SEISMIC ANCHORAGE

WEIGHT = 1600 LBS
HORIZONTAL FORCE (E_h) = 0.90 W_p = 1440 LBS
VERTICAL FORCE (E_v) = 0.40 W_p = 640 LBS

BOLT FORCES:

TENSION (T)

\[ T_{\text{MAXIMUM}} = \left( \frac{1440 \#(41.1)}{3 \text{ bolts (43.7")}} \times (0.3) \right) + \left( \frac{1440 \#(41.1)(27.3")}{2 \text{ bolts (28")}} \right) - \left( \frac{(1600 \#)(0.9) - 640 \#(27.3")}{3 \text{ bolts (43.7")}} \right) = 628 \text{ LBS/BOLT (MAX)} \]

SHEAR (V)

\[ V_{\text{MAXIMUM}} = \frac{1440 \#(27.3")}{3 \text{ bolts (43.7")}} = 300 \text{ LBS/BOLT (MAX)} \]

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

USE 6 - 3/8" THREADED RODS THRU FLOOR (HOLES TO BE 1/16" LARGER THAN BOLT DIAMETER MAX)

FRONT ELEVATION

T_{\text{max}} = 1215 \text{ LBS/BOLT}
V_{\text{max}} = 480 \text{ LBS/BOLT}

SIDE ELEVATION

WEIGHT = 1600 LBS
HORIZONTAL FORCE (E_h) = 144 \text{ W_p} = 2304 LBS
VERTICAL FORCE (E_v) = 0.40 \text{ W_p} = 640 LBS

BOLT FORCES:

TENSION (T)

T_{\text{max}} = \left( \frac{2304 \times (41.7) \times 0.3}{2 \text{ bolts (43.7) \times 3}} \right) + \left( \frac{2304 \times (41.7) \times (27.3)}{2 \text{ bolts (43.7) \times 3}} \right) - \left( \frac{1600 \times (0.9) - 640 \times (27.3)}{3 \text{ bolts (43.7)}} \right) = 1215 \text{ LBS/BOLT (MAX)}

SHEAR (V)

V_{\text{max}} = \frac{2304 \times (27.3)}{3 \text{ bolts (43.7)}} = 480 \text{ LBS/BOLT (MAX)}

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