

PATTERSON-KELLEY CO.

MACH MODEL C-4000

DES. **J. ROBERSON**

JOB NO. **11-1161**

DATE **6/29/11**

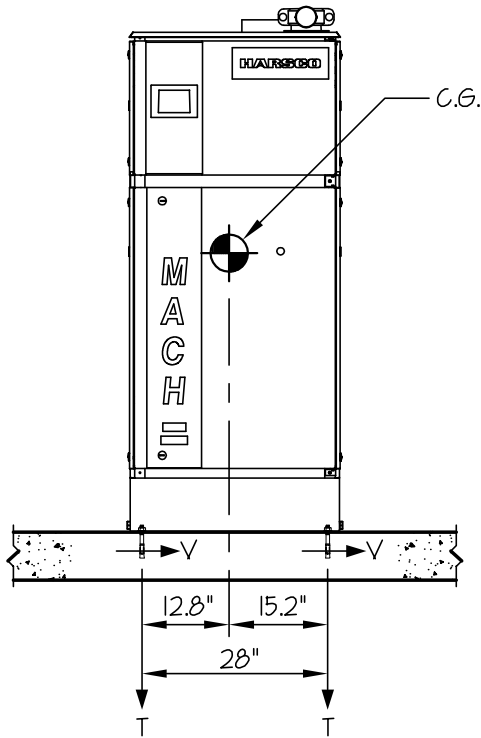
SHEET

1

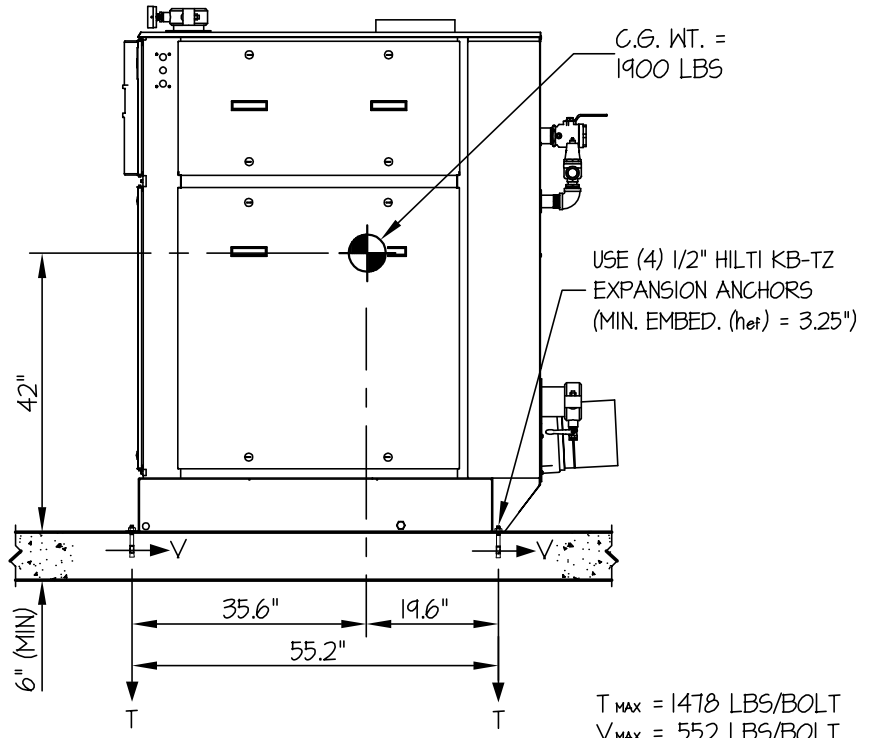
OF **1** SHEET

SEISMIC ANCHORAGE

SLAB ON GRADE



FRONT ELEVATION



SIDE ELEVATION

C.G. WT. = 1900 LBS
 USE (4) 1/2" HILTI KB-TZ EXPANSION ANCHORS (MIN. EMBED. (het) = 3.25")
 $T_{MAX} = 1478 \text{ LBS/BOLT}$
 $V_{MAX} = 552 \text{ LBS/BOLT}$

LOADS: PER 2010 CALIFORNIA BUILDING CODE SECTION 1613A AND ASCE 7-05 SECTIONS 12 AND 13.

WEIGHT = 1900 LBS

HORIZONTAL FORCE (E_h) = $0.90W_p = 1710 \text{ LBS}$

VERTICAL FORCE (E_v) = $0.40W_p = 760 \text{ LBS}$

BOLT FORCES:

TENSION (T)

$$T_{MAXIMUM} = \left[\frac{1710\#(42\")(12.8\"){1_{BOLT}(55.2\")(28\')}}{1_{BOLT}(55.2\")(28\')} \times (0.3) \right] + \frac{1710\#(42\")(35.6\')}{1_{BOLT}(28\')(55.2\')} - \frac{(1900\#(0.9) - 760\#)(35.6\')(12.8\')}{1_{BOLT}(55.2\')(28\')} = 1553 \text{ LBS/BOLT (MAX)}$$

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

SHEAR (V)

$$V_{MAXIMUM} = \frac{1710\#(35.6\')}{2_{BOLTS}(55.2\')} = 552 \text{ LBS/BOLT (MAX)}$$

NOTE:

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



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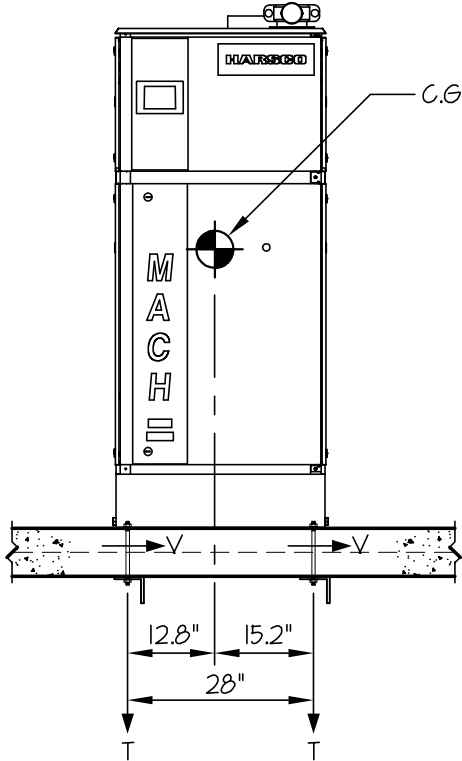
SHEET

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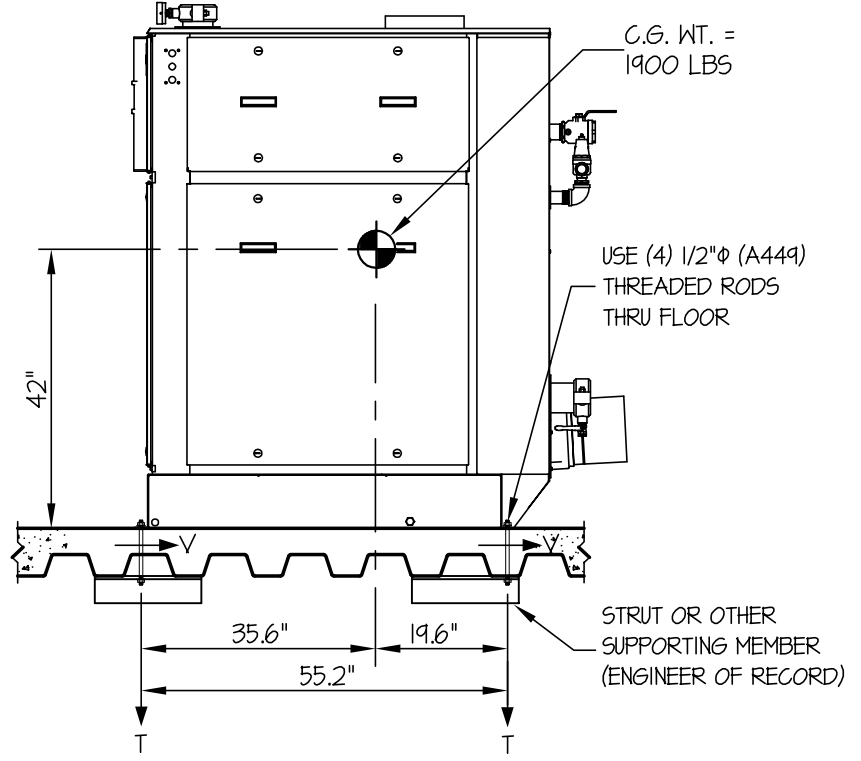
OF **1** SHEET

SEISMIC ANCHORAGE

ELEVATED FLOOR



FRONT ELEVATION



SIDE ELEVATION

$T_{MAX} = 2668$ LBS/BOLT
 $V_{MAX} = 919$ LBS/BOLT

LOADS: PER 2010 CALIFORNIA BUILDING CODE SECTION 1613A AND ASCE 7-05 SECTIONS 12 AND 13.

WEIGHT = 1900 LBS

HORIZONTAL FORCE (E_h) = $1.50W_p = 2850$ LBS

VERTICAL FORCE (E_v) = $0.40W_p = 760$ LBS

BOLT FORCES:

TENSION (T)

$$T_{MAXIMUM} = \left[\frac{2850\#(42\")(12.8\"){}}{1_{BOLT}(55.2\")(28\")} \times (0.3) \right] + \frac{2850\#(42\")(35.6\"){}}{1_{BOLT} (28\")(55.2\")} - \frac{(1900\#(0.9) - 760\#)(35.6\")(12.8\"){}}{1_{BOLT} (55.2\")(28\")} = 2778 \text{ LBS/BOLT (MAX)}$$

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

SHEAR (V)

$$V_{MAXIMUM} = \frac{2850\#(35.6\"){}}{2_{BOLTS} (55.2\")} = 919 \text{ LBS/BOLT (MAX)}$$

NOTE:

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

