SEISMIC ANCHORAGE

Front Elevation:

Tension (T)

\[ T_{\text{maximum}} = \left[ \frac{675 \times 28.6 \times 15}{38.6 \times 31} \times (0.3) \right] + \frac{675 \times 28.6 \times 23.85}{31 \times 38.6} - \frac{(750 \times 0.9) - 300 \times 15 \times 23.85}{31 \times 38.6} = 346 \text{ LBS/BOLT (MAX)} \]

Shear (V)

\[ V_{\text{maximum}} = \frac{675 \times 23.85}{2 \times 38.6} = 209 \text{ LBS/BOLT (MAX)} \]

Side Elevation:


Weight = 750 LBS

Horizontal Force (E_h) = 0.90W = 675 LBS

Vertical Force (E_v) = 0.40W = 300 LBS

Bolt Forces:

Tension (T)

Shear (V)

Note:
Engineer of record shall provide wall structure designed to support weights and forces shown.

WEIGHT = 750 LBS
HORIZONTAL FORCE \( (E_h) = 144W_h = 1080\) LBS
VERTICAL FORCE \( (E_v) = 0.40W_v = 300\) LBS

BOLT FORCES:

TENSION \( (T) \)

\[
T_{\text{MAXIMUM}} = \frac{1080\#(28.6''(15''))}{38.6''(31'')} \times (0.3) + \frac{1080\#(28.6'')(23.85'')}{31''(38.6'')} \times \frac{(750\#(0.9) - 300\#(15''(23.85''))}{31''(38.6'')} = 620 \text{ LBS/BOLT (MAX)}
\]

SHEAR \( (V) \)

\[
V_{\text{MAXIMUM}} = \frac{1080\#(23.85'')}{2\text{bolts}(38.6'')} = 334 \text{ LBS/BOLT (MAX)}
\]

NOTE:
ENGINEER OF RECORD SHALL PROVIDE WALL STRUCTURE DESIGNED TO SUPPORT WEIGHTS AND FORCES SHOWN.