

**PRESSALIT CARE**

**WALL CHAIR WITH WALL TRACK**

DES. **R. LA BRIE**

JOB NO. **11-0743**

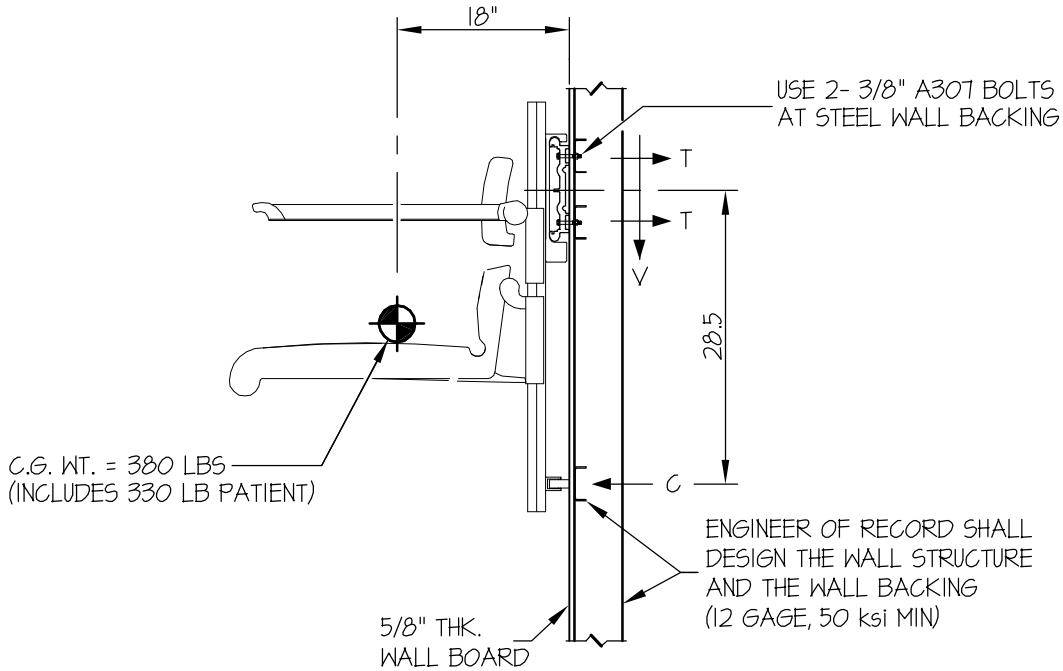
DATE **10/1/07**

SHEET

**1**

OF **2** SHEETS

SEISMIC ANCHORAGE

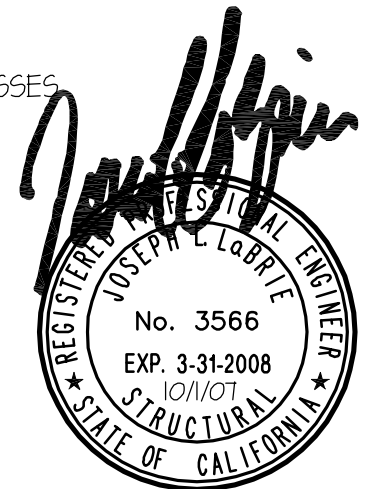


$T_{MAX} = 711 \text{ LBS/SCREW}$   
 $V_{MAX} = 171 \text{ LBS/SCREW}$

**ELEVATION**

NOTES:

1. FORCES ARE DETERMINED PER 2001 CALIFORNIA BUILDING CODE - SECTION 1632A AND HAVE BEEN FACTORED TO REPRESENT WORKING DESIGN LOADS, NOT ULTIMATE.  
 HORIZONTAL FORCE ( $V_H$ ) =  $.71W$  ( $C_a = .66, I_p = 1.5, a_p = 1.0, R_p = 3.0$ )  
 VERTICAL FORCE ( $V_V$ ) =  $0.35W$
2. CENTER OF GRAVITY (C.G.) WEIGHT IS A MAXIMUM. THIS CALCULATION ENCOMPASSES ALL WEIGHTS UP TO THE MAXIMUM WEIGHT SHOWN.
3. ENGINEER OF RECORD FOR THE BUILDING SHALL PROVIDE SUPPORT STRUCTURE DESIGNED TO SUPPORT WEIGHTS AND FORCES SHOWN.



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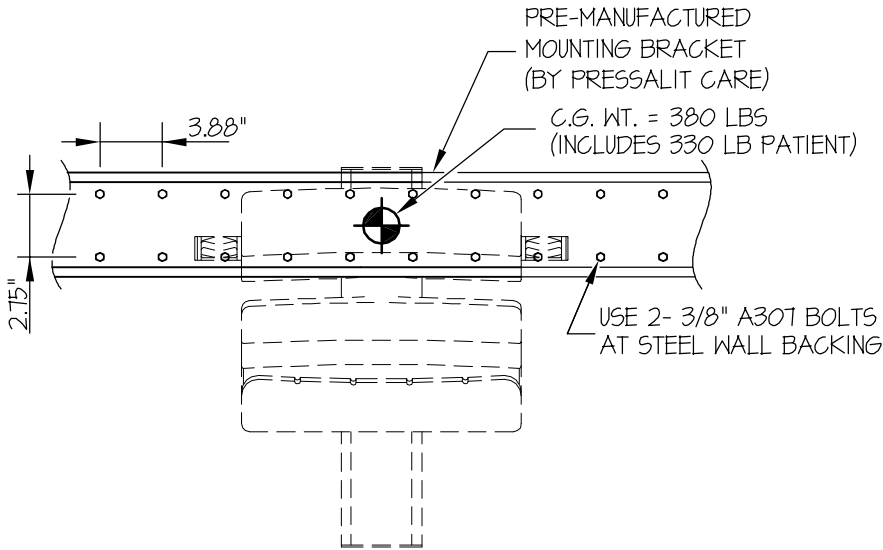
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SHEET

**2**

OF **2** SHEETS



ELEVATION AT WALL PLATE

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

USE 2- 3/8" X 4"  
@ 3.88" ON CENTER  
LAG SCREWS TO  
WOOD STUD OR 4X BLKG.  
(PRE-DRILL HOLES  
TO SHANK DIAMETER)

5/8" THK.  
WALL BOARD

WOOD STUD WALL

CONCRETE WALL  
(3000 PSI MIN)  
BY ENGINEER OF  
RECORD

USE 2- 3/8"φ  
HILTI KB-III  
EXPANSION  
ANCHORS  
@ 3.88" ON CENTER  
(MIN. EMBED. = 3")

CONCRETE WALL

LOADS:

WEIGHT = 380 LBS (INCLUDES PATIENT WEIGHT OF 330 LBS.)

HORIZONTAL FORCE (V<sub>H</sub>) = 270 LBS

VERTICAL FORCE (V<sub>V</sub>) = 133 LBS

BOLT FORCES:

TENSION (T)

$$T_{\text{VERTICAL}} = \frac{(380\# + 133\#)18"}{28.5"(4\text{SCREWS})} = 81 \text{ LBS}$$

$$T_{\text{PARALLEL}} = \frac{270\#(18")}{2 \text{ SCREWS}(3.88")} = 626 \text{ LBS}$$

$$T_{\text{PERP.}} = \frac{270\#}{4 \text{ SCREWS}} = 68 \text{ LBS}$$

$$T_{\text{MAX}} = 81\# + \sqrt{626\#^2 + 68\#^2} = 711 \text{ LBS/SCREW (MAX)}$$

SHEAR (V) (OCCURS WHEN UNIT IS FULLY EXTENDED AND AGAINST THE WALL)

$$V_{\text{MAX}} = \frac{(380\# + 270\# + 133\#)}{4 \text{ SCREWS}} = 171 \text{ LBS/SCREW (MAX)}$$