

UL/cUL SYSTEM NO. W-L-3393

CABLE BUNDLE THROUGH GYPSUM WALL ASSEMBLY

F-RATING = 1-HR. OR 2-HR.

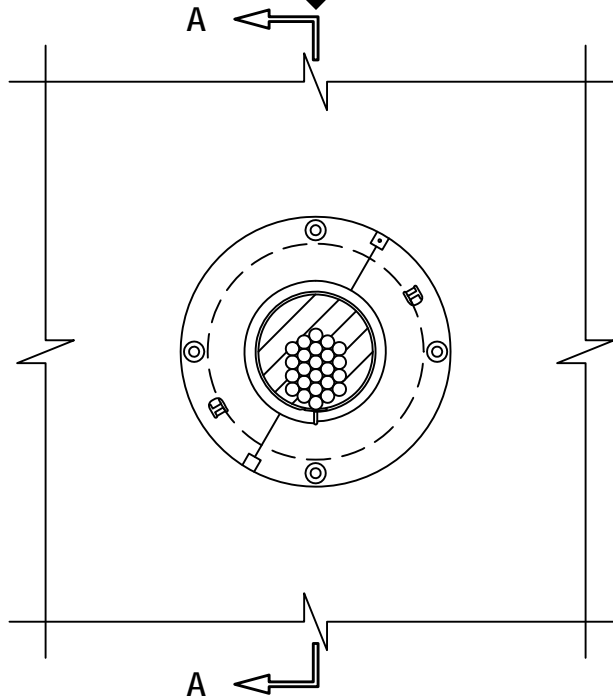
T-RATING = 0-HR., 3/4-HR., OR 1-HR.

L-RATING AT AMBIENT = 1.3 OR 2.8 CFM (SEE TABLE BELOW)

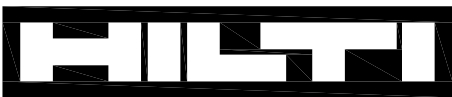
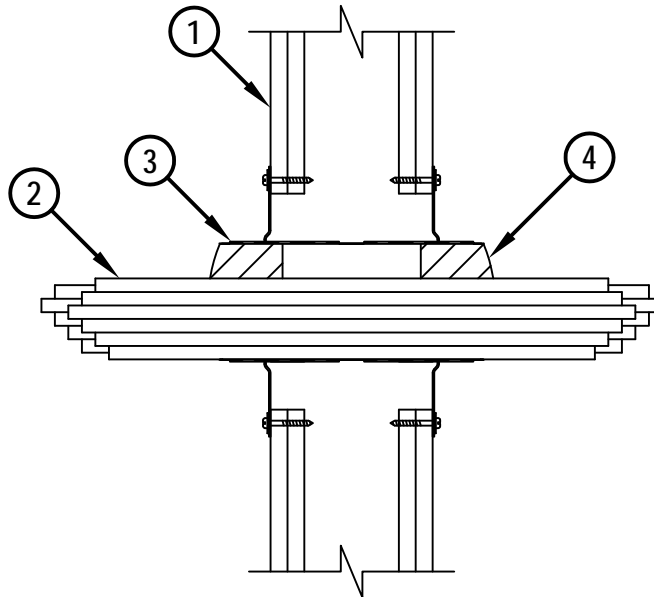
L-RATING AT 400°F = 1.1 OR 1.2 CFM (SEE TABLE BELOW)

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FRONT VIEW



SECTION A-A



Hilti Firestop Systems

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

Sheet 1 of 2

Scale 9/64" = 1"

Date Jan. 28, 2013

Drawing No.

**WL
3393a**

Saving Lives through Innovation and Education

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1. GYPSUM WALL ASSEMBLY (UL/cUL CLASSIFIED U300, U400, V400, OR W400 SERIES) (1-HR. OR 2-HR. FIRE-RATING) (2-HR. SHOWN) TO INCLUDE THE FOLLOWING CONSTRUCTION FEATURES :
 - A. [NOT SHOWN] WOOD STUDS TO CONSIST OF NOMINAL 2" x 4" LUMBER (SPACED MAXIMUM 16" OC). STEEL STUDS TO BE MINIMUM 3-1/2" WIDE (SPACED MAXIMUM 24" OC).
 - B. NOMINAL 5/8" THICK GYPSUM WALLBOARD. TYPE, NUMBER OF LAYERS, AND SHEET ORIENTATION AS SPECIFIED IN THE INDIVIDUAL UL DESIGN.
2. [OPTIONAL] 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 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 3/C NO. 12 AWG MC CABLE.
3. HILTI CFS-SL RK FIRESTOP RETROFIT SLEEVE (2" OR 4") CENTERED WITHIN WALL. DEVICE FLANGES SPUN CLOCKWISE ONTO DEVICE THREADS, BUTTING TIGHTLY TO BOTH SIDES OF WALL. EACH FLANGE SECURED TO WALL ASSEMBLY WITH FOUR NO. 10 x 1-1/2" LONG STEEL LAMINATING SCREWS THROUGH PRE-PUNCHED HOLES IN FLANGE.
4. HILTI CFS-PL FIRESTOP PLUG (2" OR 4") CUT TO FIT AROUND THE CABLE BUNDLE AND INSTALLED TIGHTLY WITHIN SLEEVE, FLUSH WITH THE END OF THE SLEEVE ON BOTH SIDES OF THE WALL.

	CFM (PER DEVICE)		CFM / SQ FT	
	AMBIENT	400°F	AMBIENT	400°F
BLANK OPENING (NO CABLES)	1.3	1.1	3.8	3
CABLES (MAX 33% FILL)	2.8	1.2	8.1	3.3

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 6" (FOR 2" DEVICE) AND 8" (FOR 4" DEVICE).
 2. CABLES MAY REPRESENT 0% TO 60% OF CROSS-SECTIONAL AREA OF DEVICE.
 3. ANNULAR SPACE BETWEEN DEVICE AND PERIPHERY OF OPENING = MINIMUM 0", MAXIMUM 2".
 4. DEVICE IS DESIGNED TO ALLOW INSTALLATION BEFORE OR AFTER THE CABLE PENETRANTS ARE IN PLACE.



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Sheet	2 of 2
Scale	-
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