LOADS: PER 2001 CALIFORNIA BUILDING CODE - SECTION 1632A (WORKING LOADS, NOT ULTIMATE)

WEIGHT = 266 LBS
HORIZONTAL FORCE \( (V_h) = 0.94w = 250 \text{ LBS} \)
VERTICAL FORCE \( (V_v) = 0.33(V_h) = 83 \text{ LBS} \)

BOLT FORCES:

TENSION (T)

\[
T_{\text{SIDE}} = \frac{250\#(29.61") - (266\# - 83\#)4.19"}{2 \text{ BOLTS}(20.13")} = 134 \text{ LBS/BOLT}
\]

\[
T_{\text{FRONT}} = \frac{250\#(29.61") - (250\# - 83\#)2.51"}{2 \text{ BOLTS}(12.51")} = 278 \text{ LBS/BOLT}
\]

\[
T = 278\# + 134\# (0.3) = 320 \text{ LBS/BOLT (MAX)}
\]

SHEAR (V)

\[
V = \frac{250\#(10")}{12.51(2)} = 100 \text{ LBS/BOLT (MAX)}
\]

NOTE:
COUNTERTOP STRUCTURE SHALL BE DESIGNED TO SUPPORT WEIGHTS AND FORCES SHOWN BY OTHERS.