SEISMIC ANCHORAGE

C.O.G. WT. = 240 LBS

USE 4-1/4" # A307 BOLTS THRU COUNTERTOP

COUNTERTOP (BY OTHERS)


WEIGHT = 240 LBS (INCLUDES CONTENTS)
HORIZONTAL FORCE (E_h) = 0.97W_h = 233 LBS
VERTICAL FORCE (E_v) = 0.27W_v = 65 LBS

BOLT FORCES:

TENSION (T)

\[ T_{\text{MAXIMUM}} = \left( \frac{233 \times 145 \times 6.5}{20 \times 12.5} \right) \times 0.3 + \frac{233 \times 145 \times 12}{12.5 \times 20} \cdot \frac{(240 \times 0.6 \times 12 \times 6.5)}{20 \times 12.5} = 164 \text{ LBS/BOLT (MAX)} \]

SHEAR (V)

\[ V_{\text{MAXIMUM}} = \frac{233 \times 12}{2 \times \text{bolts} \times 20} = 70 \text{ LBS/BOLT (MAX)} \]

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