

LOADS: PER 2010 CALIFORNIA BUILDING CODE SECTION 1613A AND ASCE 7-05 SECTIONS 12 AND 13. WEIGHT = 1290 LBS

HORIZONTAL FORCE $(E_h) = 0.90W_p = 1161 LBS$

VERTICAL FORCE (E_v) = 0.40W₀ = 516 LBS

BOLT FORCES:

TENSION (T)

$$T_{\text{MAXIMUM}} = \left[\frac{1161\#(32.5'')(9.25'')}{32''(24.75'')} \times (0.3) \right] + \frac{1161\#(32.5'')(22'')}{24.75''(32'')} - \frac{(1290\#(0.9) - 516\#)(9.25'')(22'')}{24.75''(32'')} = 1014 \text{ LBS/BOLT (MAX)}$$

$$(\text{HORIZ - FRONT TO BACK}) \qquad (\text{HORIZ - SDE TO SDE}) \qquad (\text{WEIGHT (0.9) - E_V})$$

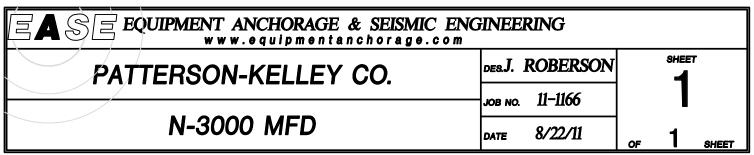
SHEAR (V)

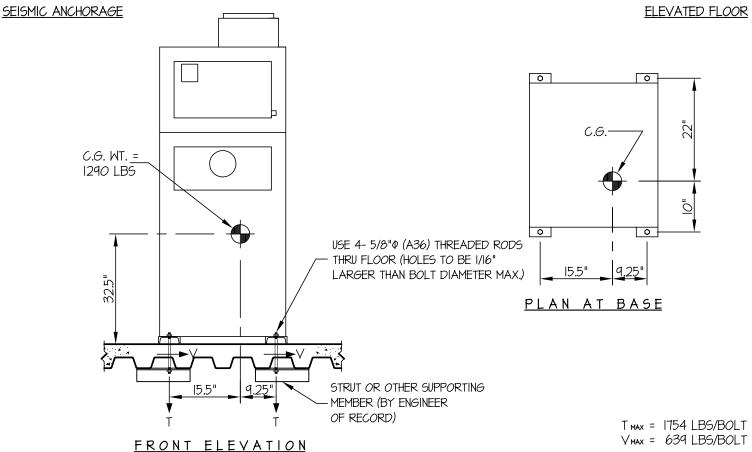
$$V_{MAXIMUM} = \frac{1161\#(22")}{2BOLTS(32")} = 399 LBS/BOLT (MAX)$$

NOTE:

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







LOADS: PER 2010 CALIFORNIA BUILDING CODE SECTION 1613A AND ASCE 7-05 SECTIONS 12 AND 13.

WEIGHT = 1290 LBS

HORIZONTAL FORCE $(E_h) = 1.44W_p = 1858 LBS$

VERTICAL FORCE (E_v) = 0.40 W_p = 516 LBS

BOLT FORCES:

TENSION (T)

$$T_{\text{MAXIMUM}} = \left[\frac{1858 \# (32.5'')(15.5'')}{32''(24.75'')} \times (0.3) \right] + \frac{1858 \# (32.5'')(22'')}{24.75''(32'')} - \frac{(1290 \# (0.9) - 516 \#)(15.5'')(22'')}{24.75''(32'')} = 1754 \text{ LBS/BOLT (MAX)}$$

$$(\text{HORIZ - FRONT TO BACK}) \qquad (\text{HORIZ - SIDE TO SIDE}) \qquad (\text{WEIGHT (0.9) - E_v})$$

SHEAR (V)

$$V_{MAXIMUM} = \frac{1858\#(22")}{2BOLTS(32")} = 639 LBS/BOLT (MAX)$$

NOTE:

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

