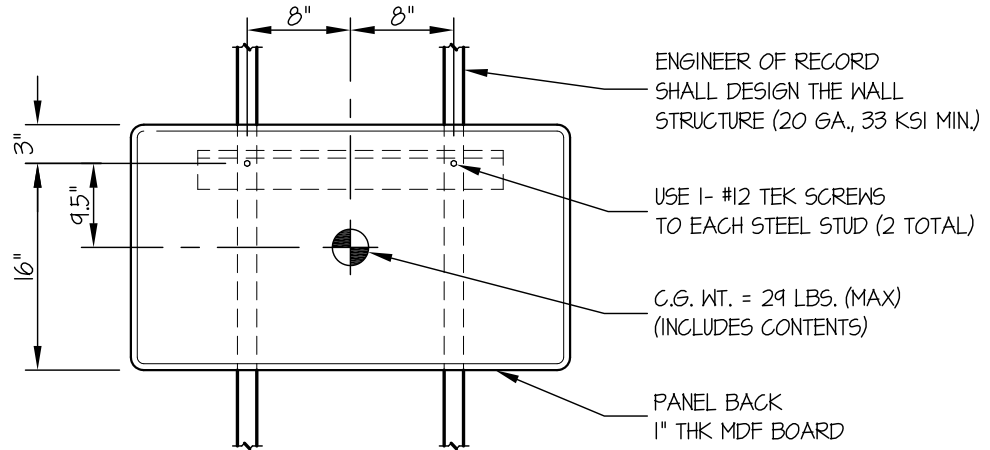


<p>MIDMARK</p> <p>INSTRUMENT PANEL</p>	DES. R. LA BRIE	<p>SHEET</p> <p>1</p> <p>OF 2 SHEETS</p>
	JOB NO. 11-0989	
	DATE 9/28/09	

SEISMIC ANCHORAGE

WALL MOUNTED



FRONT 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 SUPPORT STRUCTURE TO SUPPORT WEIGHTS AND FORCES SHOWN.

$T_{MAX} = 59$ LBS/SCREW
 $V_{MAX} = 33$ LBS/SCREW



MIDMARK

INSTRUMENT PANEL

DES. **R. LA BRIE**

JOB NO. **11-0989**

DATE **9/28/09**

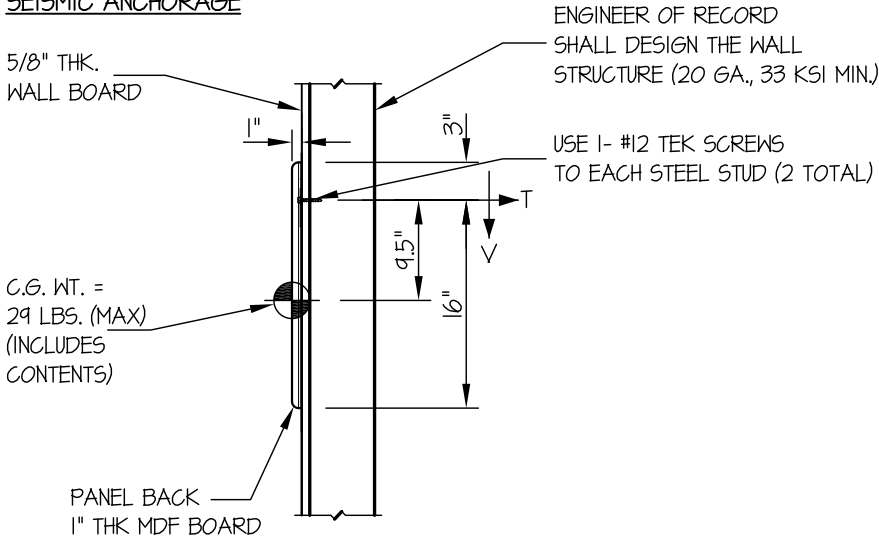
SHEET

2

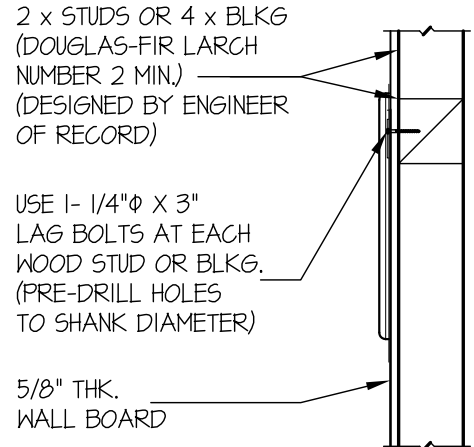
OF **2** SHEETS

SEISMIC ANCHORAGE

WALL MOUNTED



SIDE ELEVATION AT STEEL STUD WALL



SIDE ELEVATION AT WOOD STUD WALL

LOADS:

WEIGHT = 29 LBS. (MAX) (INCLUDES CONTENTS)

HORIZONTAL FORCE (E_h) = 0.97W_p = 28 LBS.

VERTICAL FORCE (E_v) = 0.27W_p = 8 LBS.

SCREW FORCES:

#12 TEK SCREWS TO 20 GAGE, 33 KSI

T_{ALLOW.} = 95 LBS

V_{ALLOW.} = 188 LBS

TENSION (T)

$$T_{\text{VERTICAL}} = \frac{(29\# + 8\#)1"}{2 \text{ SCREWS}(16")} = 1 \text{ LBS}$$

$$T_{\text{PARALLEL}} = \frac{28\#(1")}{1 \text{ SCREW } (16")} = 2 \text{ LBS}$$

$$T_{\text{PERP.}} = \frac{28\# (12.5")}{2 \text{ SCREW } (3")} = 58 \text{ LBS}$$

$$T_{\text{MAX}} = 1\# + \sqrt{2^2 + 58^2} = 59 \text{ LBS/SCREW (MAX)}$$

SHEAR (V)

$$V_{\text{MAX}} = \frac{29\# + 8\# + 28\#}{2 \text{ SCREWS}} = 33 \text{ LBS/SCREW (MAX)}$$

NOTE:

ARCHITECT OR STRUCTURAL ENGINEER OF RECORD SHALL PROVIDE SUPPORT STRUCTURE TO SUPPORT WEIGHTS AND FORCES SHOWN.