

HUMANSCALE HEALTHCARE

V5 WALL STATION

DES. **R. LA BRIE**

JOB NO. **11-0937**

DATE **4/13/09**

SHEET

1

OF **2** SHEETS

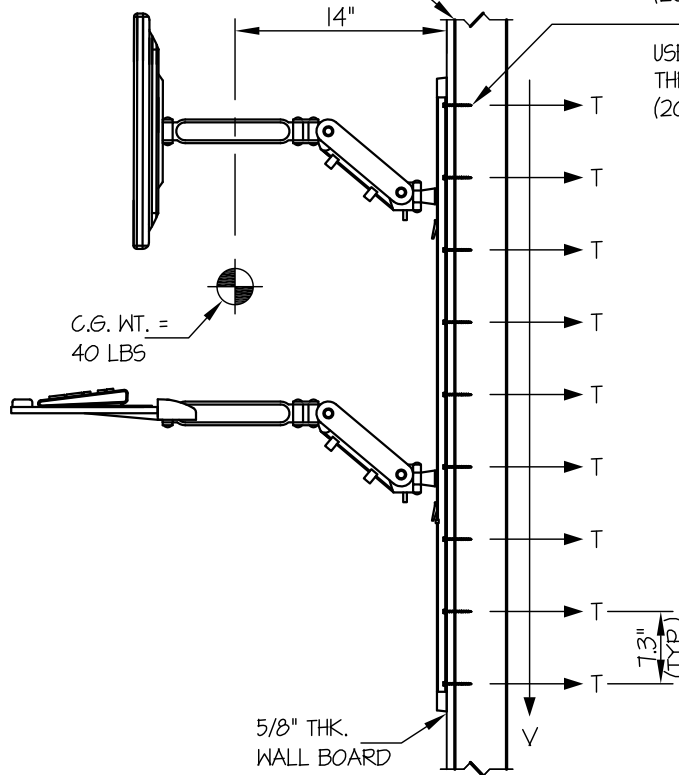
SEISMIC ANCHORAGE

WALL MOUNTED

ENGINEER OF RECORD SHALL
 DESIGN THE WALL STRUCTURE

USE 9- #12 TEK SCREWS
 AT STEEL STUD WALL
 (20 GAGE, 33 ksi MIN.)

-OR-
 USE 9- 1/4" HILTI TOGGLER BOLTS
 THRU STEEL STUDS
 (20 GAGE, 33 ksi MIN.)



T_{MAX} = 17 LBS/BOLT
 V_{MAX} = 16 LBS/BOLT

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) = 2.43 W_p (S_{Ds} = 193, α_p = 2.5, 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.



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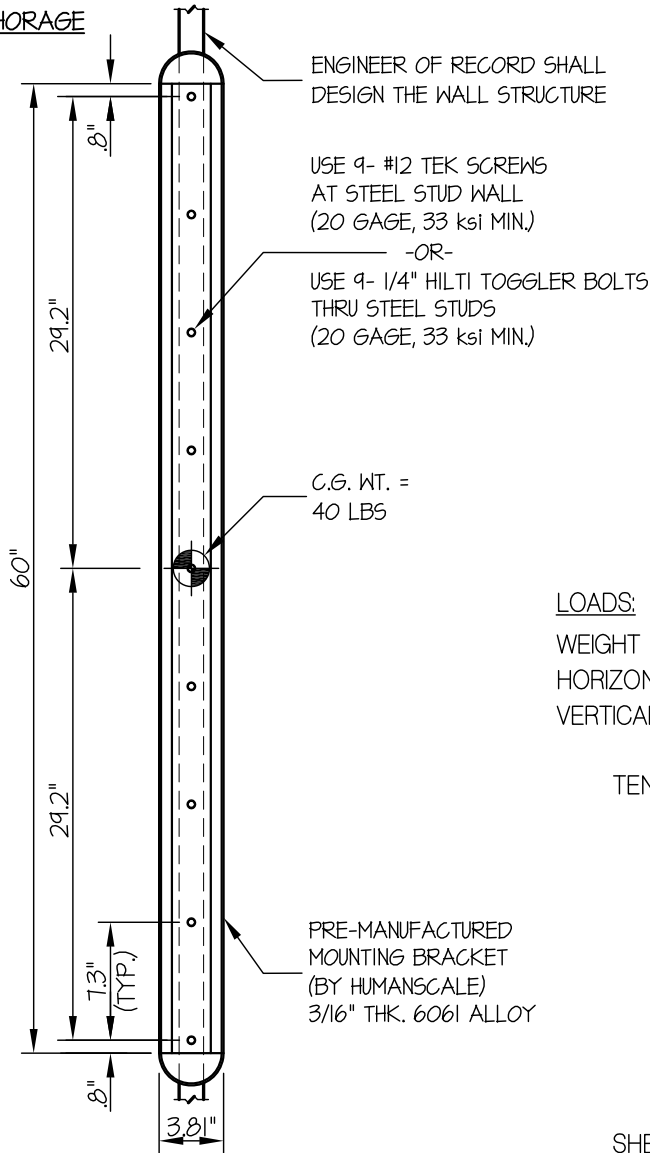
SHEET

2

OF **2** SHEETS

SEISMIC ANCHORAGE

WALL MOUNTED



PLAN AT WALL PLATE

ENGINEER OF RECORD SHALL DESIGN THE WALL STRUCTURE

USE 9- #12 TEK SCREWS AT STEEL STUD WALL (20 GAGE, 33 ksi MIN.)

-OR-

USE 9- 1/4" HILTI TOGGLER BOLTS THRU STEEL STUDS (20 GAGE, 33 ksi MIN.)

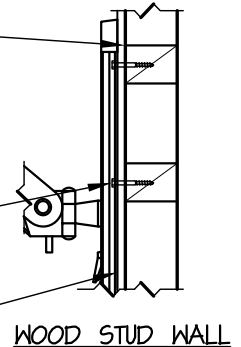
C.G. WT. = 40 LBS

PRE-MANUFACTURED MOUNTING BRACKET (BY HUMANSCALE) 3/16" THK. 6061 ALLOY

2 x STUDS OR 4 x BLKG (DOUGLAS-FIR LARCH NUMBER 2 MIN.) (DESIGNED BY ENGINEER OF RECORD)

USE 9- 1/4"Φ X 4" LAG BOLTS TO WOOD STUD OR BLKG. (PRE-DRILL HOLES TO SHANK DIAMETER)

5/8" THK. WALL BOARD



LOADS:

WEIGHT = 40 LBS (MAX OPERATING WEIGHT)

HORIZONTAL FORCE (E_H) = 97 LBS

VERTICAL FORCE (E_V) = 11 LBS

TENSION (T)

$$T_{\text{VERTICAL}} = \frac{(40\# + 11\#)(14")}{2_{\text{SCREWS}}(58.4")} = 6 \text{ LBS}$$

$$T_{\text{PARALLEL}} = 0 \text{ (FREELY ROTATES } 180^\circ)$$

$$T_{\text{PERP.}} = \frac{97\#}{9 \text{ SCREWS}} = 11 \text{ LBS}$$

$$T_{\text{MAX}} = 6\# + 11\# = 17 \text{ LBS/SCREW (MAX)}$$

SHEAR (V)

$$V_{\text{MAX}} = \frac{40\# + 11\# + 97\#}{9 \text{ SCREWS}} = 16 \text{ LBS/SCREW (MAX)}$$

#12 TEK SCREWS TO 20 GAGE, 33 KSI

$T_{\text{ALLOW.}} = 95 \text{ LBS}$

$V_{\text{ALLOW.}} = 188 \text{ LBS}$