

**BLICKMAN HEALTH INDUSTRIES**

**HIGH CABINETS**

DES. **R. LA BRIE**

EASE JOB NO. **11-0934**

DATE **12/30/09**

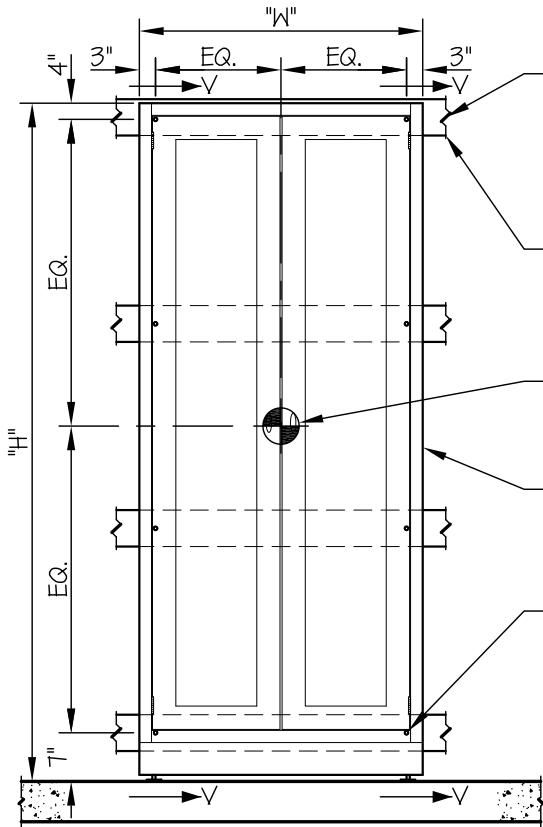
SHEET

**1**

OF **2** SHEETS

SEISMIC ANCHORAGE

WALL MOUNTED



**FRONT ELEVATION**

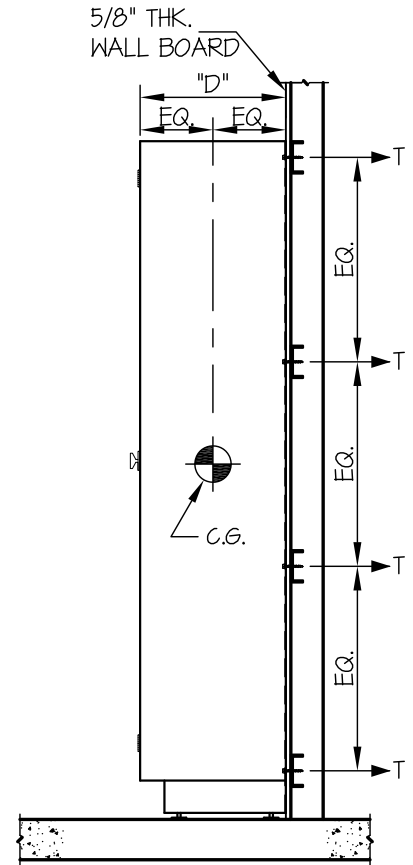
WHERE STUDS DO NOT  
 LINE UP WITH SCREWS  
 PROVIDE WALL BACKING  
 16 GA., 50 KSI MIN. (BY E.O.R.)

ENGINEER OF RECORD  
 SHALL DESIGN THE WALL  
 BACKING AND THE WALL  
 STRUCTURE

C.G. WT. = SEE TABLE  
 (INCLUDES CONTENTS)

BACK OF CABINET IS  
 18 GAGE (50 KSI)

USE 8- 1/4"Φ TEK SCREWS  
 TO WALL STRUCTURE  
 (16 GA., 50 KSI (MIN))



**SIDE ELEVATION**

**NOTES:**

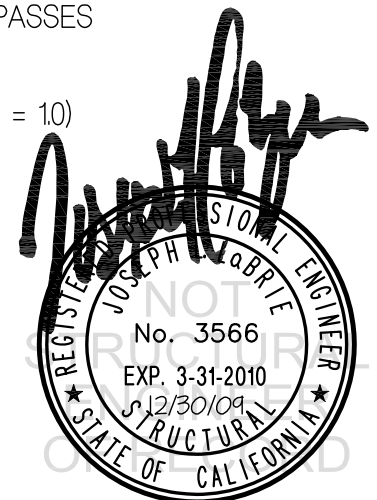
1. FORCES ARE DETERMINED PER 2007 CALIFORNIA BUILDING CODE SECTION 1613A AND ASCE 7-05 SECTIONS 12 AND 13. ALLOWABLE STRESS DESIGN IS USED.

HORIZONTAL FORCE ( $E_h$ ) =  $0.97 W_p$  ( $S_{ds} = 1.93$ ,  $a_p = 1.0$ ,  $I_p = 1.5$ ,  $R_p = 2.5$ )

VERTICAL FORCE ( $E_v$ ) =  $0.27 W_p$

2. CENTER OF GRAVITY (C.G.) WEIGHT IS A MAXIMUM. THIS CALCULATION ENCOMPASSES ALL WEIGHTS UP TO THE MAXIMUM WEIGHT SHOWN.

3. ARCHITECT OR STRUCTURAL ENGINEER OF RECORD SHALL PROVIDE RIGID ( $a_p = 1.0$ ) SUPPORT STRUCTURE TO SUPPORT WEIGHTS AND FORCES SHOWN.



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SHEET

**2**

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SEISMIC ANCHORAGE

WALL MOUNTED

MAX WEIGHT (LBS.)	W (in.)	H (in.)	D (in.)	T <sub>MAX</sub> (LBS/BOLT)	V <sub>MAX</sub> (LBS/BOLT)
475	18.75	84	18	133	77
585	18.75	84	23	194	94
608	24.75	84	18	137	98
729	24.75	84	23	185	117
856	35	84	18	162	138
1041	35	84	23	214	168
1125	47	84	18	198	181
* 1300	47	84	23	242	211

\* THIS UNIT IS USED IN THE CALCULATION BELOW.

ENGINEER OF RECORD SHALL DESIGN THE WALL BACKING AND THE WALL STRUCTURE

USE 8- 1/4"Φ TEK SCREWS TO WALL STRUCTURE (16 GA., 50 KSI (MIN))

5/8" THK. WALL BOARD

STEEL STUD WALL

LOADS:

WEIGHT = 1300 LBS

HORIZONTAL FORCE (E<sub>h</sub>) = 0.97 W<sub>p</sub> = 1261 LBS

VERTICAL FORCE (E<sub>v</sub>) = 0.27 W<sub>p</sub> = 351 LBS

SCREW FORCES (ASSUMES 2/3 LOAD TO MIDDLE FOUR SCREWS)

TENSION (T)

$$T_{\text{PARALLEL}} = \frac{1261\#(11.5')(67)}{2 \text{ SCREWS } (41'')} = 118 \text{ LBS/SCREW}$$

$$T_{\text{PERP.}} = \frac{1261\#(67)}{4 \text{ SCREWS}} = 211 \text{ LBS/SCREW}$$

$$T_{\text{MAX}} = \sqrt{118^2 + 211^2} = 242 \text{ LBS/SCREW (MAX)}$$

SHEAR (V)

$$V_{\text{MAX}} = \frac{1261\#(67)}{4 \text{ SCREWS}} = 211 \text{ LBS/SCREW (MAX)}$$

1/4"Φ TEK SCREWS  
IN 16 GA, 50 KSI STEEL

T<sub>ALLOW.</sub> = 260 LBS

V<sub>ALLOW.</sub> = 612 LBS