EASE EQUIPMENT ANCHORAGE & SEISMIC ENGINEERING
www.equipmentanchorage.com

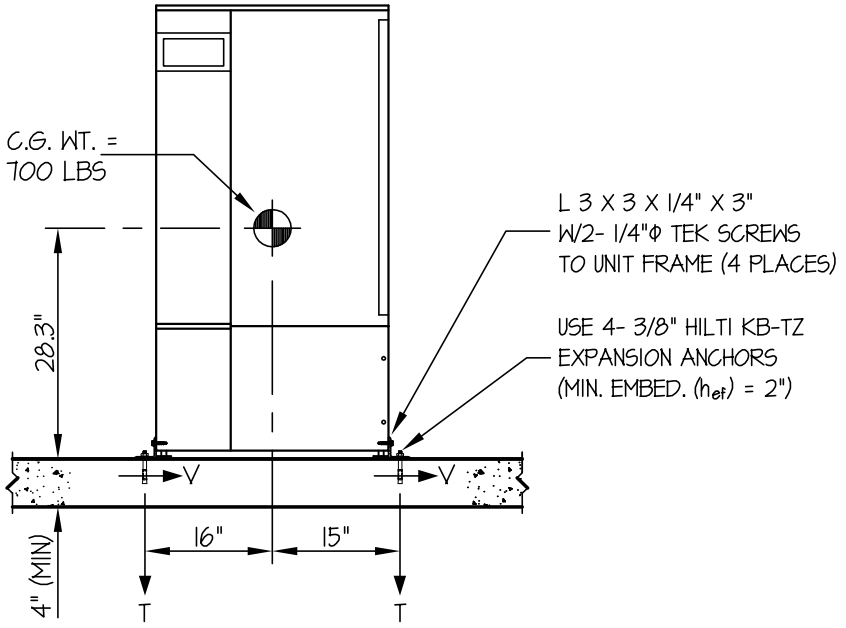
PATTERSON-KELLEY CO.

P-K MACH SERIES C-900 BOILER

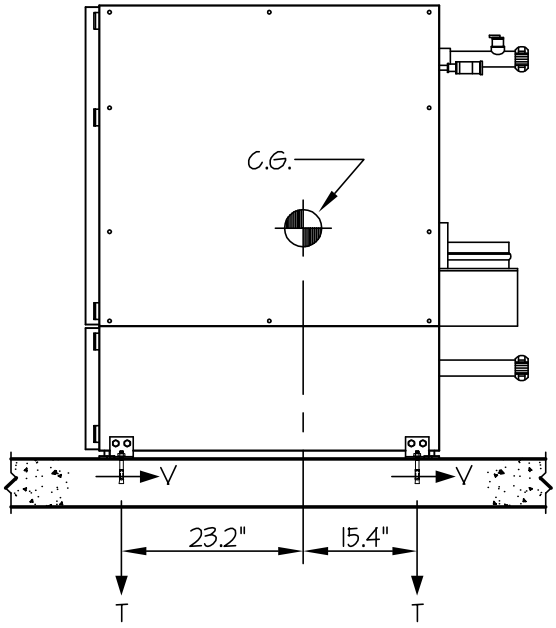
DES. J. ROBERSON
JOB NO. 11-1166
DATE 8/22/11
SHEET 1 OF 1 SHEET

SEISMIC ANCHORAGE

SLAB ON GRADE



FRONT ELEVATION



SIDE ELEVATION

T_{MAX} = 311 LBS/BOLT
V_{MAX} = 189 LBS/BOLT

LOADS: PER 2010 CALIFORNIA BUILDING CODE SECTION 1613A AND ASCE 7-05 SECTIONS 12 AND 13.
WEIGHT = 700 LBS
HORIZONTAL FORCE (E_h) = 0.90W_p = 630 LBS
VERTICAL FORCE (E_v) = 0.40W_p = 280 LBS

BOLT FORCES:

TENSION (T)

$$T_{MAXIMUM} = \left[\frac{630\#(28.3'')(15'')}{38.6''(31'')} \times (0.3)\right] + \frac{630\#(28.3'')(23.2'')}{31''(38.6'')} - \frac{(700\#(0.9) - 280\#)(15'')(23.2'')}{31''(38.6'')} = 311 \text{ LBS/BOLT (MAX)}$$

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

SHEAR (V)

$$V_{MAXIMUM} = \frac{630\#(23.2'')}{2_{BOLTS}(38.6'')} = 189 \text{ LBS/BOLT (MAX)}$$

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

REGISTERED PROFESSIONAL ENGINEER
JONATHAN ROBERSON
No. 4197
EXP. 6-30-2012
8/22/11
STRUCTURAL
STATE OF CALIFORNIA

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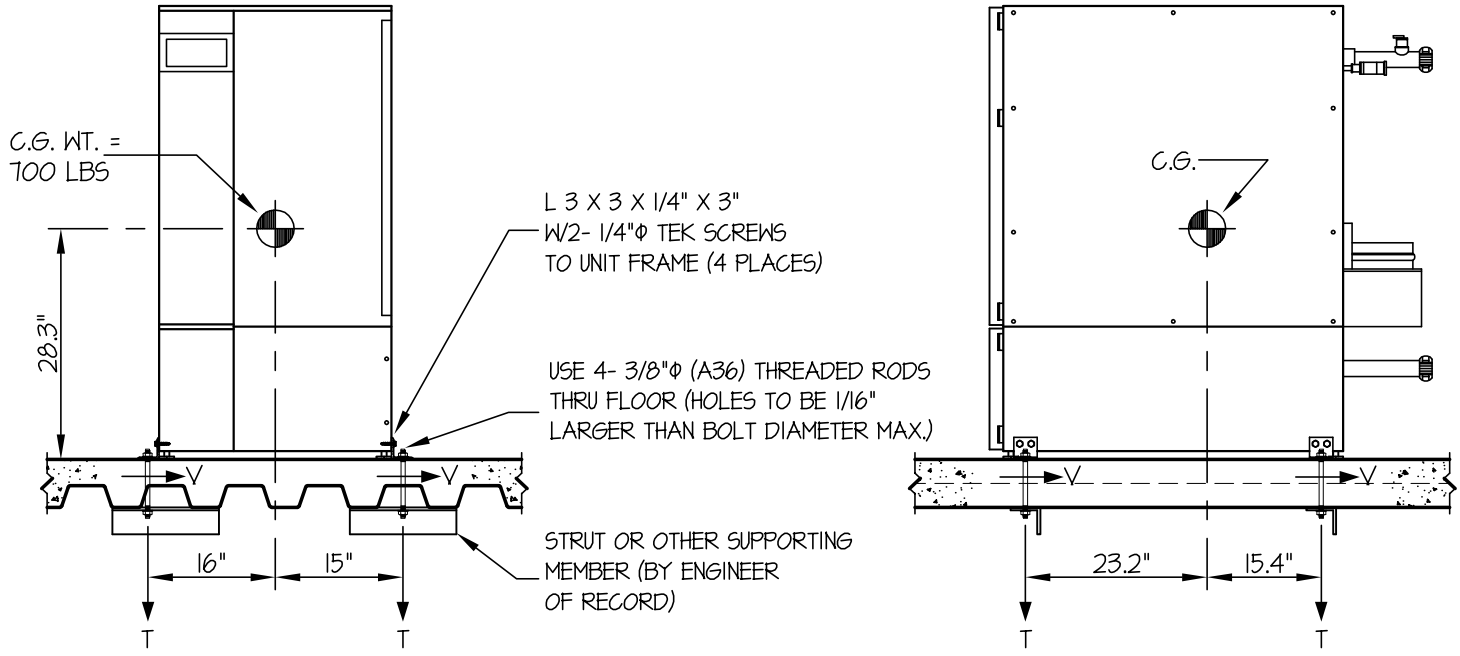
SEISMIC ANCHORAGE

ELEVATED FLOOR



FRONT ELEVATION

SIDE ELEVATION

T_{MAX} = 558 LBS/BOLT
V_{MAX} = 303 LBS/BOLT

LOADS: PER 2010 CALIFORNIA BUILDING CODE SECTION 1613A AND ASCE 7-05 SECTIONS 12 AND 13.
WEIGHT = 700 LBS
HORIZONTAL FORCE (E_h) = $1.44W_p$ = 1008 LBS
VERTICAL FORCE (E_v) = $0.40W_p$ = 189 LBS

BOLT FORCES:

TENSION (T)

$$T_{MAXIMUM} = \left[\frac{1008\#(28.3'')(15'')}{38.6''(31'')} \times (0.3)\right] + \frac{1008\#(28.3'')(23.2'')}{31''(38.6'')} - \frac{(700\#(0.9) - 280\#)(15'')(23.2'')}{31''(38.6'')} = 558 \text{ LBS/BOLT (MAX)}$$

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

SHEAR (V)

$$V_{MAXIMUM} = \frac{1008\#(23.2'')}{2_{BOLTS}(38.6'')} = 303 \text{ LBS/BOLT (MAX)}$$

NOTE:
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