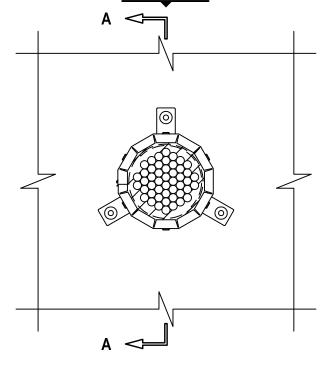
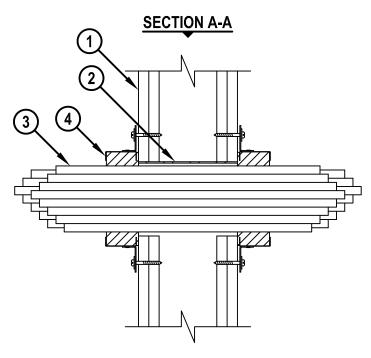
UL/cUL SYSTEM NO. W-L-3396

CABLE BUNDLE THROUGH GYPSUM WALL ASSEMBLY

F-RATING = 1-HR. OR 2-HR.
T-RATING = 0-HR., 1-HR., OR 2-HR.
L-RATING = (SEE TABLE BELOW)
FRONT VIEW







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Sheet	1 of 2
Scale	11/64" = 1"
Date	Jan. 14, 2015

WL 3396d

WL3396d.011415

Saving Lives through Innovation and Education

UL/cUL SYSTEM NO. W-L-3396

CABLE BUNDLE THROUGH GYPSUM WALL ASSEMBLY

F-RATING = 1-HR. OR 2-HR. T-RATING = 0-HR., 1-HR., OR 2-HR. L-RATING = (SEE TABLE BELOW)

WL3396d 01141

- 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] MAXIMUM 4" NOMINAL DIAMETER STEEL PIPE SLEEVE (SCHEDULE 5 OR HEAVER), SHEET METAL SLEEVE (MIN. 28 GA.), OR PVC PIPE SLEEVE (SCHEDULE 40) FLUSH WITH WALL SURFACES.
- 3. 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 AND 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.
- 4. HILTI CFS-CC 4" FIRESTOP CABLE COLLAR CENTERED OVER OPENING AND MOUNTED TO FACE OF GYPSUM WALL WITH NO. 10 x 1-1/2" LONG STEEL LAMINATING SCREWS AND MIN. 9/16" DIAMETER STEEL WASHERS OR MIN. 3/16" TOGGLE BOLTS WITH MIN. 9/16" DIAMETER STEEL WASHERS. PLUG WITHIN COLLAR TO BE CUT TO FIT TIGHTLY AROUND THE CABLE BUNDLE.

OPENING	CFM (PER DEVICE)		CFM / SQ FT OPENING	
	AMBIENT	400F	AMBIENT	400F
BLANK OPENING ONLY (NO CABLES)	LESS THAN 1	LESS THAN 1	LESS THAN 1	4
MAX. 100% FILL CAT 5 AND/OR CAT 6 CABLES	1.2	LESS THAN 1	13.2	8.9

NOTES: 1. MAXIMUM DIAMETER OF OPENING = 4".

- 2. CABLES MAY REPRESENT 0% TO 100% VISUAL FILL OF OPENING.
- 3. WHEN PVC SLEEVE IS USED, CABLES TO FILL MAXIMUM 45% OF CROSS-SECTIONAL AREA OF SLEEVE.
- 4. [OPTIONAL] HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT OR HILTI CP 618 FIRESTOP PUTTY STICK MAY BE APPLIED TO FILL INTERSTICES BETWEEN AND AROUND THE CABLE BUNDLE.



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Scale	-
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