



**OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION**

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

OFFICE USE ONLY

APPLICATION #: OSP-0698

OSHPD Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: Schneider Electric

Manufacturer's Technical Representative: Hao Ding

Mailing Address: 330 Weakley Ln., Smyrna, TN 37167

Telephone: (561) 848-0396

Email: hao.ding@non.se.com

Product Information

Product Name: UPS and Batteries

Product Type: Batteries

Product Model Number: Galaxy Lithium Ion Battery Cabinet

General Description: Li-ion Battery Cabinet with 13, 16, or 17 modules.

Mounting Description: Rigid, Floor Mounted

Tested Seismic Enhancements: None

DATE: 07/27/2021

Applicant Information

Applicant Company Name: Structural Integrity Associates, Inc.

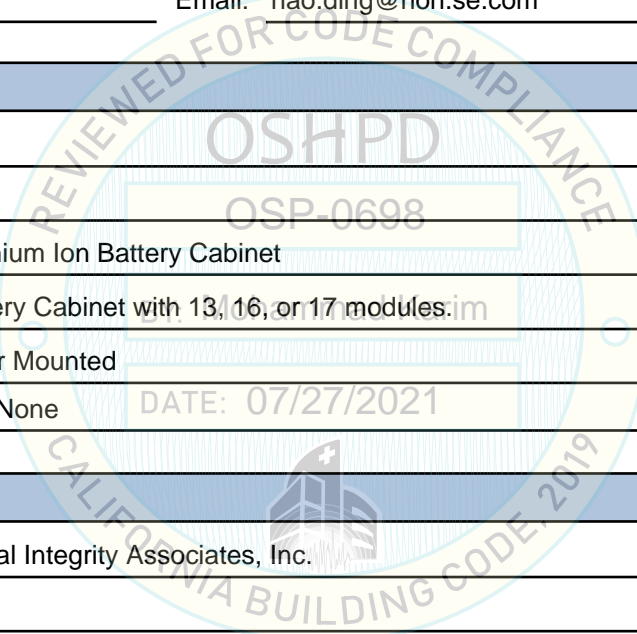
Contact Person: Galen Reid

Mailing Address: 233 SW Wilson Ave Suite 101, Bend, OR 97702

Telephone: (541) 604-7225

Email: greid@structint.com

Title: Manager, TRU Compliance





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

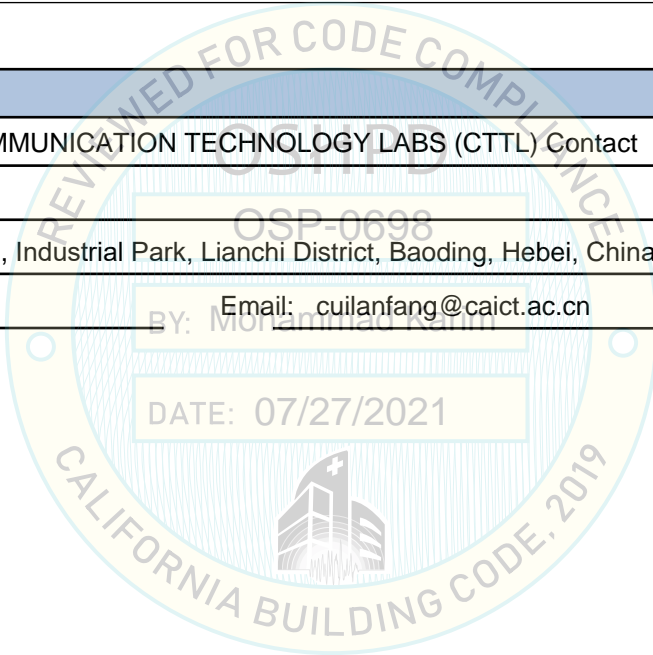
Company Name: STRUCTURAL INTEGRITY ASSOCIATES, INC.
Name: Andrew Coughlin California License Number: S6082
Mailing Address: 5215 Hellyer Ave, Suite 101, San Jose, CA 95138-1025
Telephone: (415) 635-8461 Email: acoughlin@structint.com

Certification Method

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

Testing Laboratory

Company Name: CHINA TELECOMMUNICATION TECHNOLOGY LABS (CTTL) Contact
Person: Lanfang Cui
Mailing Address: 299 Tengfei Road, Industrial Park, Lianchi District, Baoding, Hebei, China
Telephone: +83 0312-6798950 Email: cuilanfang@caict.ac.cn





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Seismic Parameters

Design Basis of Equipment or Components (F_p/W_p) = 1.44 (SDS = 2.0); 1.13 (SDS = 2.5)

SDS (Design spectral response acceleration at short period, g) = 2.0 (z/h = 1); 2.5 (z/h = 0)

a_p (Amplification factor) = 1.0

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) = 1 and 0

Natural frequencies (Hz) = See Attachment

Overall dimensions and weight = See Attachment

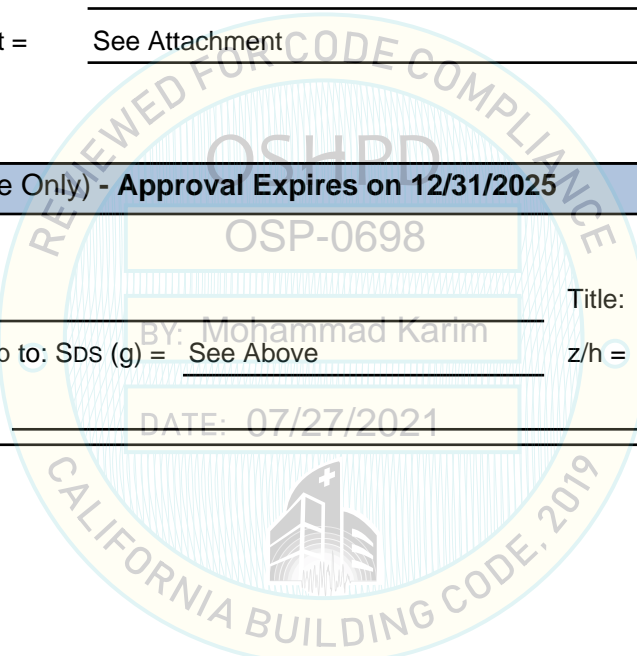
OSHPD Approval (For Office Use Only) - Approval Expires on 12/31/2025

Date: 7/27/2021

Name: Mohammad Karim Title: Supervisor, Health Facilities

Special Seismic Certification Valid Up to: SDS (g) = See Above z/h = See Above

Condition of Approval (if applicable): DATE: 07/27/2021



UNIT UNDER TEST (UUT) SUMMARY SHEET

2001335-CR-001-R0



Manufacturer: Schneider Electric	UUT 1
Model Line: Galaxy Lithium Ion Battery Cabinet	
Model Number: LIBSESMG17IEC Serial Number: N/A	

Product Construction Summary:
Carbon steel cabinet

Options/Subcomponent Summary:
17 battery modules (8 Type A, 9 Type B), LV438279 Molded Case Circuit Breaker, 0N-87889 IEC Switchgear Box, 0N-2192 SMPS Box IEC

UUT Properties						
Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
1069	23.2	25.6	77.6	14.8	11.9	>33.3

UUT Highest Passed Seismic Run Information									
Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)	
CBC 2019	ICC-ES AC156 (2018)	2.0	1.0	1.5	3.20	2.40	1.67	0.67	
		2.5	0.0						

Test Mounting Details:



Rear Seismic BKT



Front Seismic BKT

UUT was rigid base mounted to the shake table using (5) Grade 8.8 M12 Bolts in the front bracket (PN: 870-51164A), and (4) Grade 8.8 M12 Bolts in the rear bracket (PN: 870-51147).
Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.
Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET



2001335-CR-001-R0

Manufacturer: Schneider Electric	UUT 2
Model Line: Galaxy Lithium Ion Battery Cabinet	
Model Number: LIBSESMG13IEC Serial Number: N/A	

Product Construction Summary:
Carbon steel cabinet

Options/Subcomponent Summary:
13 battery modules (6 Type A, 7 Type B), LV438279 Molded Case Circuit Breaker, 0N-87889 IEC Switchgear Box, 0N-2192 SMPS Box IEC

UUT Properties						
Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
866	23.2	25.6	77.6	14.8	11.9	>33.3

UUT Highest Passed Seismic Run Information									
Building Code	Test Criteria	S _{DS} (g)	z/h	I _P	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)	
CBC 2019	ICC-ES AC156 (2018)	2.0	1.0	1.5	3.20	2.40	1.67	0.67	
		2.5	0.0						

Test Mounting Details:



Rear Seismic BKT



Front Seismic BKT

UUT was rigid base mounted to the shake table using (5) Grade 8.8 M12 Bolts in the front bracket (PN: 870-51164A), and (4) Grade 8.8 M12 Bolts in the rear bracket (PN: 870-51147).
Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.
Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET

2001335-CR-001-R0



Manufacturer: Schneider Electric	UUT 3
Model Line: Galaxy Lithium Ion Battery Cabinet	
Model Number: LIBSESMG17IEC + LIBSESMG17UL Serial Number: N/A	

Product Construction Summary:
Carbon steel cabinet

Options/Subcomponent Summary:
17 battery modules per section (8 Type A, 9 Type B), LV438279 Molded Case Circuit Breaker, LLF37060D33 Molded Case Circuit Breaker, 0N-87889 IEC Switchgear Box, 0N-2191 UL Switchgear Box, 0N-2192 SMPS Box IEC, 0N-1588 SMPS Box UL

UUT Properties						
Weight ¹ (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
2138	23.2	51.2	77.6	12.1	12.9	>33.3

UUT Highest Passed Seismic Run Information									
Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)	
CBC 2019	ICC-ES AC156 (2018)	2.0	1.0	1.5	3.20	2.40	1.67	0.67	
		2.5	0.0						

Test Mounting Details:



¹Combined weight of ganged cabinets.



Rear Seismic BKT



Front Seismic BKT

UUT was rigid base mounted to the shake table using (10) Grade 8.8 M12 Bolts in the front brackets (PN: 870-51164A), and (8) Grade 8.8 M12 Bolts in the rear brackets (PN: 870-51147)
Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.
Contents were included in testing per operating conditions.