



OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION

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

OFFICE USE ONLY

APPLICATION #: OSP – 0132 – 10

OSHPD Special Seismic Certification Preapproval (OSP)

Type: ☐ New ☒ Renewal

Manufacturer Information

Manufacturer: West-Com Nurse

Manufacturer's Technical Representative: Joseph Wherity

Mailing Address: 2200 Cordelia Rd., Fairfield, CA 94534

Telephone: (707) 428-5900 ext 222 Email: jwerity@westcall.com

Product Information

Product Name: Novus, Odyssey, and Endeavor

Product Type: Hospital Communication Systems

Product Model Number: Novus 36/24/0x, Novus 18/22/0x, WOC-8500, EV-32, 64, 96 w/SMC, Novus HRM, I-Dome HRM

(List all unique product identification numbers and/or part numbers)

General Description: Nurse Call Infrastructure and Head End Control Terminal equipment.

Mounting Description: Wall mounted

Applicant Information

Applicant Company Name: West-Com Nurse Call Systems Inc.

Contact Person: Joseph Wherity

Mailing Address: 2200 Cordelia RD., Fairfield, CA 94534

Telephone: (707) 428-5900 ext 222 Email: jwerity@westcall.com

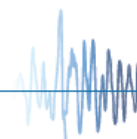
I hereby agree to reimburse the Office of Statewide Health Planning and Development review fees in accordance with the California Administrative Code, 2016.

Signature of Applicant:  Date: 8/8/17

Title: Director of Technical Services Company Name: West-Com Nurse Call Systems, Inc.

"Access to Safe, Quality Healthcare Environments that Meet California's Diverse and Dynamic Needs"

STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY
OSH-FD-759 (REV 12/16/15)



OSHPD

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OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT FACILITIES DEVELOPMENT DIVISION

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

Company Name: Buehler & Buehler, Structural Engineers, Inc.
Name: Scott Hooker, S.E. California License Number: S3937
Mailing Address: 600 Q Street, Suite 200, Sacramento, CA 95811
Telephone: (916) 443-0303 Email: shooker@bbse.com

Supports and Attachments Preapproval

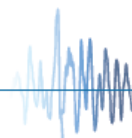
- ☐ Supports and attachments are preapproved under OPM-
(Separate application for OSHPD Preapproval of Manufacturer's Certification (OPM) of Supports and attachments is required)
- ☒ Supports and attachments are not preapproved

Certification Method

- ☒ Testing in accordance with: ☒ ICC-ES AC156
- ☐ Other (Please Specify): _____

Testing Laboratory

Company Name: ANCO Engineers
Contact Name: Conor Byrne
Mailing Address: 1965A 33rd Street, Boulder, CO 80304
Telephone: (303) 443-7580 Email: conor@ancoengineers.com





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FACILITIES DEVELOPMENT DIVISION

Seismic Parameters

Design in accordance with ASCE 7-10 Chapter 13: ☒ Yes ☐ No

Design Basis of Equipment or Components (F_p/W_p) = 1.15

S_{DS} (Design spectral response acceleration at short period, g) = 1.54

a_p (In-structure equipment or component amplification factor) = 2.5

R_p (Equipment or component response modification factor) = 6.0

Ω_0 (System overstrength factor) = 1.0

I_p (Importance factor) = 1.5

z/h (Height factor ratio) = 1.0

Equipment or Component Natural Frequencies (Hz) = See attached

Overall dimensions and weight (or range thereof) = See attached

Equipment or Components @ grade designed in accordance with ASCE 7-10 Chapter 15: ☐ Yes ☒ No

Design Basis of Equipment or Components (V/W) = _____

S_{DS} (Design spectral response acceleration at short period, g) = _____

S_{D1} (Design spectral response acceleration at 1 second period, g) = _____

R (Response modification coefficient) = _____

Ω_0 (System overstrength factor) = _____

C_d (Deflection amplification factor) = _____

I_p (Importance factor) = _____

Height to Center of Gravity above base = _____

Equipment or Component Natural Frequencies (Hz) = _____

Overall dimensions and weight (or range thereof) = _____

Tank(s) designed in accordance with ASME BPVC, 2015: ☐ Yes ☒ No

List of Attachments Supporting Special Seismic Certification

☒ Test Report(s) ☐ Drawings ☐ Calculations ☐ Manufacturer's Catalog

☒ Other(s) (Please Specify): Previous OSP and original Operability test witness documents

OSHPD Approval (For Office Use Only) – Approval Expires on December 31, 2022

Signature: _____

Date: September 20, 2017

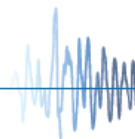
Print Name: Timothy J. Piland

Title: SSE

Special Seismic Certification Valid Up to : S_{DS} (g) = 1.54

z/h = 1

Condition of Approval (if applicable): _____





Special Seismic Certification
OSHPPD Preapproval
West-Com Nurse Call Systems Panels



Table 1. Certified Product List

<i>Model Number</i>	<i>Cabinet</i>	<i>Tested/ Interpolated</i>	<i>Length (in)</i>	<i>Width (in)</i>	<i>Height (in)</i>	<i>Operating Weight (lbs)</i>
NV HRM	1212	Extrpolated	6	12	12	15
I-Dome HRM	1212	UUT-1	6	12	12	15
NV PSM/1	1822	Interpolated	6	22	18	42.5
NV PSM/2	1822	Interpolated	6	22	18	42.5
NV PSM/3	1822	Interpolated	6	22	18	42.5
NV PSM/4	1822	Interpolated	6	22	18	42.5
NV PSM/5	1822	UUT-2	6	22	18	42.5
NOVUS/1822/00	1822	Interpolated	6	22	18	68
NOVUS/1822/01	1822	Interpolated	6	22	18	68
NOVUS/1822/02	1822	Interpolated	6	22	18	68
NOVUS/1822/03	1822	Interpolated	6	22	18	68
NOVUS/3624/00	3624	Interpolated	6	24	36	68
NOVUS/3624/01	3624	Interpolated	6	24	36	68
NOVUS/3624/02	3624	Interpolated	6	24	36	68
NOVUS/3624/03	3624	Interpolated	6	24	36	68
NOVUS/3624/04	3624	Interpolated	6	24	36	68
NOVUS/3624/05	3624	Interpolated	6	24	36	68
NOVUS/3624/06	3624	Interpolated	6	24	36	68
NOVUS/3624/07	3624	Interpolated	6	24	36	68
NOVUS/3624/08	3624	UUT-3	6	24	36	68
WOC-8500	3624	UUT-4	6	24	36	70.5
EV-32	1822	Interpolated	6	22	18	72.5
EV-64	1822	Interpolated	6	22	18	72.5
EV-32 W/SMC	1822	Interpolated	6	22	18	72.5
EV-64 W/SMC	1822	Interpolated	6	22	18	72.5
EV-96	3624	Interpolated	6	24	36	72.5
EV-128	3624	Interpolated	6	24	36	72.5
EV-96 W/SMC	3624	Interpolated	6	24	36	72.5
EV-128 W/SMC	3624	UUT-5	6	24	36	72.5



Special Seismic Certification
OSHPD Preapproval
West-Com Nurse Call Systems Panels



Table 2. Certified Sub-Component List

Control Box					
<i>Part Number</i>	<i>Weight (lb)</i>	<i>Size</i>	<i>Manufacturer</i>	<i>Material</i>	<i>Interpolated / Included With Test</i>
1212	10lbs	12" x 12" x 6"	Hoffman	16 Ga Cold Rolled Stainless Steel	UUT-1
1822	33lbs	18" x 22" x 6"	States Electric	16 Ga Cold Rolled Stainless Steel	UUT-2
3624	63lbs	36" x 24" x 6"	States Electric	14 Ga Cold Rolled Stainless Steel	UUT-3, UUT-4, UUT-5

Module					
<i>Part Number</i>	<i>Weight (lb)</i>	<i>Cabinet</i>	<i>Manufacturer</i>	<i>Material</i>	<i>Interpolated / Included With Test</i>
Jumper Wire	2lbs	1212	West-Com	FR4 Printed Circuit Board	UUT-1
30123024	1lbs	1822	West-Com	FR4 Printed Circuit Board	UUT-2
40118001	1lbs	1822 & 3624	West-Com	FR4 Printed Circuit Board	UUT-3
30123029	1lbs	1822 & 3624	West-Com	FR4 Printed Circuit Board	UUT-3
30118143	1lbs	1822 & 3624	West-Com	FR4 Printed Circuit Board	UUT-3
30118112	2lbs	1822 & 3624	West-Com	FR4 Printed Circuit Board	UUT-3
20121018	1lbs	1822 & 3624	West-Com	FR4 Printed Circuit Board	UUT-3
30118013	2lbs	3624	West-Com	FR4 Printed Circuit Board	UUT-4
30123030	2lbs	3624	West-Com	FR4 Printed Circuit Board	UUT-4
30118006	1lbs	3624	West-Com	FR4 Printed Circuit Board	UUT-4
30118107	1lbs	3624	West-Com	FR4 Printed Circuit Board	UUT-4
30118023	1lbs	3624	West-Com	FR4 Printed Circuit Board	UUT-4
30118008	1lbs	3624	West-Com	FR4 Printed Circuit Board	UUT-4
30118004	1lbs	3624	West-Com	FR4 Printed Circuit Board	UUT-4
30118003	1lbs	3624	West-Com	FR4 Printed Circuit Board	UUT-4
30118007	1lbs	3624	West-Com	FR4 Printed Circuit Board	UUT-4
30118085	1lbs	1822 & 3624	West-Com	FR4 Printed Circuit Board	UUT-5
30018144	1lbs	1822 & 3624	West-Com	FR4 Printed Circuit Board	UUT-5
30118144	1lbs	1822 & 3624	West-Com	FR4 Printed Circuit Board	UUT-5

UUT-1 Test Summary

Testing Lab:	ANCO Engineers
Testing Report:	3308.01
Testing Unit Num:	I-Dome HRM

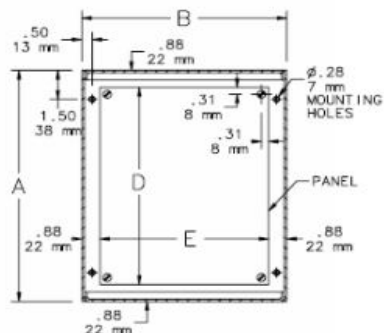
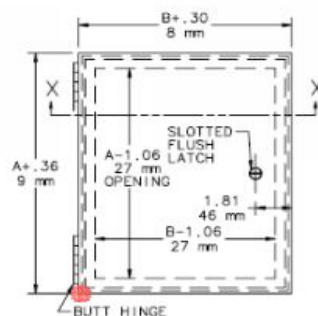
Model Number	Operating Weight (lbs)	Mounting	Excitation Direction	Frequency* (Hz)	Length (in)	Width (in)	Height (in)
I-Dome HRM	15	Wall Mounted	X Front - Back	NA	6.25	12.25	12.25
			Y Side - Side	NA			
			Z Vertical	NA			

* Frequencies are for units prior to ICC ES AC-156 testing.

Attachment Method	4 - #14 Sheet Metal Screws	Seismic Parameters							
		Building Code	Test Criteria	S _{DS} (g)	z/h	Horizontal		Vertical	
		CBC 2016	AC 156	1.54	1.0	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
						2.46	1.85	1.64	1.23



Figure 1.1: I-Dome HRM



NOTE: 1. Panels are 14 gauge steel.
2. Panel screws have #10-32 threads.

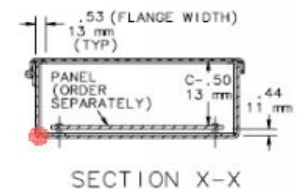


Figure 1.2: Location of Origin / Mounting Locations

Notes: The UUTs were full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-1 Summary Tested Sub-Component

Subcomponent	Part Number	Manufacturer
Module	Jumper Wire	West-Com
Control Box	1212	Hoffman

UUT-2 Test Summary

Testing Lab: ANCO Engineers
Testing Report: 3308.01
Testing Unit Num: NV PSM/5

Model Number	Operating Weight (lbs)	Mounting	Excitation Direction	Frequency* (Hz)	Length (in)	Width (in)	Height (in)
NV PSM/5	42.5	Wall Mounted	X	Front - Back	6.25	21.5	18
			Y	Side - Side			
			Z	Vertical			

* Frequencies are for units prior to ICC ES AC-156 testing.

Attachment Method	4 - #14 Sheet Metal Screws	Seismic Parameters							
		Building Code	Test Criteria	S _{DS} (g)	z/h	Horizontal		Vertical	
		CBC 2016	AC 156	1.54	1.0	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
						2.46	1.85	1.64	1.23



Figure 2.1: NV PSM/5

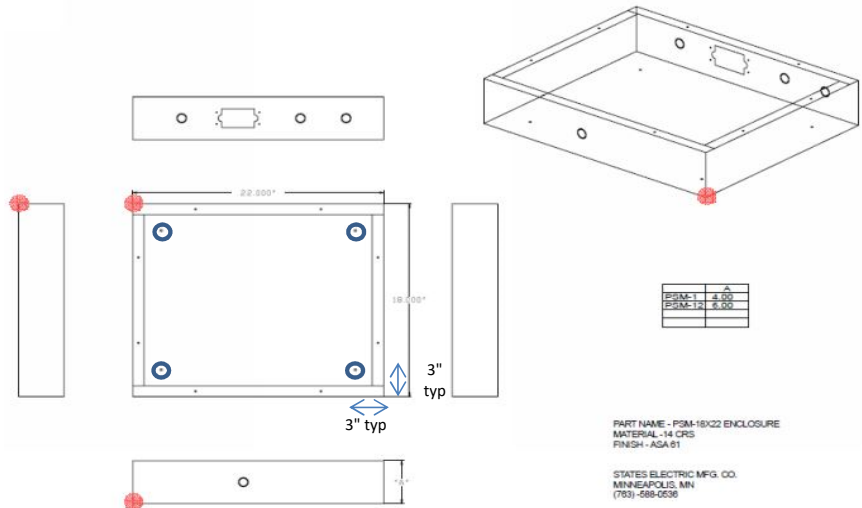


Figure 2.2: Location of Origin / Mounting Locations

Notes: The UUTs were full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-2 Summary Tested Sub-Component

Subcomponent	Part Number	Manufacturer
Module	30123024	West-Com
Control Box	1822	States Electric

UUT-3 Test Summary

Testing Lab: ANCO Engineers
 Testing Report: 3308.01
 Testing Unit Num: NOVUS/3624/08

Model Number	Operating Weight (lbs)	Mounting	Excitation Direction	Frequency* (Hz)	Length (in)	Width (in)	Height (in)
NOVUS/3624/08	68	Wall Mounted	X Front - Back	NA	6.5	24	36
			Y Side - Side	NA			
			Z Vertical	NA			

* Frequencies are for units prior to ICC ES AC-156 testing.

Attachment Method	4 - #14 Sheet Metal Screws	Seismic Parameters							
		Building Code	Test Criteria	S _{DS} (g)	z/h	Horizontal		Vertical	
		CBC 2016	AC 156	1.54	1.0	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
						2.46	1.85	1.64	1.23

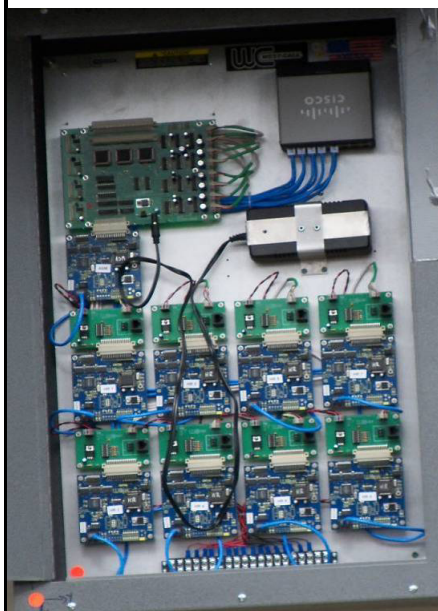


Figure 3.1: NOVUS/3624/08

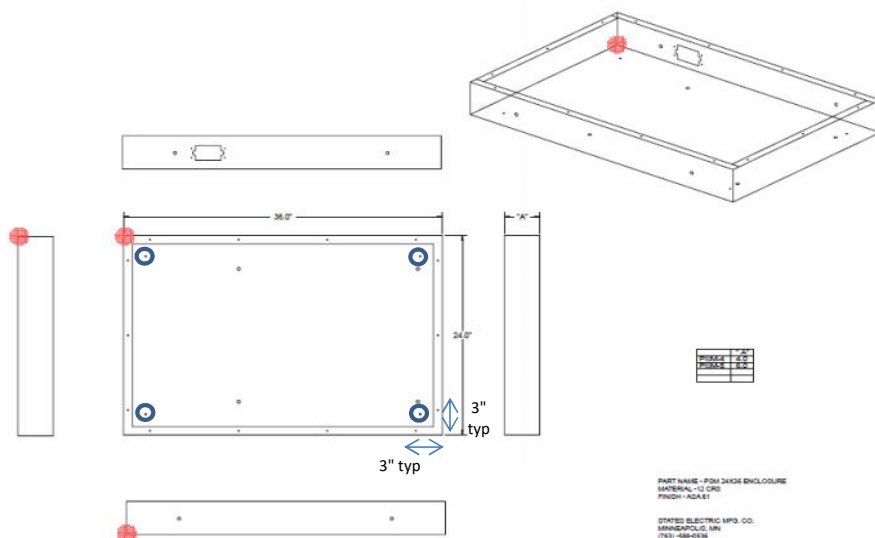


Figure 3.2: Location of Origin / Mounting Locations

Notes: The UUTs were full of contents during the test.
 Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-3 Summary Tested Sub-Component

Subcomponent	Part Number	Manufacturer
Module	40118001	West-Com
Module	30123029	West-Com
Module	30118143	West-Com
Module	30118112	West-Com
Module	20121018	West-Com
Control Box	3624	States Electric

UUT-4 Test Summary

Testing Lab: ANCO Engineers
Testing Report: 3308.01
Testing Unit Num: WOC-8500

Model Number	Operating Weight (lbs)	Mounting	Excitation Direction	Frequency* (Hz)	Length (in)	Width (in)	Height (in)
WOC-8500	70.5	Wall Mounted	X Front - Back	NA	6.5	24	36
			Y Side - Side	NA			
			Z Vertical	NA			

* Frequencies are for units prior to ICC ES AC-156 testing.

Attachment Method	4 - #14 Sheet Metal Screws	Seismic Parameters							
		Building Code	Test Criteria	S _{DS} (g)	z/h	Horizontal		Vertical	
		CBC 2016	AC 156	1.54	1.0	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
						2.46	1.85	1.64	1.23



Figure 4.1: WOC-8500

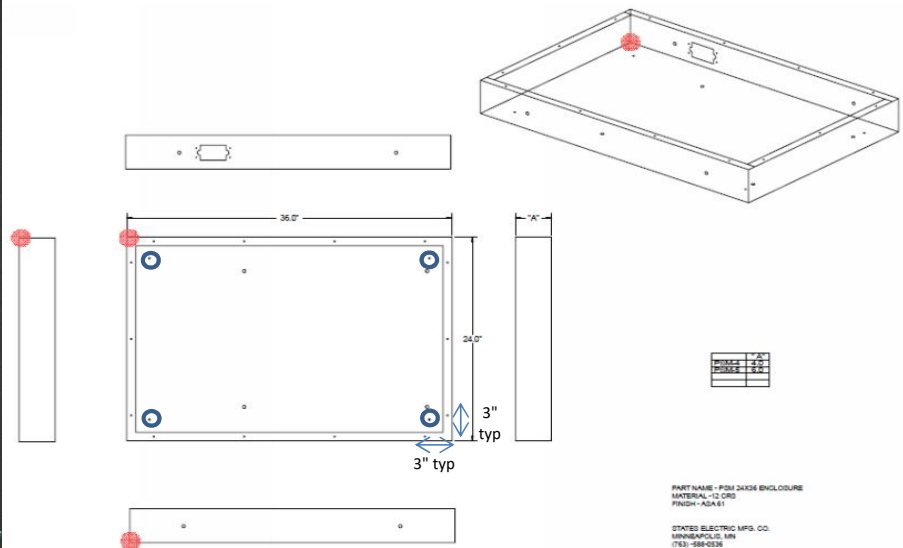


Figure 4.2: Location of Origin / Mounting Locations

Notes: The UUTs were full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-4 Summary Tested Sub-Component

Subcomponent	Part Number	Manufacturer
Module	30118013	West-Com
Module	30123030	West-Com
Module	30118006	West-Com
Module	30118107	West-Com
Module	30118023	West-Com
Module	30118008	West-Com
Module	30118004	West-Com
Module	30118003	West-Com
Module	30118007	West-Com
Control Box	3624	States Electric

UUT-5 Test Summary

Testing Lab: ANCO Engineers
Testing Report: 3308.01
Testing Unit Num: EV-128W/SMC

Model Number	Operating Weight (lbs)	Mounting	Excitation Direction	Frequency* (Hz)	Length (in)	Width (in)	Height (in)
EV-128W/SMC	72.5	Wall Mounted	X Front - Back	NA	6.5	24	36
			Y Side - Side	NA			
			Z Vertical	NA			

* Frequencies are for units prior to ICC ES AC-156 testing.

Attachment Method	4 - #14 Sheet Metal Screws	Seismic Parameters							
		Building Code	Test Criteria	S _{DS} (g)	z/h	Horizontal		Vertical	
		CBC 2016	AC 156	1.54	1.0	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
						2.46	1.85	1.64	1.23

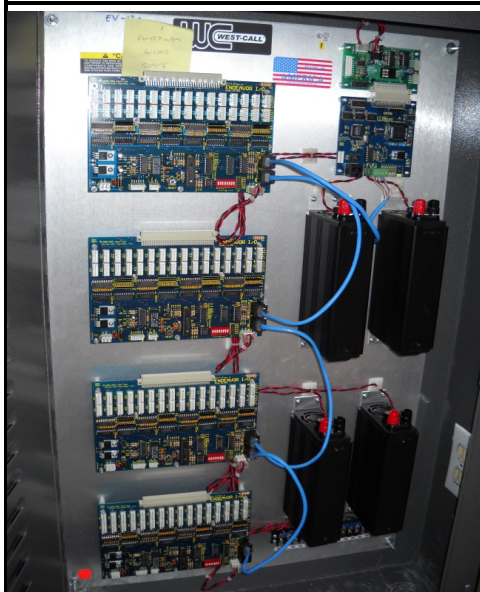


Figure 5.1: EV-128W/SMC

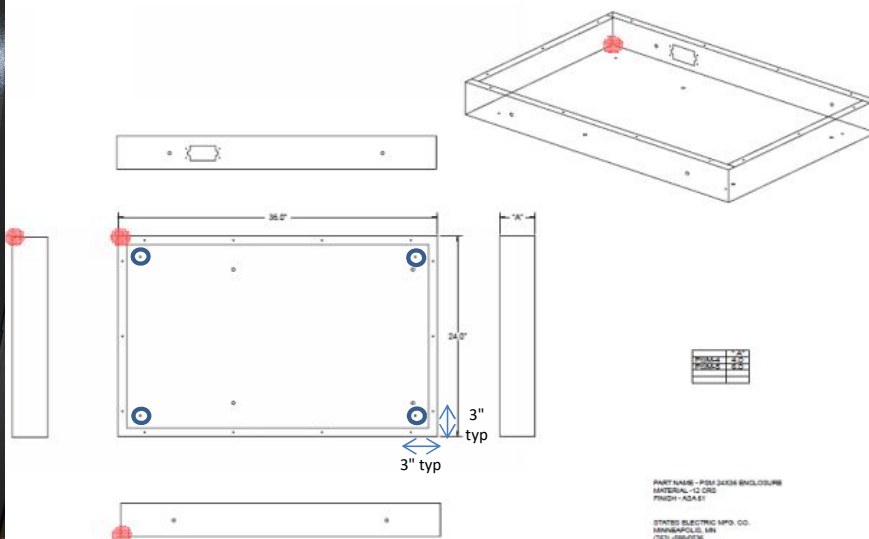


Figure 5.2: Location of Origin / Mounting Locations

Notes: The UUTs were full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-5 Summary Tested Sub-Component

Subcomponent	Part Number	Manufacturer
Module	30118085	West-Com
Module	30018144	West-Com
Module	30118144	West-Com
Control Box	3624	States Electric