

BLICKMAN HEALTH INDUSTRIES

WARMING CABINETS

DES. **R. LA BRIE**

EASE JOB NO. **11-0934**

DATE **12/30/09**

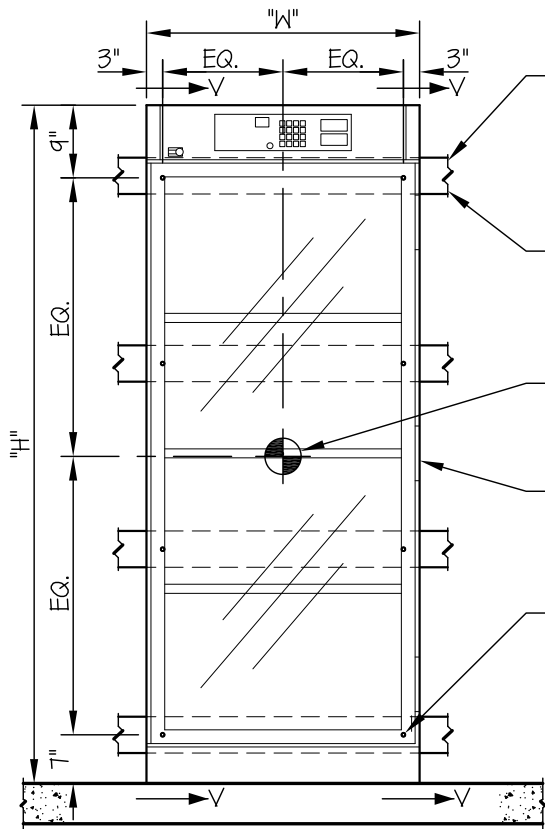
SHEET

1

OF **2** SHEETS

SEISMIC ANCHORAGE

WALL MOUNTED



FRONT ELEVATION

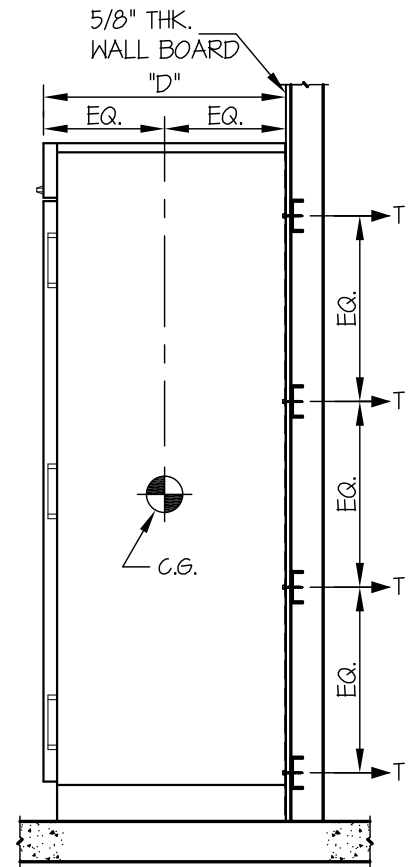
WHERE STUDS DO NOT LINE UP WITH SCREWS PROVIDE WALL BACKING 16 GA., 50 KSI MIN. (BY E.O.R.)

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"Ø TEK SCREWS TO WALL STRUCTURE (16 GA., 50 KSI (MIN))



SIDE ELEVATION

NOTES:

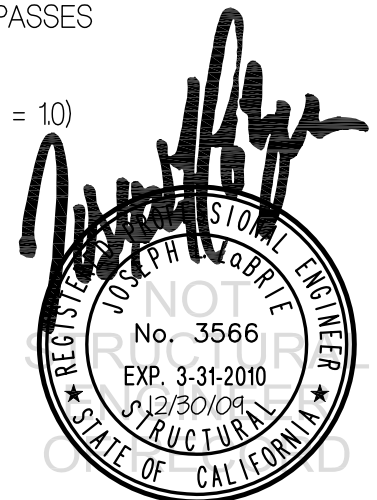
1. FORCES ARE DETERMINED PER 2007 CALIFORNIA BUILDING CODE SECTION 1613A AND ASCE 7-05 SECTIONS 12 AND 13. ALLOWABLE STRESS DESIGN IS USED.

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

OF **2** SHEETS

SEISMIC ANCHORAGE

WALL MOUNTED

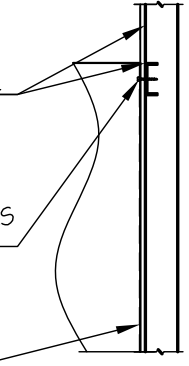
MAX WEIGHT (LBS.)	W (in.)	H (in.)	D (in.)	T _{MAX} (LBS/SCREW)	V _{MAX} (LBS/SCREW)
260	24	24.5	20.13	63	43
351	30	24.5	26.63	85	57
509	30	35.5	26.63	122	82
741	30	60	20.63	157	120
* 1046	30	74.5	26.63	253	170

* 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 = 1046 LBS

HORIZONTAL FORCE (E_h) = 0.97 W_p = 1015 LBS

VERTICAL FORCE (E_v) = 0.27 W_p = 282 LBS

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

TENSION (T)

$$T_{\text{PARALLEL}} = \frac{1015 \# (13.3') (.67)}{2 \text{ SCREWS } (24'')} = 188 \text{ LBS/SCREW}$$

$$T_{\text{PERP.}} = \frac{1015 \# (.67)}{4 \text{ SCREWS}} = 170 \text{ LBS/SCREW}$$

$$T_{\text{MAX}} = \sqrt{188^2 + 170^2} = 253 \text{ LBS/SCREW (MAX)}$$

SHEAR (V)

$$V_{\text{MAX}} = \frac{1015 \# (.67)}{4 \text{ SCREWS}} = 170 \text{ LBS/SCREW (MAX)}$$

1/4"φ TEK SCREWS

IN 16 GA., 50 KSI STEEL

T_{ALLOW.} = 260 LBS

V_{ALLOW.} = 612 LBS