

**HUMANSCALE HEALTHCARE**

**V7 WALL STATION**

DES. **R. LA BRIE**

JOB NO. **11-0937**

DATE **4/13/09**

SHEET

**1**

OF **2** SHEETS

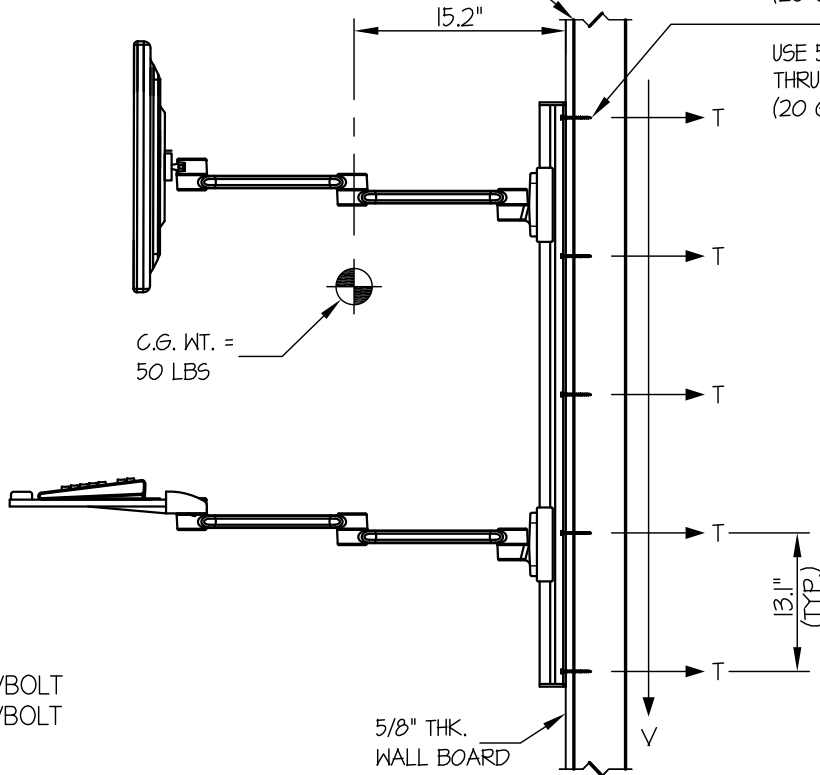
SEISMIC ANCHORAGE

WALL MOUNTED

ENGINEER OF RECORD SHALL  
 DESIGN THE WALL STRUCTURE

USE 5- #12 TEK SCREWS  
 AT STEEL STUD WALL  
 (20 GAGE, 33 ksi MIN.)

-OR-  
 USE 5- 1/4" HILTI TOGGLER BOLTS  
 THRU STEEL STUDS  
 (20 GAGE, 33 ksi MIN.)



T<sub>MAX</sub> = 36 LBS/BOLT  
 V<sub>MAX</sub> = 37 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<sub>h</sub>) = 2.43 W<sub>p</sub> (S<sub>Ds</sub> = 193, α<sub>p</sub> = 2.5, I<sub>p</sub> = 1.5, R<sub>p</sub> = 2.5)

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

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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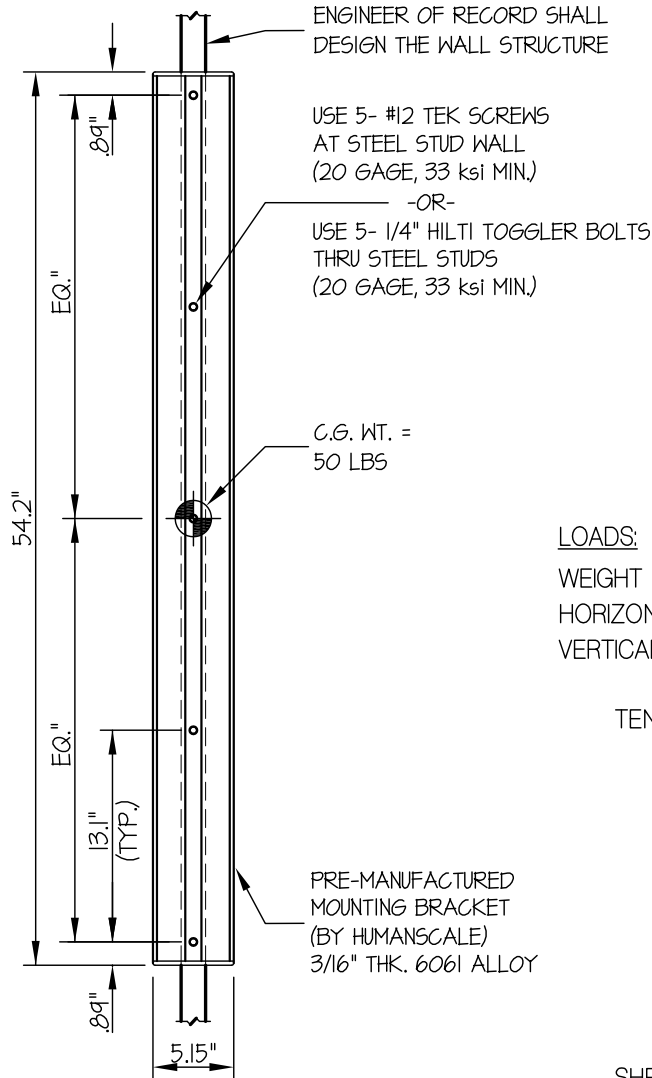
SHEET

**2**

OF **2** SHEETS

SEISMIC ANCHORAGE

WALL MOUNTED



**PLAN AT WALL PLATE**

ENGINEER OF RECORD SHALL DESIGN THE WALL STRUCTURE

USE 5- #12 TEK SCREWS AT STEEL STUD WALL (20 GAGE, 33 ksi MIN.)

-OR-  
 USE 5- 1/4" HILTI TOGGLER BOLTS THRU STEEL STUDS (20 GAGE, 33 ksi MIN.)

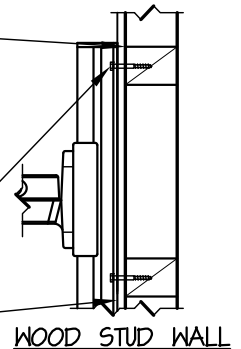
C.G. WT. = 50 LBS

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 5- 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 = 50 LBS (MAX OPERATING WEIGHT)

HORIZONTAL FORCE ( $E_h$ ) = 122 LBS

VERTICAL FORCE ( $E_v$ ) = 14 LBS

TENSION (T)

$$T_{\text{VERTICAL}} = \frac{(50\# + 14\#)(15.2")}{2\text{SCREWS}(39.3")} = 12 \text{ LBS}$$

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

$$T_{\text{PERP.}} = \frac{122\#}{5 \text{ SCREWS}} = 24 \text{ LBS}$$

$$T_{\text{MAX}} = 12\# + 24\# = 36 \text{ LBS/SCREW (MAX)}$$

SHEAR (V)

$$V_{\text{MAX}} = \frac{50\# + 14\# + 122\#}{5 \text{ SCREWS}} = 37 \text{ LBS/SCREW (MAX)}$$

#12 TEK SCREWS TO 20 GAGE, 33 KSI

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

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