED UNDER COMPOSITE SHEET AROUND PERIMETER OF OPENING AND OVER BUTTED SEAM OR SLIT MADE IN COMPOSITE SHEET (NOT SHOWN ON SEAM).
6. HILTI CFS-COS FIRESTOP COMPOSITE SHEET CUT TO OVERLAP FLOOR OR WALL A MINIMUM OF 2". COMPOSITE SHEET INSTALLED WITH THE ALUMINUM FOIL FACING AGAINST THE FLOOR OR WALL AND SECURED WITH MINIMUM 3/16" DIAMETER BY 1-1/4" LONG STEEL ANCHOR SCREWS WITH 1-1/4" DIAMETER STEEL FENDER WASHERS AT MAXIMUM 2" FROM ENDS AND MAXIMUM 6" C/C. COMPOSITE SHEET CUT TO TIGHTLY FOLLOW THE CONTOUR OF THE CABLE TRAY AND CABLE FILL WITH AN ANNULAR SPACE EQUAL TO OR LESS THAN 1/4".
7. MINIMUM 2" WIDE STAINLESS STEEL STRIP (MIN. 24 GA.) CENTERED OVER ENTIRE LENGTH OF BUTT SEAM OR SLIT MADE IN THE COMPOSITE SHEET. COVER STRIP SECURED TO COMPOSITE SHEET WITH STEEL SHEET METAL SCREWS OR STEEL RIVETS SPACED MAXIMUM 3" C/C ON EACH SIDE OF SEAM OR SLIT.
8. GENEROUS BEAD OF HILTI CP 618 FIRESTOP PUTTY STICK APPLIED AROUND BASE OF CABLE TRAY AND CABLE FILL AT THEIR EGRESS FROM THE COMPOSITE SHEET.

CABLE TRAY TYPE	F-RATING	COMPOSITE SHEET INSTALLATION FLOOR	COMPOSITE SHEET INSTALLATION WALL
STEEL	2-HR, 3-HR., OR 4-HR.	BOTH SIDES	BOTH SIDES
STEEL	2-HR. ONLY	TOP SIDE	BOTH SIDES
ALUMINUM	2-HR. OR 3-HR.	BOTH SIDES	BOTH SIDES

- NOTES :**
1. MAXIMUM SIZE OF OPENING = 30" x 30".
  2. WHEN F-RATING IS 4-HR. (OR AS AN OPTION FOR ITEM 4 IN A 3-HR. FIRE-RATING) APPLY A GENEROUS BEAD OF HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT AROUND THE BASE OF THE CABLE TRAY AND FILL CONTOUR ON BOTH SIDES OF FLOOR OR WALL.
  3. HILTI CFS-COS FIRESTOP COMPOSITE SHEET AND HILTI FS-ONE MAX/CP 619T ARE REQUIRED ON BOTH SIDES OF A WALL.
  4. HILTI CP 617 FIRESTOP PUTTY PAD MAY BE USED AS AN OPTION TO HILTI CP 619T FIRESTOP PUTTY ROLL.
  5. MAXIMUM AREA OF CABLES SHALL BE 40% OF THE CROSS-SECTIONAL AREA OF THE CABLE TRAY BASED ON A MAXIMUM 3" CABLE LOADING DEPTH WITHIN TRAY.
  6. WHEN COMPOSITE SHEET IS INSTALLED ON TOP SIDE OF FLOOR ONLY, THE FILL MATERIAL (ITEMS 4, 5, AND 8) ARE ALSO REQUIRED TO BE INSTALLED ON TOP SURFACE OF FLOOR.



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