

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

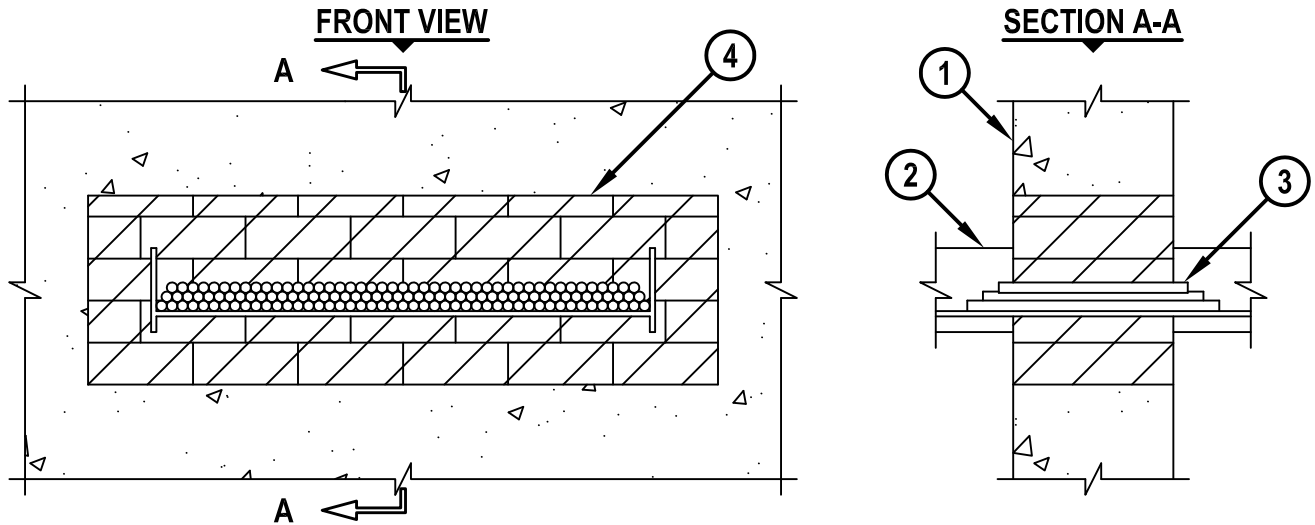
F-RATING = 2-HR.

T-RATING = 0-HR.

L-RATING AT AMBIENT = 5 CFM / SQ FT

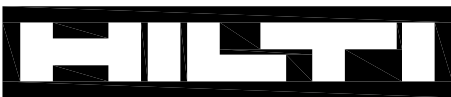
L-RATING AT 400°F = 2 CFM / SQ FT

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1. CONCRETE WALL ASSEMBLY (2-HR. FIRE-RATING) :
  - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 5" THICK).
  - B. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
2. MAXIMUM 24" x 4" ALUMINUM OR STEEL OPEN LADDER 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 OR HILTI FS 657 FIRE BLOCK (SEE NOTE NO. 4 BELOW FOR ORIENTATION OF BLOCKS) FIRMLY PACKED AND WITHIN OPENING. EITHER ONE OR A COMBINATION OF BLOCK TYPES MAY BE USED.

- NOTES :**
1. MAXIMUM AREA OF OPENING = 270 SQ. IN., WITH A MAXIMUM DIMENSION OF 30".
  2. ANNULAR SPACE = MINIMUM 1", MAXIMUM 4".
  3. MAXIMUM AREA OF CABLES EQUALS 40% OF CROSS-SECTIONAL AREA OF CABLE TRAY.
  4. FOR CONCRETE WALLS AND SOLID FILLED BLOCK WALLS, INSTALL FIRESTOP/FIRE BLOCKS (2" THICK x 8" WIDE x 5" DEEP, CENTERED WITHIN OPENING. FOR HOLLOW CORE BLOCK WALLS, INSTALL FIRESTOP/FIRE BLOCKS (2" THICK x 5" WIDE x 8" DEEP, PASSING THROUGH THE OPENING FROM SURFACE TO SURFACE.
  5. APPLY HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT OR CP 618 FIRESTOP PUTTY STICK INTO INTERSTICES OF CABLES, BETWEEN CABLES AND CABLE TRAY, AND ANY VOIDS, TO MAXIMUM EXTENT POSSIBLE.
  6. L-RATINGS ONLY APPLY WHEN FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT IS USED.



**Hilti Firestop Systems**

HILTI, Inc.  
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Sheet	1 of 1
Scale	7/64" = 1"
Date	Jan. 09, 2015

Drawing No.

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