SEISMIC ANCHORAGE

WEIGHT = 1350 LBS
HORIZONTAL FORCE (E_h) = 0.90 W_b = 1215 LBS
VERTICAL FORCE (E_v) = 0.40 W_b = 540 LBS

BOLT FORCES:

TENSION (T)  (ONLY 4 OUTER BOLTS CONSIDERED IN CALCULATIONS)

\[
T_{\text{MAXIMUM}} = \frac{1215\#(27.4')}{3 \text{ bolts (55')}} \times 0.3 + \frac{1215\#(27.4')}{2 \text{ bolts (28')}} - \frac{(1350\#(0.9) - 540\#)}{6 \text{ bolts}} = 542 \text{ LBS/BOOLT (MAX)}
\]

SHEAR (V)

\[
V_{\text{MAXIMUM}} = \frac{1215\#}{6 \text{ bolts}} = 203 \text{ LBS/BOOLT (MAX)}
\]

NOTE:
ARCHITECT OR STRUCTURAL ENGINEER OF RECORD SHALL PROVIDE SUPPORT STRUCTURE TO SUPPORT WEIGHTS AND FORCES SHOWN.
SEISMIC ANCHORAGE

ELEVATED FLOOR

WEIGHT = 1350 LBS
HORIZONTAL FORCE (E_h) = 144 W_p = 1944 LBS
VERTICAL FORCE (E_v) = 0.40 W_p = 540 LBS

BOLT FORCES:

TENSION (T) (ONLY 4 OUTER BOLTS CONSIDERED IN CALCULATIONS)

\[ T_{\text{MAXIMUM}} = \left( \frac{1944 \#(27.4^\circ)}{3 \text{ bolts (55\°)}} \times (0.3) \right) + \left( \frac{1944 \#(27.4^\circ)}{2 \text{ bolts (28\°)}} \right) - \left( \frac{(1350 \#(0.9) - 540\#)}{6 \text{ bolts}} \right) = 935 \text{ LBS/BOOLT (MAX)} \]

SHEAR (V)

\[ V_{\text{MAXIMUM}} = \frac{1944\#}{6 \text{ bolts}} = 324 \text{ LBS/BOOLT (MAX)} \]

NOTE:
ARCHITECT OR STRUCTURAL ENGINEER OF RECORD SHALL PROVIDE SUPPORT STRUCTURE TO SUPPORT WEIGTHS AND FORCES SHOWN.