



**DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
FACILITIES DEVELOPMENT DIVISION**

**APPLICATION FOR HCAI SPECIAL SEISMIC
CERTIFICATION PREAPPROVAL (OSP)**

OFFICE USE ONLY

APPLICATION #: OSP-0194

HCAI Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: Concentric, LLC

Manufacturer's Technical Representative: Brian Alpizar

Mailing Address: 703 Pitts School Rd NW Suite D,, Concord, NC 37210

Telephone: (615) 804-6131

Email: brian.alpizar@concentricusa.com

Product Information

Product Name: UPS and Batteries

Product Type: Batteries

Product Model Number: 48 Vdc and 125 Vdc System Battery Rack

General Description: 48 Vdc System battery rack with (8) lead acid 3CC-5M battery blocs and 125 Vdc System battery rack with (20) lead acid 3CC-9M battery blocs from the Power Safe CC battery series

Mounting Description: Rigid, Floor Mounted

Tested Seismic Enhancements: None

Applicant Information

Applicant Company Name: Concentric, LLC

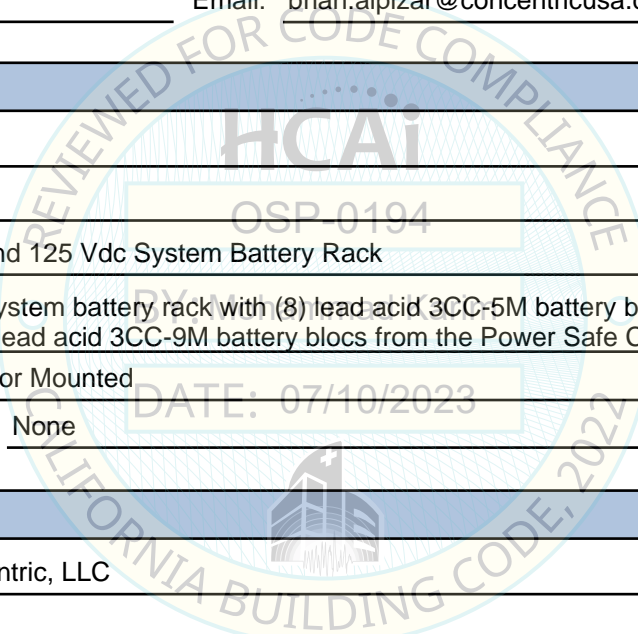
Contact Person: Brian Alpizar

Mailing Address: 703 Pitts School Rd NW Suite D,, Concord, NC 28027

Telephone: (888) 691-8100

Email: brian.alpizar@concentricusa.com

Title: Sales Engineer





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California Licensed Structural Engineer Responsible for the Engineering and Test Report(s)

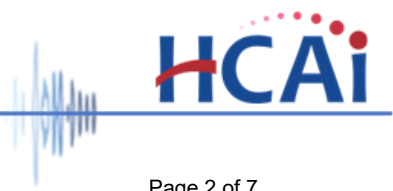
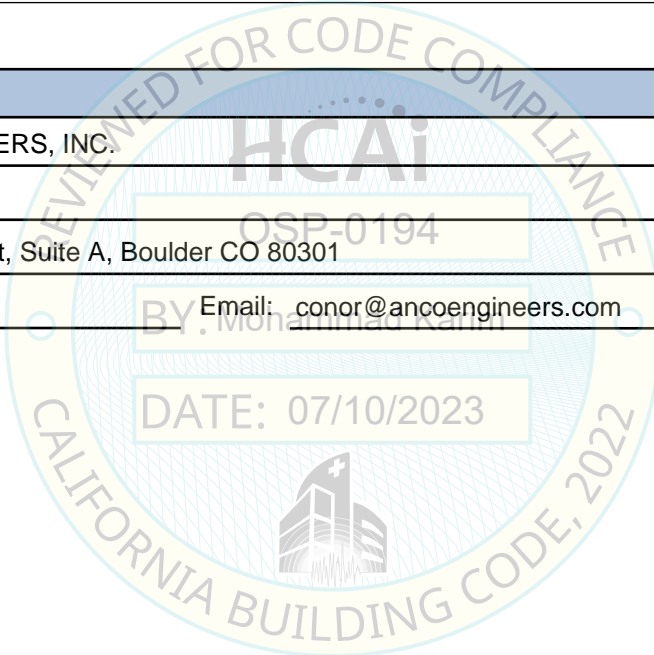
Company Name: COFFMAN ENGINEERS
Name: Arvind Nerurkar California License Number: S5195
Mailing Address: 1101 2nd Ave Suite 400, Seattle, WA 98101
Telephone: (206) 623-0717 Email: Arvind.Nerurkar@Coffman.com

Certification Method

GR-63-Core ICC-ES AC156 IEEE 344 IEEE 693 NEBS 3
 Other (Please Specify): _____

Testing Laboratory

Company Name: ANCO ENGINEERS, INC.
Contact Person: Coner Byrne
Mailing Address: 1965 33rd Street, Suite A, Boulder CO 80301
Telephone: (303) 443-7580 Email: conor@ancoengineers.com





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Seismic Parameters

Design Basis of Equipment or Components (F_p/W_p) = 1.13

SDS (Design spectral response acceleration at short period, g) = 2.5

a_p (Amplification factor) = 1

R_p (Response modification factor) = 2.5

Ω_0 (System overstrength factor) = 2.0

I_p (Importance factor) = 1.5

z/h (Height ratio factor) = 0

Natural frequencies (Hz) = See Attachment

Overall dimensions and weight = See Attachment

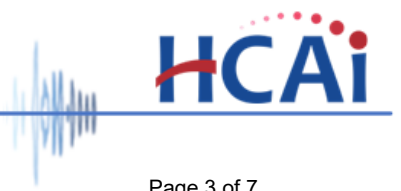
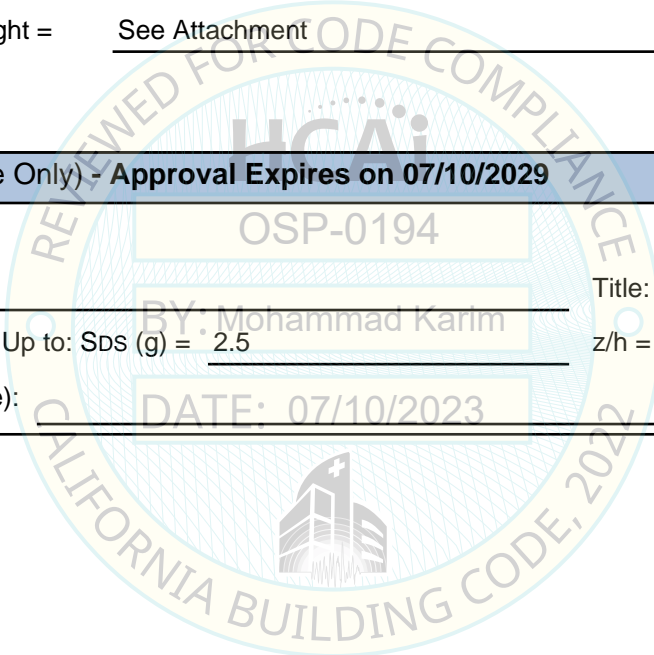
HCAI Approval (For Office Use Only) - Approval Expires on 07/10/2029

Date: 7/10/2023

Name: Mohammad Karim Title: Supervisor, Health Facilities

Special Seismic Certification Valid Up to: SDS (g) = 2.5 z/h = 0

Condition of Approval (if applicable): DATE: 07/10/2023

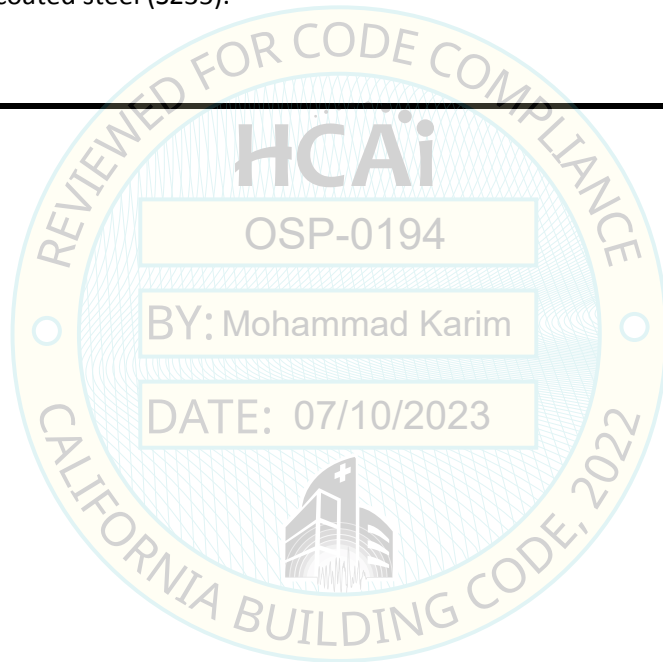


ABT Power Management, Inc. Battery Racks
I. Certified Product Table

	Width	Depth	Height	Max. Weight	Part No.	Notes	Test Status
Racks							
48 Vdc System	23.2 in	17.8 in	47.8 in	737.0 lbs	ABT48VOSHDP	1, 3, 4	UUT-2
125 Vdc System	23.2 in	66.0 in	47.8 in	2848.0 lbs	ABT125VOSHDP	2, 3, 4	UUT-1

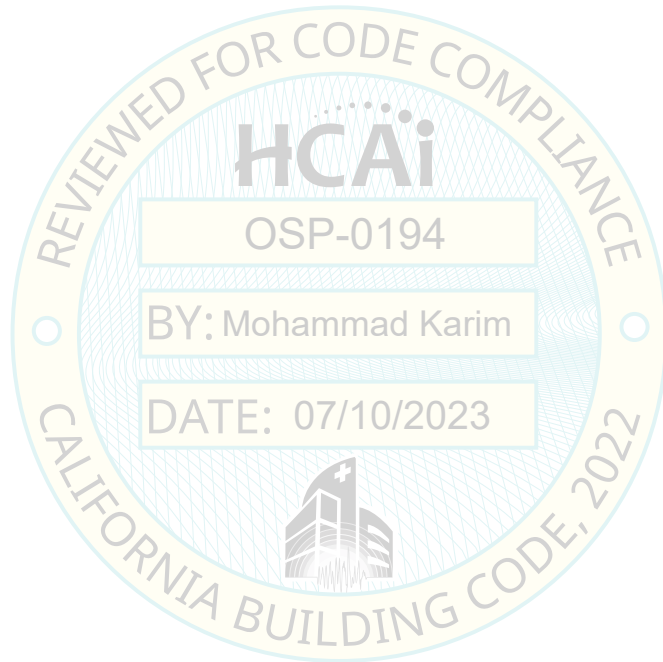
Notes

1. Contains 3CC-5M battery blocs.
2. Contains 3CC-9M battery blocs.
3. Constructed out of plastic coated steel (S235).
4. Rigidly floor mounted.



ABT Power Management, Inc. Battery Racks
II. Certified Subcomponents Table

	Width	Depth	Height	Max. Weight	Part No.	Notes	Test Status
PowerSafe Lead Acid CC Batteries¹							
3CC-5M	9 in	7 in	14.8 in	74.0 lbs	3CC-5M	2	UUT-2
3CC-9M	9 in	12.2 in	14.8 in	132.0 lbs	3CC-9M	3	UUT-1
Notes 1. PowerSafe CC Series batteries are provided by EnerSys 2. Installed in the 48Vdc System Rack only 3. Installed in the 125Vdc System Rack only							



Tested Unit #1 (UUT1) - ANCO Test Report # 3315.01 Dated June 27, 2011
 125 Vdc System with (20) 3CC-9M battery blocs
 Plastic Coated Steel (S235)
 23.2"W x 66.0"D x 47.75"H, 2848 lbs
 Floor mounted using (6) ½"-13 Grade 8 bolts.



UUT#1 is on the right

Building Code	Test Criteria	S _{DS} (g)	z/h	Horizontal		Vertical	
				A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-H} (g)
CBC 2022	ICC-ES AC 156	2.5	0	2.5	1.0	1.67	0.67
Natural Frequencies			Test Results				
F-B	S-S	V	The UUT maintained structural integrity and functionality after the AC156 test. UUT full of contents during testing.				
9.1	10.27	>33.3					

Internal Components:

Item #	Part #	Description
1	ABT125VOSHDP	125Vdc Battery Rack
2	3CC-9M	3CC-9M Battery Blocs

Tested Unit #2 (UUT2) - ANCO Test Report # 3315.01 Dated June 27, 2011
 48 Vdc System with (8) 3CC-5M battery blocs
 Plastic Coated Steel (S235)
 23.2"W x 17.8"D x 47.75"H, 737 lbs
 Floor mounted using (4) ½"-13 Grade 8 bolts.



UUT#2 is on the left

Building Code	Test Criteria	S _{Ds} (g)	z/h	Horizontal		Vertical	
				A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-H} (g)
CBC 2022	ICC-ES AC 156	2.5	0	2.5	1.0	1.67	0.67
Natural Frequencies			Test Results				
F-B	S-S	V	The UUT maintained structural integrity and functionality after the AC156 test. UUT full of contents during testing.				
14.3	10.9	>33.3					

Internal Components:

Item #	Part #	Description
1	ABT48VOSHDP	48 Vdc Battery Rack
2	3CC-5M	3CC-5M Battery Blocs