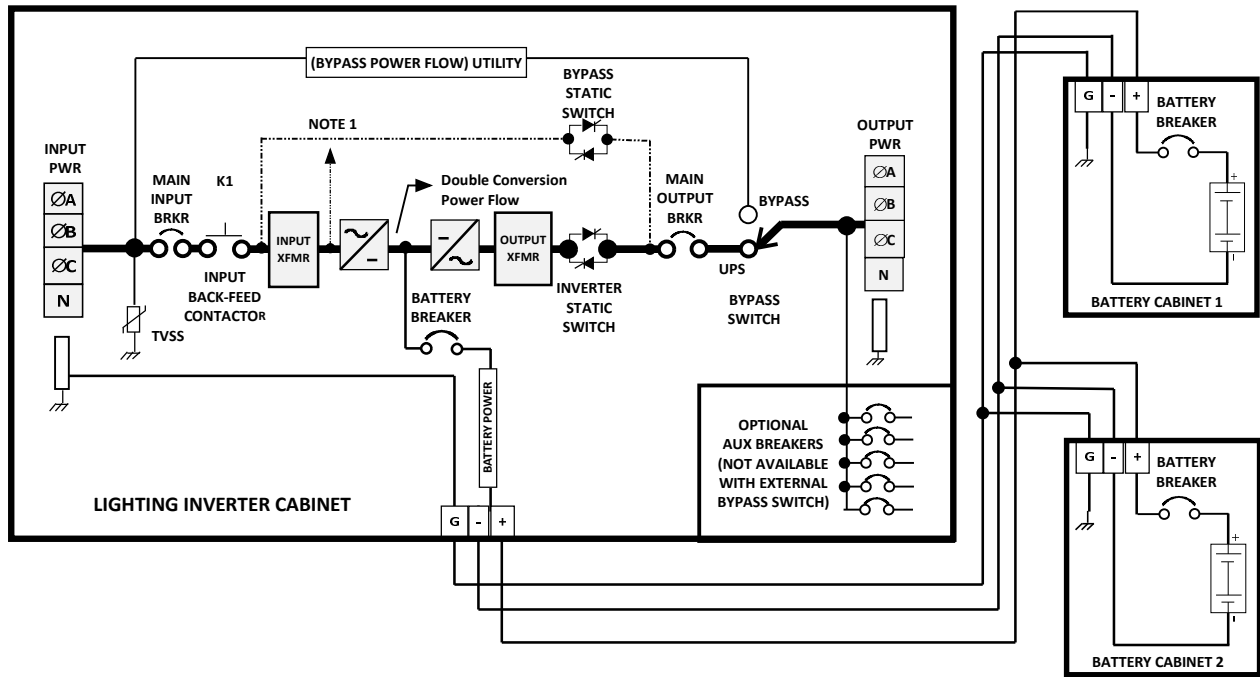
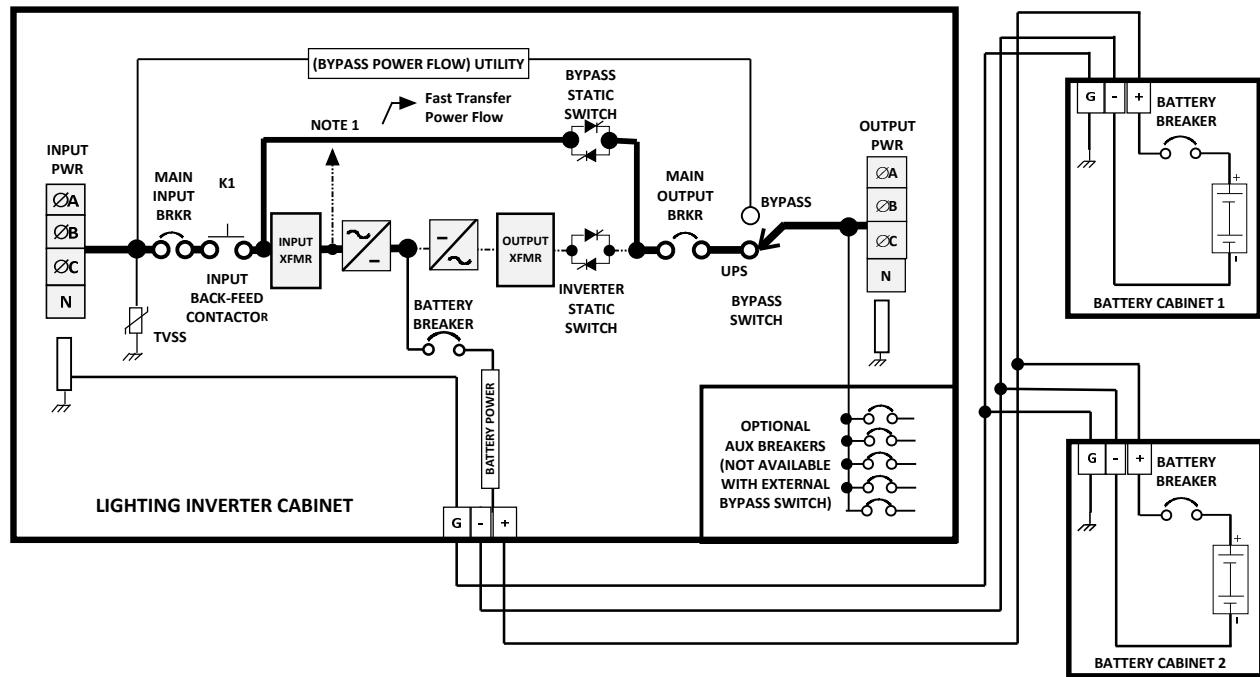


3 PHASE LIGHTING INVERTER TYPICAL SINGLE LINE DIAGRAM

DOUBLE CONVERSION UNITS (STANDARD)



FAST TRANSFER UNITS (OPTIONAL)



NOTE(S):

1. STATIC BYPASS AND MANUAL BYPASS WILL BE POWERED FROM THE TRANSFORMER FOR DIFFERENT INPUT AND OUTPUT VOLTAGE CONFIGURATIONS.
2. OPTIONAL DELTA INPUT POWER AVAILABLE USING EXTERNAL TRANSFORMER, TRANSFORMER MUST BE SIZED MIN 25% LARGER THAN UPS CAPACITY.
3. BOLD LINE INDICATES THE NORMAL (DOUBLE CONVERSION) POWER FLOW.
4. OPTIONAL EXTERNAL WRAP AROUND BYPASS SWITCH IS AVAILABLE.

SUBJECT TO CHANGE WITHOUT NOTICE



TYPICAL 3-PH LIGHTING INVERTER
SINGLE LINE DIAGRAM

DRAWN : SS

9/7/22

APPVD : HN

9/7/22

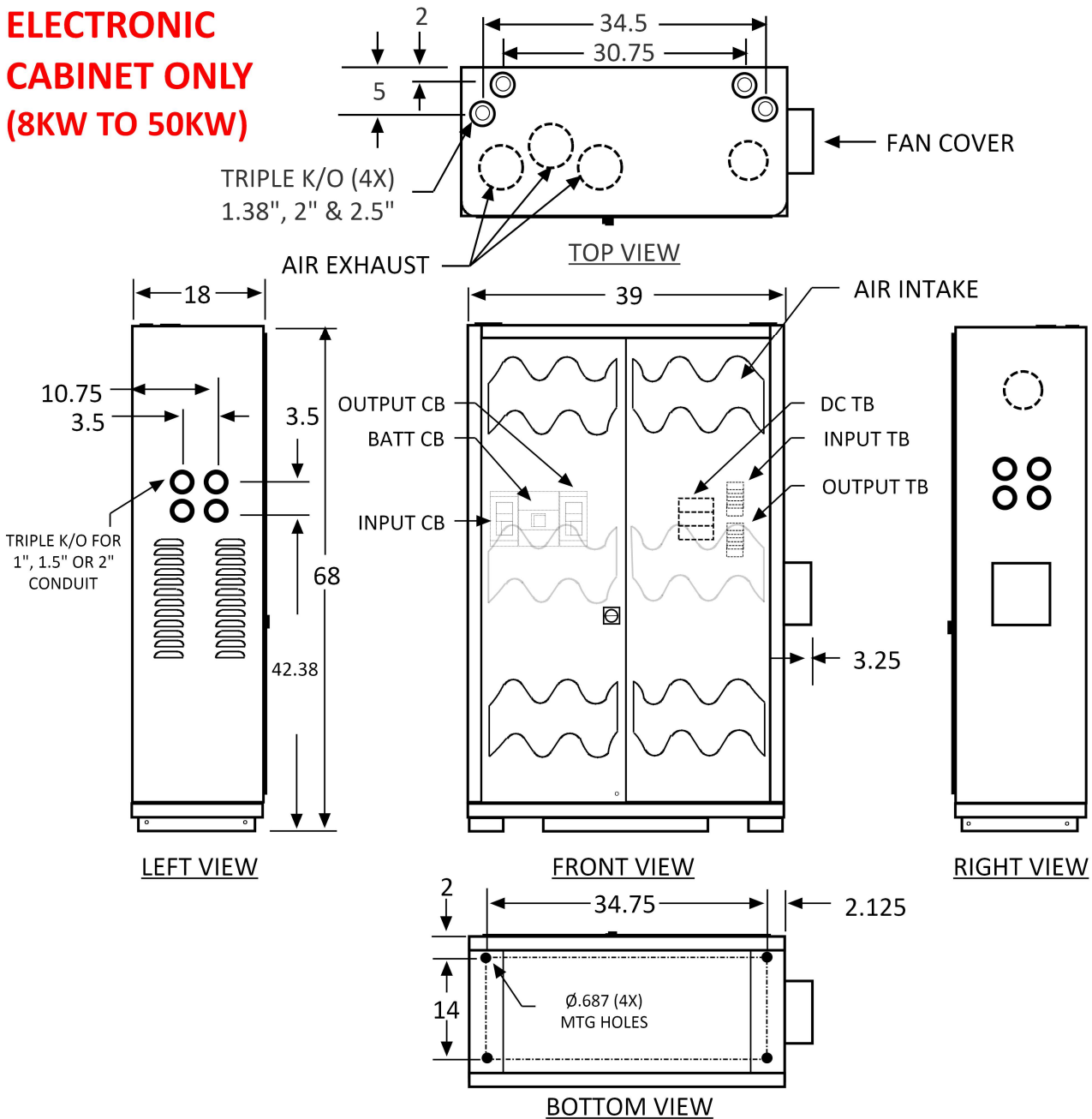
715-TD-010

REVISION
B

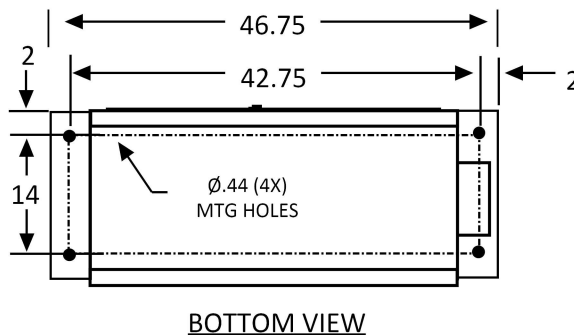
SHEET
1 OF 1

POWER RIDE 3 INVERTER INDOOR CABINET

**ELECTRONIC
CABINET ONLY
(8KW TO 50KW)**



INSTALLATION WITH SEISMIC BRACKETS FOR ZONE 4



NOTE(S):

- 1) CONSTRUCTION: NEMA1 INDOOR
- 2) OPTIONAL SEISMIC BRACKETS AVAILABLE
- 3) ANCHORING HARDWARE TO BE SUPPLIED BY CUSTOMER

SUBJECT TO CHANGE WITHOUT NOTICE



POWER RIDE 3
INVERTER CABINET

DRAWN : MT
APPVD : SS

10/18/22
10/18/22

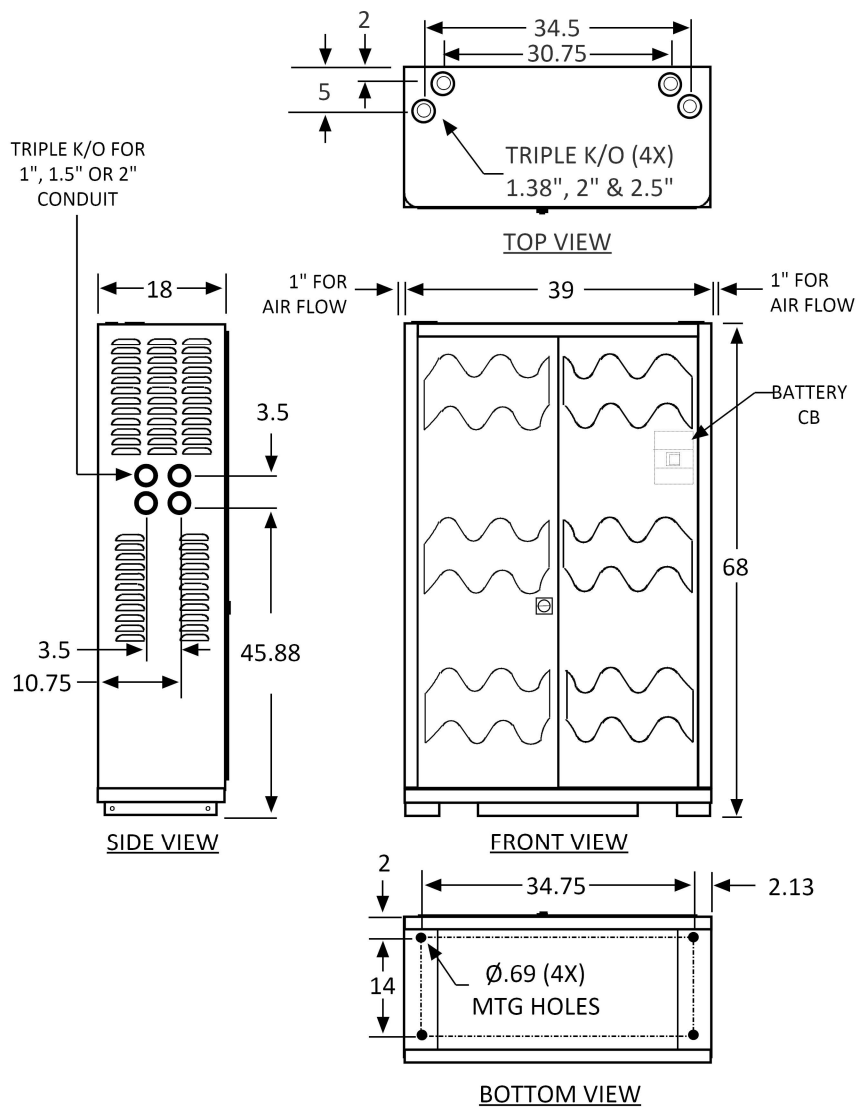
715-TD-011

REVISION
A

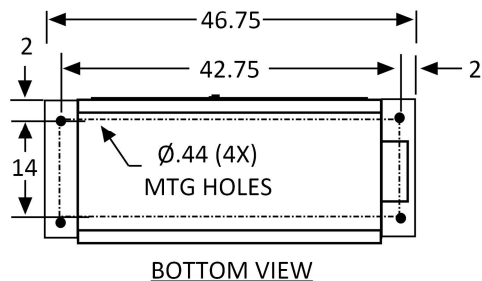
SHEET
1 OF 1

Technical Drawing: 39" Battery Cabinet (w/ Standard Battery)

(10KVA/8KW) BATTERY INDOOR CABINET



SEISMIC BRACKET INSTALLATION



NOTE(S):

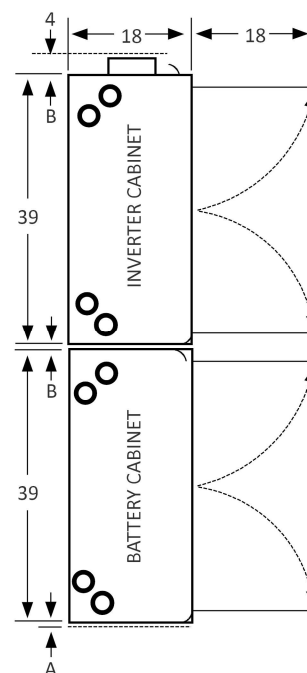
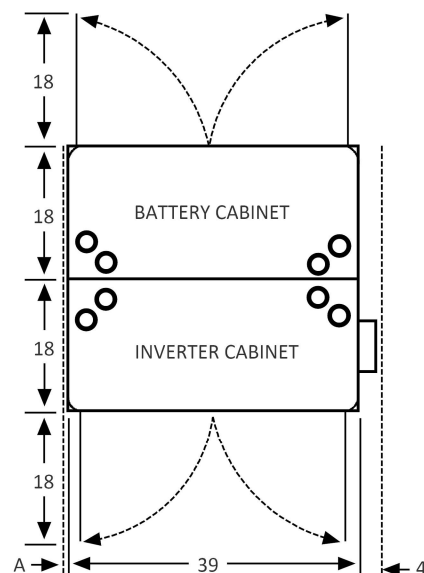
- 1) CONSTRUCTION: NEMA1 INDOOR
- 2) OPTIONAL SEISMIC BRACKETS AVAILABLE
- 3) OPTIONAL STACKABLE RACKS AVAILABLE. 10KVA/8KW UNITS ONLY.
- 4) ANCHORING HARDWARE TO BE SUPPLIED BY CUSTOMER (REFER TO SEISMIC DWG)

SUBJECT TO CHANGE WITHOUT NOTICE

STANDARD VRLA BATTERY

KVA/KW	BATTERY CABINET QTY 90 MIN.	BATTERY CABINET QTY 120 MIN.
10KVA/8KW	1	1

B	1.0"	8.0"
A	1.0"	4.0"
DIM	WITHOUT EXTERNAL SEISMIC	WITH EXTERNAL SEISMIC



POWER RIDE 3 BATTERY CABINET (39" WIDE)

DRAWN : MT
APPVD : SS

10/18/22
10/18/22

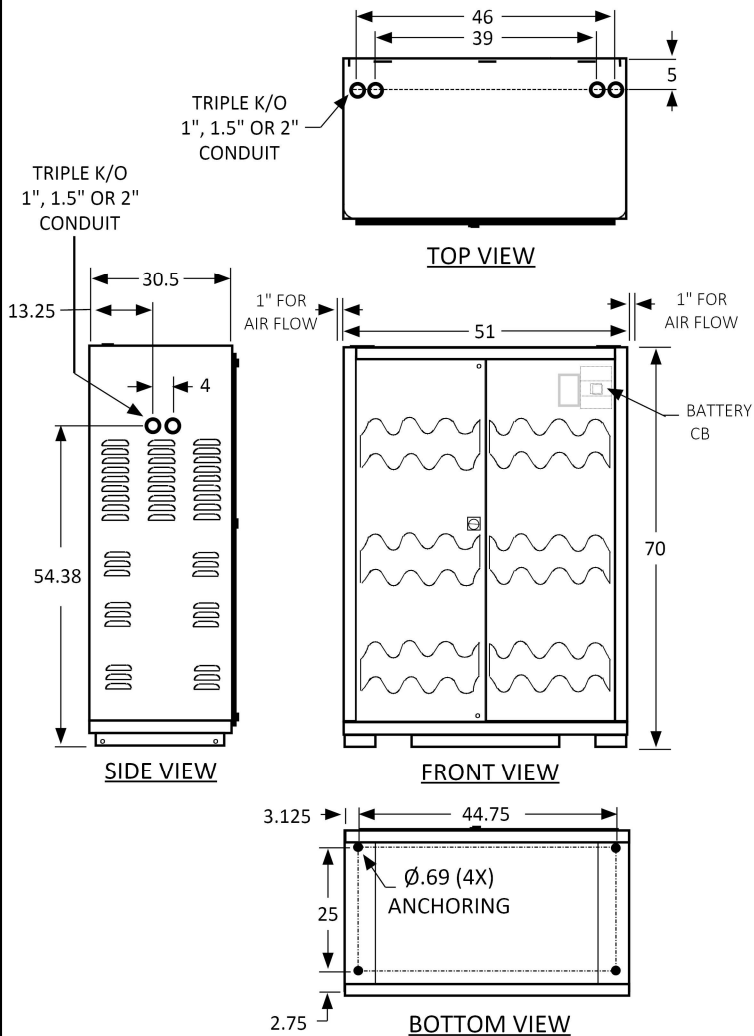
715-TD-012

REVISION
A

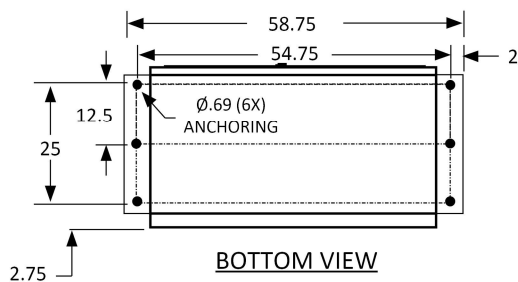
SHEET
1 OF 1

Technical Drawing: 51" Battery Cabinet (w/ Standard Battery)

(12 KW TO 50 kW) BATTERY INDOOR CABINET



SEISMIC BRACKET INSTALLATION

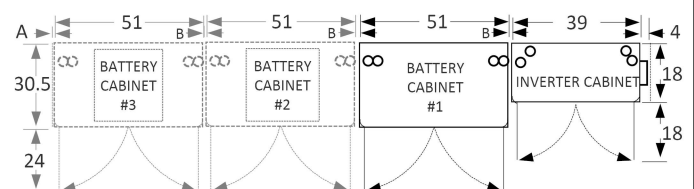
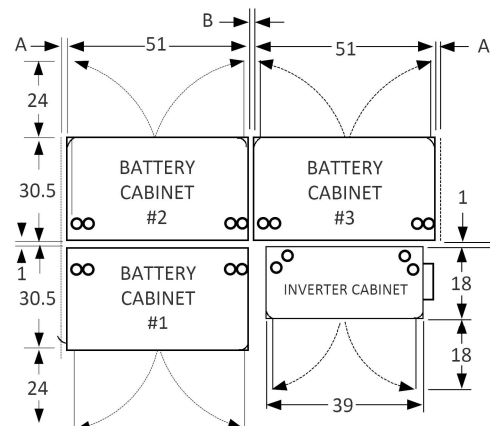
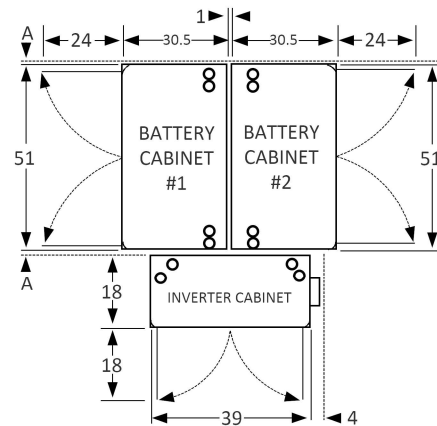
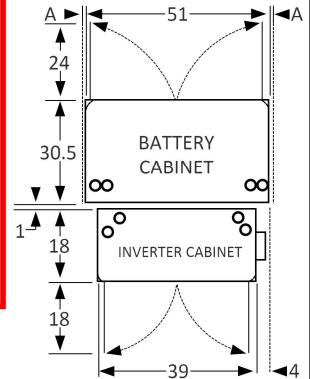


NOTE(S):

- 1) CONSTRUCTION: NEMA1 INDOOR
- 2) OPTIONAL SEISMIC BRACKETS AVAILABLE
(FOR ANCHOR DETAILS, REFER TO SEISMIC DWG)

STANDARD VRLA BATTERY		
KVA/KW	BATTERY CABINET QTY 90 MIN.	BATTERY CABINET QTY 120 MIN.
15KVA/12KW	1	1
20KVA/16KW	1	1
25KVA/20KW	1	1
30KVA/24KW	1	2
40KVA/32KW	2	2
50KVA/40KW	2	2
50KW	2	3

B	1.0"	8.0"
A	1.0"	4.0"
DIM	WITHOUT EXTERNAL SEISMIC	WITH EXTERNAL SEISMIC



SUBJECT TO CHANGE WITHOUT NOTICE



POWER RIDE 3 BATTERY CABINET (51" WIDE)

DRAWN : MT 10/18/22
APPVD : SS 10/18/22

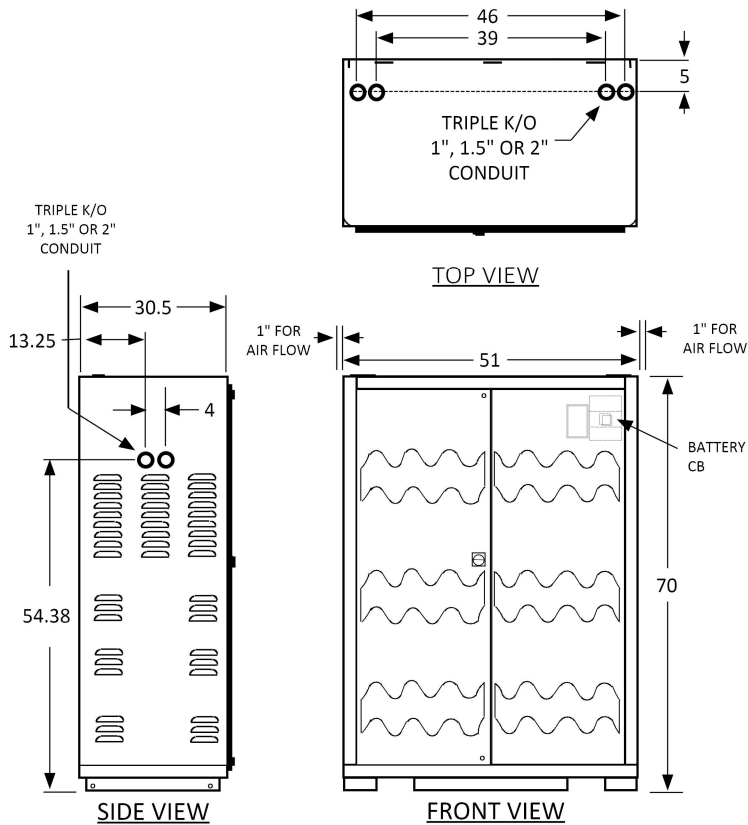
715-TD-013

REVISION A

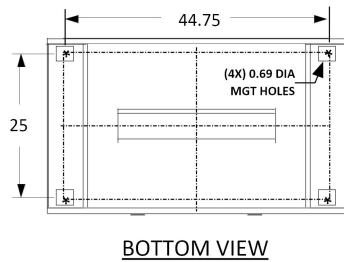
SHEET 1 OF 1

Technical Drawing: 51" Battery Cabinet (w/ Standard Battery & Integrated Brackets)

(12 KW TO 50 KW) BATTERY INDOOR CABINET



INTEGRATED SEISMIC BRACKET INSTALLATION



*- DENOTES ANCHOR LOCATION

NOTE(S):

1) CONSTRUCTION: NEMA1 INDOOR

2) ANCHORS FOR INTEGRATED SEISMIC MOUNTING:

A. USE 5/8" DIA x 3-3/4" MIN. EMBED. HILTI KB-TZ ANCHORS, ICC ESR-1917 (LARR#25701) OR APPROVED EQUAL (4) TOTAL PER CABINET, (2) PER ANCHOR BRACKET

B. CONCRETE 5" THICK x 2,500 PSI (MIN. REQ'D)

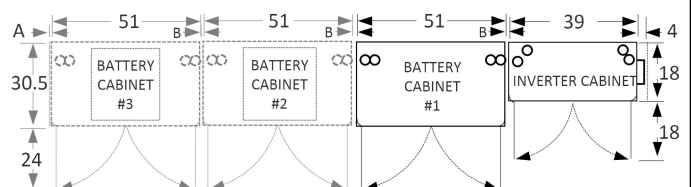
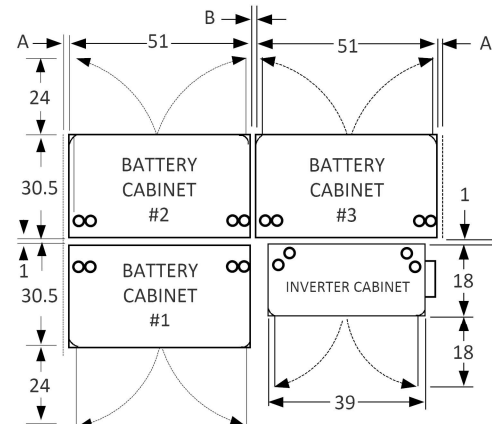
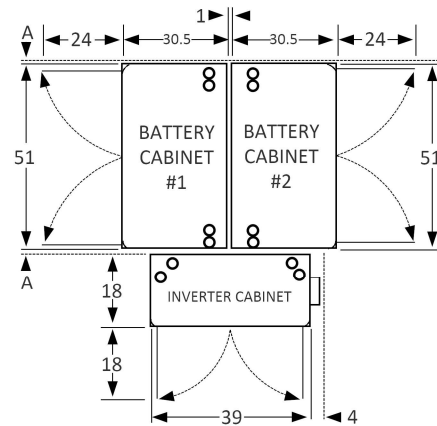
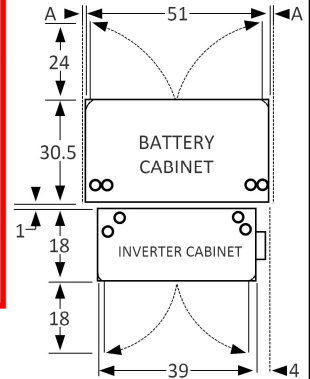
C. SOIL BEARING PRESSURE 500 PSF (MIN. REQ'D)

FOR ALL DETAILS REFER TO SEISMIC DWG. FOR EACH CABINET MOUNTING

STANDARD VRLA BATTERY

KVA/KW	BATTERY CABINET QTY 90 MIN.	BATTERY CABINET QTY 120 MIN.
15KVA/12KW	1	1
20KVA/16KW	1	1
25KVA/20KW	1	1
30KVA/24KW	1	2
40KVA/32KW	2	2
50KVA/40KW	2	2
50KW	2	3

B	1.0"
A	1.0"
DIM	WITH INTEGRATED SEISMIC



SUBJECT TO CHANGE WITHOUT NOTICE



POWER RIDE 3 BATTERY
CABINET (51" WIDE)

DRAWN : MT
APPVD : SS

10/18/22
10/18/22

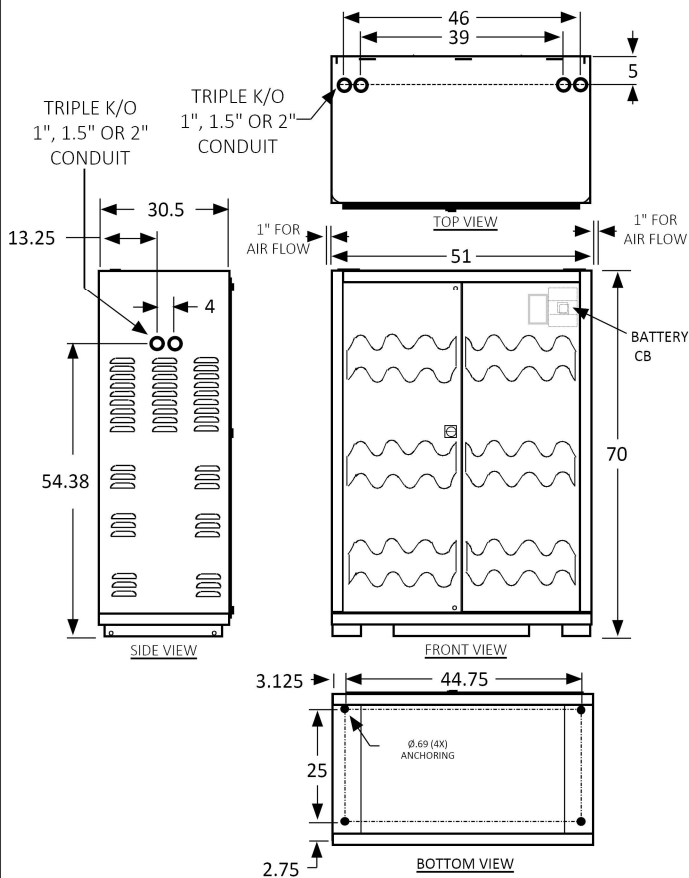
715-TD-014

REVISION
A

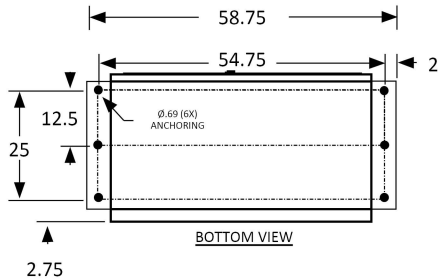
SHEET
1 OF 1

Technical Drawing: 51" Battery Cabinet (w/ Long Life Battery)

(8KW TO 50 KW) BATTERY INDOOR CABINET LONG LIFE BATTERY



SEISMIC BRACKET INSTALLATION



NOTE(S):

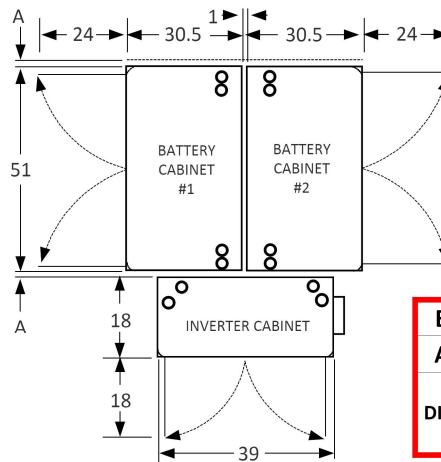
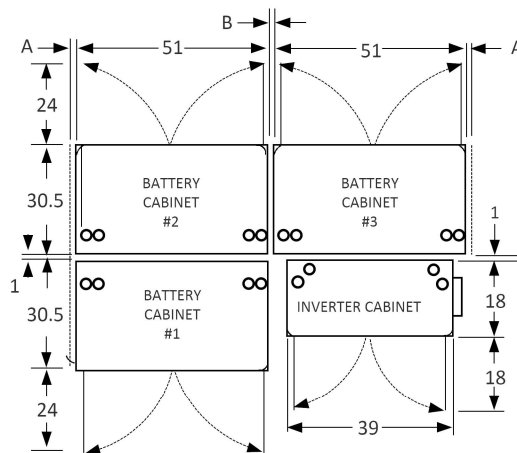
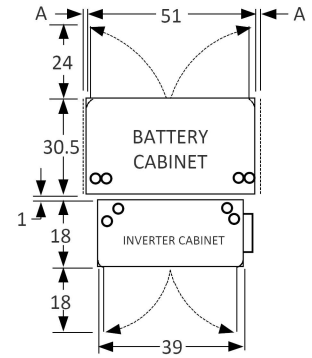
- 1) CONSTRUCTION: NEMA1 INDOOR.
- 2) OPTIONAL SEISMIC BRACKETS AVAILABLE.
(FOR ANCHOR DETAILS, REFER TO SEISMIC DWG)

SUBJECT TO CHANGE WITHOUT NOTICE

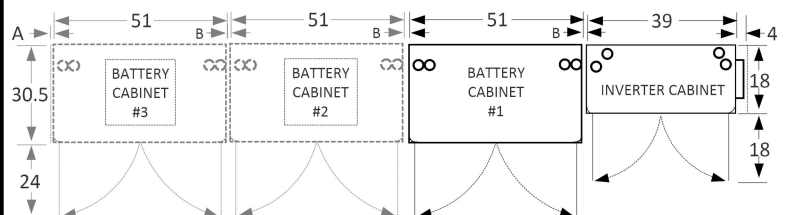
SYSTEM INSTALLATION RECOMMENDATION

LONG LIFE BATTERY

KVA/KW	BATTERY CABINET QTY 90 MIN.	BATTERY CABINET QTY 120 MIN.
10KVA/8KW	1	1
15KVA/12KW	1	1
20KVA/16KW	1	1
25KVA/20KW	1	1
30KVA/24KW	1	2
40KVA/32KW	2	2
50KVA/40KW	2	3
50KW	3	3



B	1.0"	8.0"
A	1.0"	4.0"
DIM	WITHOUT EXTERNAL SEISMIC	WITH EXTERNAL SEISMIC



POWER RIDE 3 BATTERY CABINET (51" WIDE)

DRAWN : SS
APPVD : HN

10/01/22
10/01/22

715-TD-015

REVISION
A

SHEET
1 OF 1

REMOTE STATUS PANEL

SIDE
MOUNT
PROVISION

BACK
MOUNT
PROVISION

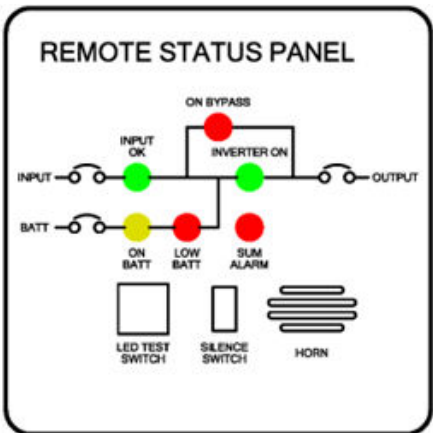


TO UPS P100 TERMINAL
BLOCK
SEE INSTALLATION
INSTRUCTION SHIPPED
WITH THE ASSEMBLY

USE
BUMPER
FOR
CONSOLE
INSTALL

Remote Status Panel displays the following:

INPUT OK:	Input power is within acceptable range
INVERTER ON:	Inverter is on
ON BYPASS:	Unit is on Bypass Mode
ON BATT:	Unit is running from Battery
LOW BATT:	Battery voltage is at low voltage before shutdown
SUM ALARM:	Unit is on critical alarm such as: Over temperature, DC OV/UV
HORN:	Audible warning for alarm condition
SILENCE WATCH:	Silences the audible warning
LED TEST:	Tests the LED's by push in



SUBJECT TO CHANGE WITHOUT NOTICE



REMOTE STATUS PANEL ASSEMBLY

DRAWN : MT

12/01/22

APPVD : SS

12/01/22

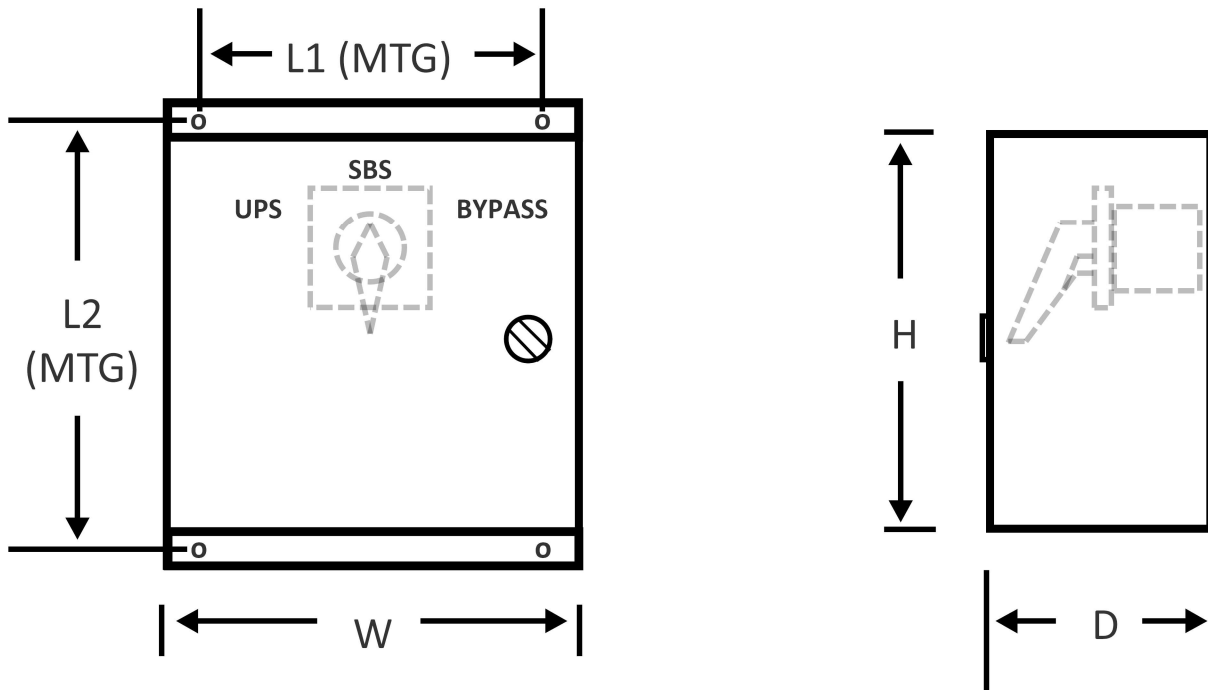
710-SV-TD-014

REVISION
A

SHEET
1 OF 1

MAKE BEFORE BREAK EXTERNAL WRAP AROUND BY-PASS SWITCH

350 AMPS	600V	30	36	16	28.5	34.5
240 AMPS	600V	30	30	12	28.5	28.5
175 AMPS	600V	20	20	12	18.5	18.5
110 AMPS	600V	14	16	10	12	16.75
55 AMPS	600V	14	16	8	12	16.75
RATING	VOLTAGE	DIM W	DIM H	DIM D	DIM L1 (MTG)	DIM L2 (MTG)



NOTE(S):

- 1) SWITCH CONTACTS ARE THREE PHASE L-NEUTRAL "MAKE BEFORE-BREAK"
- 2) CONTACTS MARKED "UPS" ARE CLOSED IN THE "UPS" POSITION
- 3) CONTACTS MARKED "BYPASS" ARE CLOSED IN THE "BYPASS" POSITION
- 4) CONTACTS MARKED "SBS" ARE CLOSED IN THE "SBS" POSITION
- 5) WRAP AROUND BY-PASS SWITCH IS FOR SAME INPUT/OUTPUT VOLTAGES ONLY
- 6) WRAP AROUND BY-PASS SWITCH CAN ONLY BE USED WITHOUT ANY BUILT-IN SECONDARY DISTRIBUTION CIRCUIT BREAKERS IN UPS

SUBJECT TO CHANGE WITHOUT NOTICE



POWER RIDE 3 / 4 EXTERNAL
BYPASS SWITCH

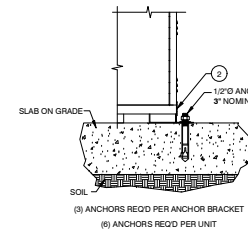
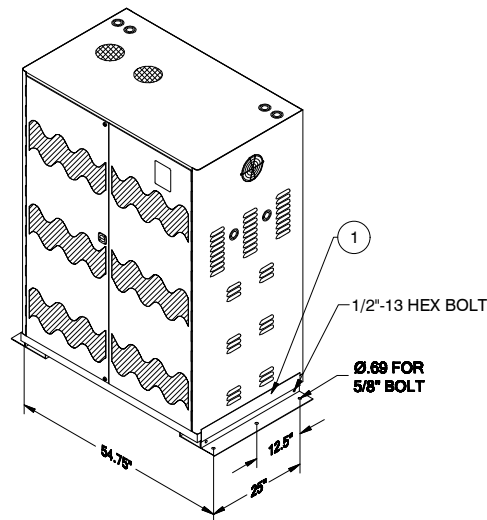
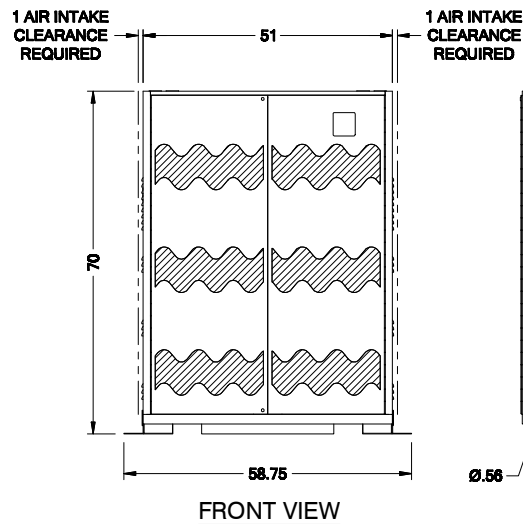
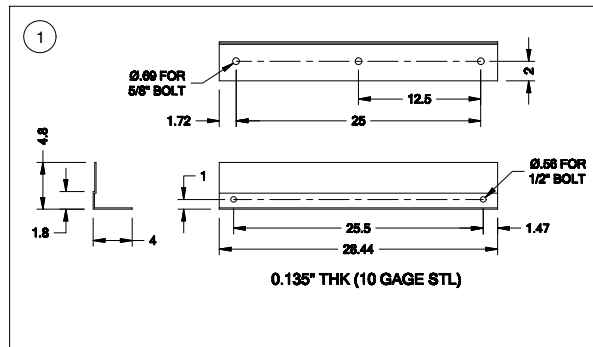
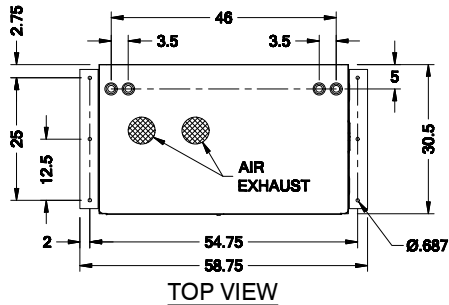
DRAWN : SS
APPVD : HN

4/17/24
4/17/24

715-TD-016

REVISION
A

SHEET
1 OF 1



2 ANCHOR DETAIL

LOADS & DISTRIBUTION: 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): $0.4 \times ap \times S_{ps} \times W_p / (R_p / I_p)$	$0.234 \times W_p$	SHALL NOT BE GREATER THAN SHALL NOT BE LESS THAN
F_p (13.3-2): $1.6 \times S_{ps} \times I_p \times W_p$	$2.336 \times W_p$	
F_p (13.3-3): $0.3 \times S_{ps} \times I_p \times W_p$	$0.438 \times W_p$	

SITE CLASS = D

$F_a = 1.2$

$S_s = 1.83$

$S_{ps} = 1.46$

$I_p = 1.00$

$ap = 2.5$

$ap = 1$

ASCE 7-16 Table 13.5-1

ASCE 7-16 Table 13.5-1

$W_p = 4640 \text{ LB}$

$D \cdot F_p = 0.7 \cdot D \cdot 438 \cdot W_p$

$= 0.31 \cdot 4640 \text{ LB}$

$= 1,423 \text{ LB}$

OVERTURNING ANALYSIS:

CABINET HEIGHT, $H = 70.0 \text{ IN}$

ANCHORS SPACING, $D = 25.0 \text{ IN}$

$M_{ot} = V_{total} \cdot H / 2$

$= 1423 \text{ LB} \cdot 70 \text{ IN} \cdot 1/2$

$= 49,792 \text{ IN-LB}$

$M_{st} = W_p \cdot D / 2$

$= 4640 \text{ LB} \cdot 25 \text{ IN} / 2$

$= 58,000 \text{ IN-LB}$

$P_{u\text{lift}} = (M_{ot} - 0.6 \cdot M_{st}) / D$

$= (49,792 \text{ IN-LB} - 0.6 \cdot 58,000 \text{ IN-LB}) / 25 \text{ IN}$

$= 600 \text{ LB}$

$\leq UPLIFT$

ANCHORS

ALLOWABLE CAPACITY PER ICC REPORT AND ACI 318-14 CHAPTER 17

PULLOUT: $11,70 \text{ LB}$

$T_{allowable, ACI}$

SHEAR: $2,590 \text{ LB}$

$V_{allowable, ACI}$

COMBINED STRESS = $(600 \text{ LB} / 3510 \text{ LB}) + (1423 \text{ LB} / 14340 \text{ LB})$

< 0.27

USE 1/2" x 3" MIN. EMBED. HILTI KB-T22 (ICC ESR-4266) OR APPROVED EQUAL

(6) PER CABINET

NOTES:

- DESIGNED PER THE 2021 IBC / 2022 CBC / 2023 LABC.
- STORAGE CAPACITY: 4,640# MAX. WEIGHT.
- ANCHORS: HILTI KB-T22, ICC ESR-4266 W/ LABC SUPPLEMENT
- CONCRETE: 4" THICK x 2,500 PSI
- SOIL BEARING PRESSURE: 600 PSF. (MIN. REQ'D).
- EVALUATION BASED ON NORTHBRIDGE LOCATION (ONE OF THE HIGHEST LA FAULT AREAS) WITH THE FOLLOWING CALCULATION AS A TYPICAL EXAMPLE. (ASSUMED GROUND FLOOR INSTALLATION)

POWER COMPANY
NORTHBRIDGE, CA 91194

NOTES:

NO.	DESCRIPTION	DATE	BY	REV.
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

NO.	DESCRIPTION	DATE	BY	REV.
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

SEIZMIC
EST. 1980
ENGINEERING, INC.
1108 E. Cypress St.
Covina, California
91724
Tel: (909) 869-0989

DRAWN BY: M.V. / T.C.
DATE: 01/25/24
CHECKED BY:
REV. DATE:
TYPE:
SCALE: N.T.S.
APPROVED BY: SALE / PATRICK



DESCRIPTION:
CABINET DETAILS

DRAWING NUMBER:
24-0186-B

CABINET ELEVATIONS

CALCULATIONS