



<u>LOADS:</u> PER 2001 CALIFORNIA BUILDING CODE - SECTION 1632A (WORKING LOADS, NOT ULTIMATE)
WEIGHT = 374 LBS

HORIZONTAL FORCE ( $V_H$ ) = 0.94W = 352 LBS VERTICAL FORCE ( $V_V$ ) = 0.33( $V_H$ ) = 117 LBS

## **BOLT FORCES:**

TENSION (T)

$$\begin{array}{c} T_{SIDE} = \\ T_{OSIDE} = \\ \hline \end{array} = \begin{array}{c} 352 \# (37.55") - (374\# - 117\#) 11.24" \\ \hline 2(22.76") \end{array} = 227 \text{ LBS/BOLT} \end{array}$$

$$T_{FRONT} = \frac{352 \# (37.55 \%) - (374 \# - 117 \#) | 1.74 \%}{2(23.56 \%)} = 216 LBS/BOLT$$

T = 227# + 216#(0.3) = 292 LBS/BOLT (MAX)

SHEAR (V)

$$V = \frac{352 \# (II.52 \#)}{2(22.76 \#)} = 89 LBS/BOLT (MAX)$$

NOTE:

PROVIDE FLOOR STRUCTURE DESIGNED TO SUPPORT WEIGHTS AND FORCES SHOWN. (BY ENGINEER OF RECORD FOR THE BUILDING)

