

PATTERSON-KELLEY CO.

MACH MODELS C-1500H & C-2000H

DES. **J. ROBERSON**

JOB NO. **11-1236**

DATE **6/25/12**

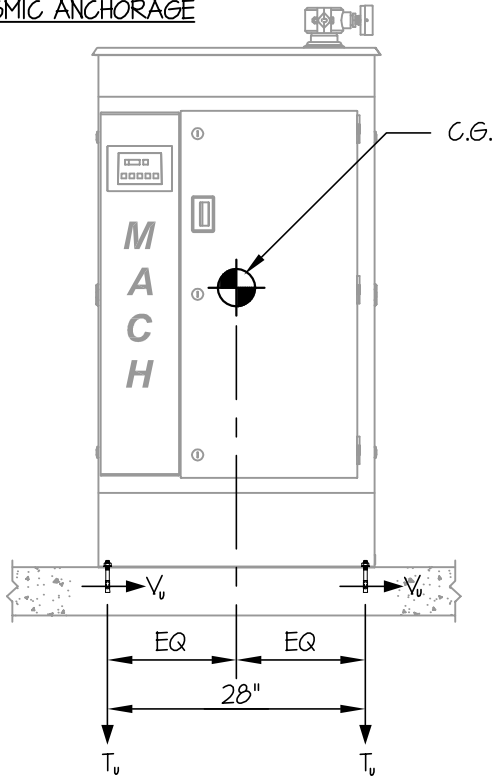
SHEET

1

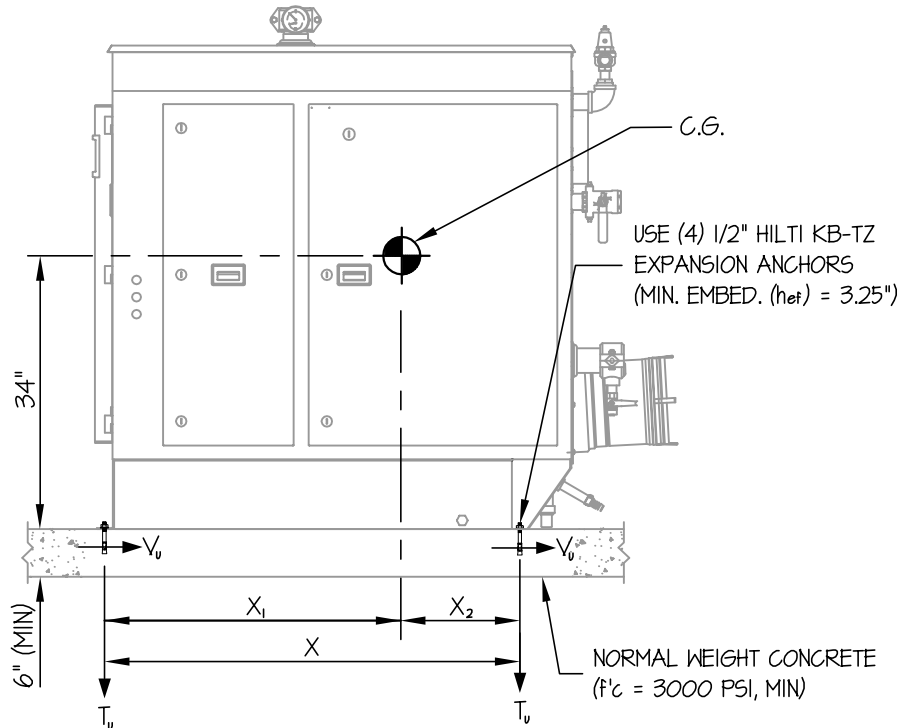
OF **1** SHEET

SEISMIC ANCHORAGE

SLAB ON GRADE



FRONT ELEVATION



SIDE ELEVATION

$T_{MAX} = 934 \text{ LBS/BOLT}$
 $V_{MAX} = 428 \text{ LBS/BOLT}$

Model	Operating Weight	X_1	X_2	X	T_v	V_u
C-1500H	1350 lb	31.5"	17"	48.5"	867 lb	395 lb
C-2000H	1600 lb	33.0"	22.5"	55.5"	934 lb	428 lb

LOADS: PER 2010 CALIFORNIA BUILDING CODE AND ASCE 7-05

(STRENGTH DESIGN IS USED) ($S_{Ds} = 2.00$, $a_p = 1.0$, $I_p = 1.5$, $R_p = 2.5$, $z/h = 0.0$)

WEIGHT = 1600 LB

HORIZONTAL FORCE (E_h) = $0.90W_p = 1440 \text{ LB}$

VERTICAL FORCE (E_v) = $0.40W_p = 640 \text{ LB}$

BOLT FORCES:

TENSION (T)

$$T_{MAXIMUM} = \left[\frac{1440\#(34")}{2\text{BOLTS}(55.5")} \times (0.3) \right] + \frac{1440\#(34")(33")}{1\text{BOLT}(28")(55.5")} - \frac{(1600\#(0.9) - 640\#(33"))}{2\text{BOLTS}(55.5")} = 934 \text{ LBS/BOLT (MAX)}$$

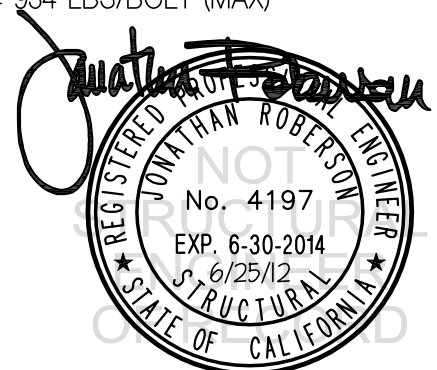
(HORIZ. - SIDE TO SIDE) (HORIZ. - FRONT TO BACK) (WEIGHT (0.9) - E_v)

SHEAR (V)

$$V_{MAXIMUM} = \frac{1440\#(33")}{2\text{BOLTS}(55.5")} = 428 \text{ LBS/BOLT (MAX)}$$

NOTE:

ENGINEER OF RECORD SHALL PROVIDE DESIGN OF SUPPORT STRUCTURE TO SUPPORT WEIGHTS AND FORCES SHOWN.



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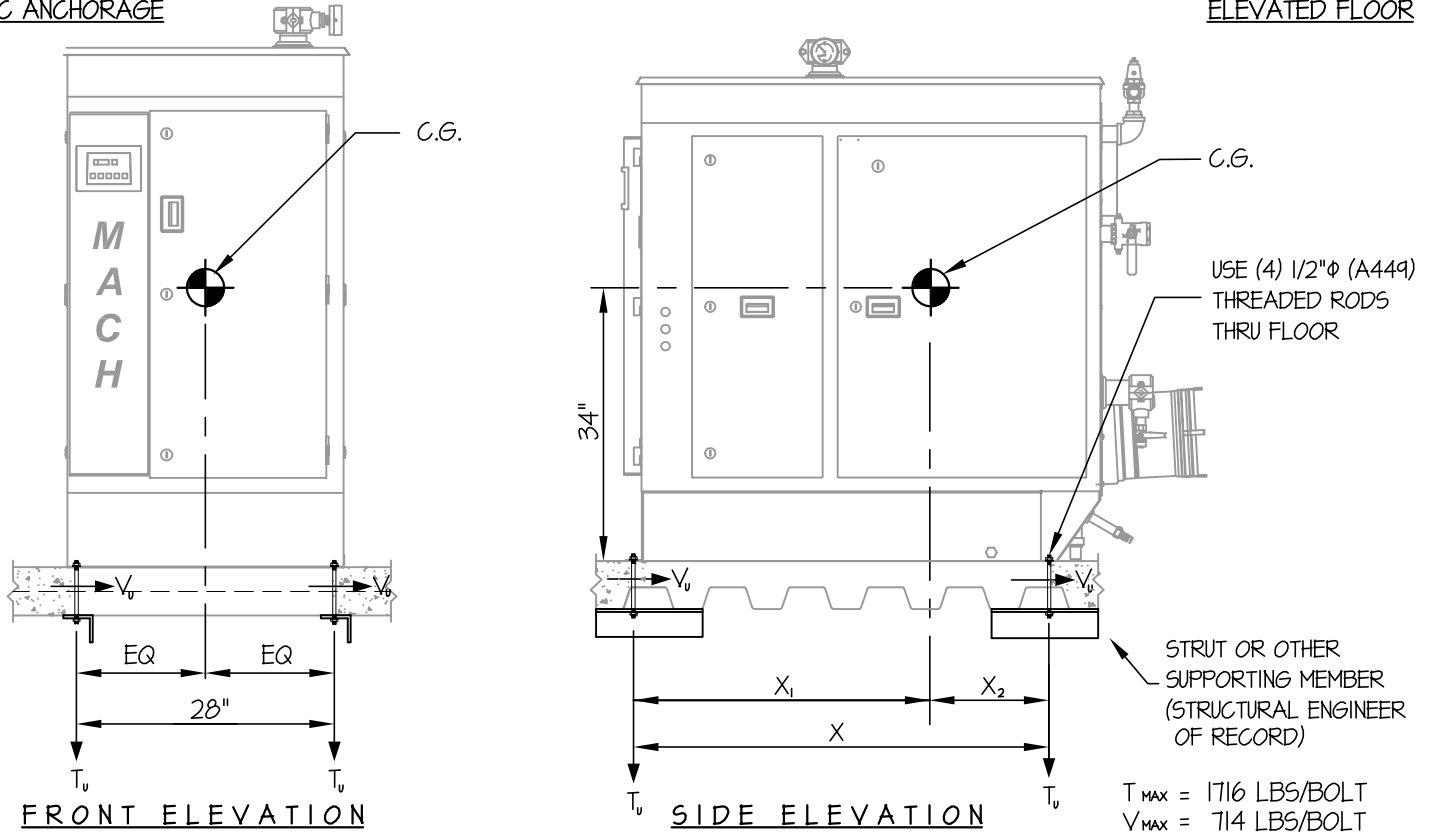
SHEET

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OF **1** SHEET

SEISMIC ANCHORAGE

ELEVATED FLOOR



Model	Operating Weight	X ₁	X ₂	X	T _v	V _v
C-1500H	1350 lb	31.5"	17"	48.5"	1591 lb	658 lb
C-2000H	1600 lb	33.0"	22.5"	55.5"	1716 lb	714 lb

LOADS: PER 2010 CALIFORNIA BUILDING CODE AND ASCE 7-05

(STRENGTH DESIGN IS USED) (S_{DS} = 2.00, a_p = 1.0, I_p = 1.5, R_p = 2.5, z/h ≤ 10)

WEIGHT = 1600 LB

HORIZONTAL FORCE (E_h) = 150W_p = 2400 LB

VERTICAL FORCE (E_v) = 0.40W_p = 640 LB

BOLT FORCES:

TENSION (T)

$$T_{\text{MAXIMUM}} = \left[\frac{2400\#(34\text{'})}{2\text{BOLT}(55.5\text{'})} \times (0.3) \right] + \frac{2400\#(34\text{'})\text{(33\text{'})}}{1\text{BOLT}(28\text{'})\text{(55.5\text{'})}} - \frac{(1600\#(0.9) - 640\#(33\text{'}))}{2\text{BOLT}(55.5\text{'})} = 1716 \text{ LBS/BOLT (MAX)}$$

(HORIZ - SIDE TO SIDE) (HORIZ - FRONT TO BACK) (WEIGHT (0.9) - E_v)

SHEAR (V)

$$V_{\text{MAXIMUM}} = \frac{2400\#(33\text{'})}{2 \text{ BOLTS } (55.5\text{'})} = 714 \text{ LBS/BOLT (MAX)}$$

NOTE:

ENGINEER OF RECORD SHALL PROVIDE DESIGN OF SUPPORT STRUCTURE TO SUPPORT WEIGHTS AND FORCES SHOWN.

