

UL/cUL SYSTEM NO. W-J-3168

CABLE BUNDLE THROUGH CONCRETE OR BLOCK WALL ASSEMBLY

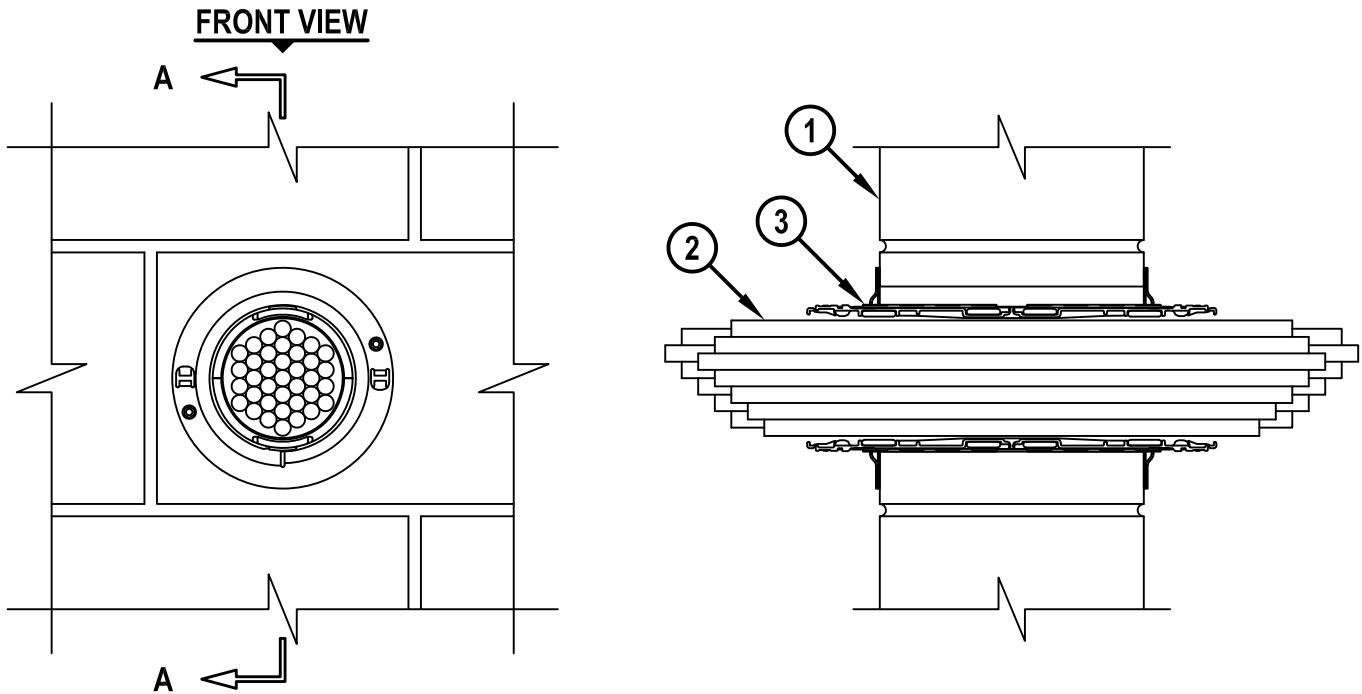
F-RATING = 2-HR.

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

L-RATING AT AMBIENT = SEE TABLE

L-RATING AT 400°F = SEE TABLE

WJ3168h.072418



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.



Hilti Firestop Systems

HILTI, Inc.
Plano, Texas USA (800) 879-8000

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Scale	1 1/64" = 1"
Date	July 24, 2018

Drawing No.

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3168h

Saving Lives through Innovation and Education

CABLE BUNDLE THROUGH CONCRETE OR BLOCK WALL ASSEMBLY

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2. CABLE BUNDLE TO BE A COMBINATION OF ANY OF THE FOLLOWING :

- A. MAXIMUM 100 PAIR NO. 24 AWG TELEPHONE CABLE WITH PVC JACKET.
- B. MAXIMUM 7/C NO. 12 AWG COPPER CONDUCTOR CONTROL CABLE WITH PVC OR XLPE JACKET AND INSULATION.
- C. MAXIMUM 4/0 AWG TYPE RHH GROUND CABLE.
- D. MAXIMUM 4 PAIR NO. 22 AWG CAT 5 OR CAT 6 COMPUTER CABLE.
- E. MAXIMUM RG 6/U COAXIAL CABLE.
- F. MAXIMUM 1/2" DIAMETER FIBER-OPTIC CABLE (24 FIBER) WITH PVC OR PE JACKET AND INSULATION.
- G. MAXIMUM 20/C NO. 22 AWG SHIELDED PRINTER CABLE WITH PVC JACKET.
- H. MAXIMUM 2/C NO. 18 AWG POWER OR NON-POWER LIMITED FIRE ALARM CABLE WITH OR WITHOUT METAL JACKET (MANUFACTURED BY AFC CABLE SYSTEMS, INC.).
- I. MAXIMUM 1/4" DIAMETER S-VIDEO CABLE CONSISTING OF TWO MAXIMUM 24 AWG 75 OHM COAX OR TWISTED PAIR CABLE WITH PE INSULATION AND PVC JACKET.

3. HILTI CP 653 (BA) SPEED SLEEVE [2" OR 4"] OR HILTI CFS-SL GA L SPEED SLEEVE [4"] SLID INTO AND CENTERED WITHIN WALL. DEVICE FLANGES SPUN CLOCKWISE ONTO DEVICE THREADS OVER SMOKE GASKET, BUTTING TIGHTLY TO BOTH SIDES OF WALL.

4. SECURE DEVICE FLANGES TO BOTH SIDES OF WALL WITH TWO MINIMUM 1-1/2" LONG MASONRY SCREWS OR ANCHORS.

MAX CABLE FILL	CABLE TYPE	L-RATING, CFM/SQ FT				L-RATING, CFM			
		AMBIENT		400°F		AMBIENT		400°F	
		SEALANT	GASKET	SEALANT	GASKET	SEALANT	GASKET	SEALANT	GASKET
0% FILL	-	LESS THAN 1	1	LESS THAN 1	2.7	LESS THAN 1	LESS THAN 1	LESS THAN 1	LESS THAN 1
100%	ITEM 2D ONLY	4.9	4.9	1.3	3.5	LESS THAN 1	LESS THAN 1	LESS THAN 1	LESS THAN 1
100%	ANY CABLES (ITEM 2) IN ANY COMBINATION	9.2	9.2	9.6	11.8	1.2	1.2	1.3	1.6

- NOTES :**
1. MAXIMUM DIAMETER OF OPENING = 3" (FOR 2" DEVICE) OR 5" (FOR 4" DEVICE).
 2. HILTI CFS-SL GA L SPEED SLEEVE SHALL ONLY BE USED IN WALLS 8" THICK OR GREATER.
 3. CABLES MAY REPRESENT 0% TO 100% VISUAL FILL OF DEVICE.
 4. ANNULAR SPACE BETWEEN DEVICE AND PERIPHERY OF OPENING = MINIMUM 0".
 5. L-RATING DOES NOT APPLY WHEN HILTI CP 618 FIRESTOP PUTTY IS USED.
 6. [OPTIONAL] INNER FABRIC MAY REMAIN OPEN WHEN L-RATING IS NOT REQUIRED.
 7. [OPTIONAL] AS AN ALTERNATE TO SMOKE GASKET, MINIMUM 5/8" DEPTH HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT, HILTI CP 606 FLEXIBLE FIRESTOP SEALANT, OR HILTI CP 618 FIRESTOP PUTTY STICK FLUSH WITH BOTH SURFACES OF WALL WITH AN ADDITIONAL 1/4" BEAD OF FIRESTOP SEALANT (NOT REQUIRED FOR PUTTY) APPLIED AT POINT OF CONTACT.



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