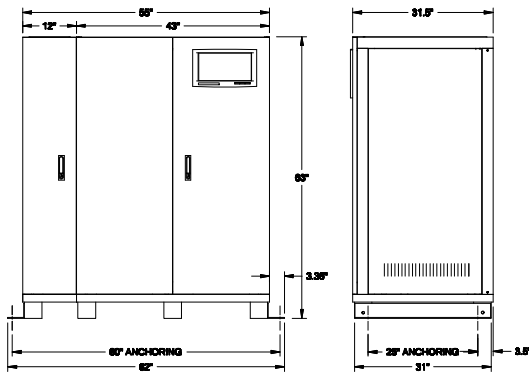
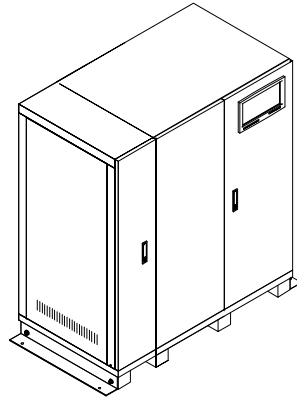


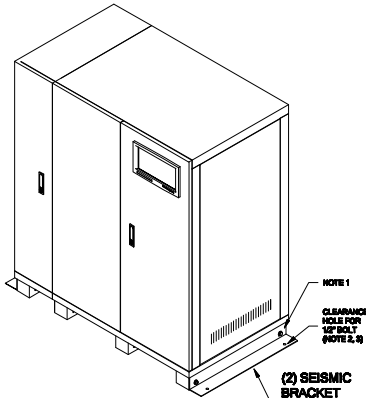


FRONT

SIDE



ISO FRONT LEFT

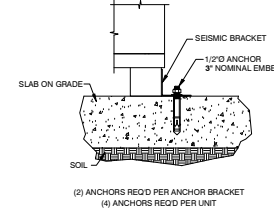


ISO FRONT RIGHT

(80KVA THRU 180 KVA)

- NOTES:**
- 1) ASSEMBLE SEISMIC BRACKETS TO CABINET USING SUPPLIED 1/2-13 HEX BOLT, PRIOR TO INSTALLING CABINET TO FINAL LOCATION.
 - 2) INDICATED MOUNTING HARDWARE TO BE SUPPLIED BY CUSTOMER. REFER TO LOCAL CODES FOR BOLT TYPE AND LENGTH.

REV	DATE	DESCRIPTION
0001-277		
SCALE	DR. WTS.	SHEET 1 OF 2



1 ANCHOR DETAIL

LOADS & DISTRIBUTION: INVERTER CABINET
ANALYSIS BASED ON SECTION 13.3 OF THE ASCE 7-16 SPECIFICATION
REFERENCED IN CHAPTER 16 OF THE 2021 IBC/2022 CBC/2023 LABC

$F_p (13.3-1) = 0.4 \times a_p \times S_{DS} \times W_p / (R_p / I_p)$	$0.234 \times W_p$	
$F_p (13.3-2) = 1.6 \times S_{DS} \times I_p \times W_p$	$2.336 \times W_p$	SHALL NOT BE GREATER THAN
$F_p (13.3-3) = 0.3 \times S_{DS} \times I_p \times W_p$	$0.438 \times W_p$	SHALL NOT BE LESS THAN

SITE CLASS = D
 $F_a = 1.2$
 $S_1 = 1.83$
 $S_{DS} = 1.46$
 $I_p = 1.00$
 $R_p = 2.5$
 $a_p = 1$
 ASCE 7-16 Table 13.5-1
 ASCE 7-16 Table 13.5-1

$W_p = 4000 \text{ LB}$

$0.7 F_p = 0.7 \times 0.438 \times W_p$
 $= 0.317 \times 4000 \text{ LB}$
 $= 1,226 \text{ LB}$

OVERTURNING ANALYSIS:
 CABINET HEIGHT, $H = 63.0 \text{ IN}$
 ANCHORS SPACING, $D = 25.0 \text{ IN}$

$M_{ot} = V_{ot} \times H / (1/2 H)$
 $= 1226 \text{ LB} \times 63 \text{ IN} \times 1/2$
 $= 38,632 \text{ IN-LB}$

$M_{ot} = W_p \times D / 2$
 $= 4000 \text{ LB} \times 25 \text{ IN} / 2$
 $= 50,000 \text{ IN-LB}$

$P_{uplift} = (M_{ot} - 0.6 \times M_{ot}) / D$
 $= (38632 \text{ IN-LB} - 0.6 \times 50000 \text{ IN-LB}) / 25 \text{ IN}$
 $= 345 \text{ LB}$
 or UPLIFT

ANCHORS
 ALLOWABLE CAPACITY PER ICC REPORT AND ACI 318-14 CHAPTER 17
 PULLOUT: 1170 LB $V_{allowable, pull}$
 SHEAR: 2390 LB $V_{allowable, shear}$
 COMBINED STRESS = $(345 \text{ LB} / 2340 \text{ LB}) + (1226 \text{ LB} / 9560 \text{ LB})$
 $= 0.28 + 1.2 \text{ OK}$

USE 1/2"Ø x 3" MIN. EMBED. HLTI K8-T22 (ICC ESR-4266) OR APPROVED EQUAL
 (4) PER CABINET

- NOTES:**
1. DESIGNED PER THE 2021 IBC / 2022 CBC / 2023 LABC, $F_a = 1.2$ & $S_e = 1.82$.
 2. STORAGE CAPACITY: 4,000# MAX. WEIGHT.
 3. ANCHORS: HLTI K8-BOLT T22, ICC #ESR-4266 W/ LABC SUPPLEMENT
 4. CONCRETE: 6" THICK x 2,800 PSI.
 5. SOIL BEARING PRESSURE: 900 PSF. (MIN. REQ'D)
 6. EVALUATION BASED ON NORTHRIDGE LOCATION (ONE OF THE HIGHEST LA FAULT AREAS) WITH THE FOLLOWING CALCULATION AS A TYPICAL EXAMPLE. (ASSUMED GROUND FLOOR INSTALLATION)

POWER COMPANY
 NORTHBRIDGE, CA 91324

ADDRESS

DESCRIPTION

DATE

REV

SEIZMIC
 EST. 1985
 SEIZMIC
 ENGINEERING, INC.
 1130 E. Cypress St.
 Covina, California
 91724
 Tel. (909) 869-0989

DRAWN BY: M.V. / T.C.
 DATE: 01/25/24
 ADD REV BY:
 REV DATE:
 TYPE:
 SCALE: N.T.S.
 APPROVED BY: S.A.E. / H.B.E.

SEAL AND E-TESTED
 NO. 2598
 DATE OF EXPIRATION
 12-31-2025

DESCRIPTION:
**CABINET
 DETAILS**

DRAWING NUMBER:
24-0186-D

CALCULATIONS

