APPLICATION FOR HCAI SPECIAL SEISMIC CERTIFICATION PREAPPROVAL (OSP)

OFFICE USE ONLY

APPLICATION #: OSP-0089

HCAI Special Seismic Certification Preapproval (OSP)

Type: ☐ New ☒ Renewal

Manufacturer Information

Manufacturer: Siemens Energy Management

Manufacturer's Technical Representative: Michael White

Mailing Address: 501 Fountain Parkway, Grand Prairie, TX 75050

Telephone: (817) 652-6526 Email: michaelwhite@siemens.com

Product Information

Product Name: SWBD & IPS SWBD Switchboards

Product Model Number(s): SWBD & IPS SWBD Switchboards

Product Category: Switchgear/Switchboards

Product Sub-Category: Switchgear - Low Voltage

General Description: Integrated power system switchboards.

Mounting Description: Base Mounted Rigid

Tested Seismic Enhancements: Seismic enhancements made to the test units and/or modifications required to address anomalies during the tests shall be incorporated into the production units.

Applicant Information

Applicant Company Name: WE Gundy & Associates, Inc

Contact Person: Travis Soppe

Mailing Address: PO Box 9121, Boise, ID 83707

Telephone: (208) 342-5989 Email: tsoppe@wegai.com

Title: President

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

Company Name: W.E. GUNDY & ASOCIATES INC.

Name: Travis Soppe California License Number: S6115

Mailing Address: P.O. Box 9121, Boise, ID 83707

Telephone: (208) 342-5989 Email: tsoppe@wegai.com

Certification Method

☐ GR-63-Core ☒ ICC-ES AC156 ☐ IEEE 344 ☐ IEEE 693 ☐ NEBS 3

☐ Other (Please Specify):

Testing Laboratory

Company Name: ENVIRONMENTAL TESTING LABORATORIES, INC. (ETL)

Contact Person: Jeremy Lange

Mailing Address: 11034 Indian Trail, Dallas TX 75229-3513

Telephone: (972) 247-9657 Email: jeremy@etldallas.com

Seismic Parameters

Certified Response Spectral Acceleration Factors:(F_p/W_p)

Horizontal	(A Flx-H), g=	2.72	(A Rig-H), g=	1.83
Vertical	(A Flx-V), g=	1.68	(A Rig-V), g=	0.68

S_{DS} (Design spectral response acceleration at short period, g) = 2.5 @ z/h = 0; 1.7 @ z/h = 1

Hf (Force amplification height factor) = 1 @ z/h = 0; 3.5 @ z/h = 1

Ru (Structure ductility redution factor) = 1 @ z/h = 0; 1.3 @ z/h = 1

I_p (Importance factor) = 1.5

z/h (Height ratio factor) = 0 and 1

HCAI Approval (For Office Use Only) - **Approval Expires on 04/20/2032**

Date: 4/20/2026

Name: Mohammad Karim Title: Supervisor, Health Facilities

Condition of Approval (if applicable):

TABLE 1	SIEMENS SWITCHBOARD & IPS SWITCHBOARD CERTIFIED PRODUCT LINE MATRIX							WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING
ID Number	Designation	NEMA	Width (in.)	Depth (in.)	Height (in.)	Max Weight (lbs)	Max CG (in)	Representative UUT[1]
Service and Distribution Sections - Standard Frame								
SWBD-SB3-38x28	**SB3**	**1/1A/2**	**38**	**28**	**90**	**710**	**45**	**UUT_w-1**
SWBD-SBx-28x28	SB1/2/3	1/1A/2/3R	28	28	90 - 120	820	48	interpolated
SWBD-SBx-32x28	SB1/2/3	1/1A/2/3R	32	28	90 - 120	820	48	interpolated
SWBD-SBx-32x38	SB1/2/3	1/1A/2/3R	32	38	90 - 120	820	48	interpolated
SWBD-SBx-38x20	SB1/2/3	1/1A/2/3R	38	20	90 - 120	820	45	interpolated
SWBD-SB3-38x20	**SB3**	**3R**	**38**	**20**	**90**	**820**	**45**	**UUT_w-4**
SWBD-SBx-38x38	SB1/2/3	1/1A/2/3R	38	38	90 - 120	820	48	interpolated
SWBD-SBx-46x38	SB1/2/3	1/1A/2/3R	46	38	90 - 120	820	48	interpolated
SWBD-SBx-58x38	SB1/2/3	1/1A/2/3R	58	38	90 - 120	820	48	interpolated
SWBD-SBx-58x38	SB1/2/3	1/1A/2/3R	58	38	90 - 120	820	48	interpolated
Service and Distribution Sections - Heavy Duty Frame								
SWBD-SB3-HD-25x20	**SB3**	**1/1A/2**	**25**	**20**	**90**	**440**	**48**	**UUT_z-2**
SWBD-SB2-HD-38x20	**SB2**	**1/1A/2**	**38**	**20**	**90**	**743**	**45**	**UUT_w-3**
SWBD-SBx-HD-30x25	SB1/2/3	1/1A/2/3R	30	25	90 - 120	800	45	interpolated
SWBD-SBx-HD-32x20	SB1/2/3	1/1A/2/3R	32	20	90 - 120	900	44	interpolated
SWBD-SBx-HD-38x20	SB1/2/3	1/1A/2/3R	38	20	90 - 120	900	44	interpolated
SWBD-SBx-HD-52x20	SB1/2/3	1/1A/2/3R	52	20	90 - 120	900	45	interpolated
SWBD-SB3-HD-38x28	**SB3**	**1/1A/2**	**38**	**28**	**90**	**955**	**54**	**UUT_z-1**
SWBD-SBx-HD-25x28	SB1/2/3	1/1A/2/3R	25	28	90 - 120	1000	48	interpolated
SWBD-SB3-HD-52x38	**SB3**	**1/1A/2**	**52**	**38**	**90**	**1027**	**47**	**UUT_w-12**
SWBD-SB3-HD-52x38	**SB3**	**1/1A/2**	**52**	**38**	**90**	**1089**	**47**	**UUT_w-11**
SWBD-SBx-HD-38x20	SB1/2/3	1/1A/2/3R	38	20	90 - 120	1100	45	interpolated
SWBD-SBx-HD-46x20	SB1/2/3	1/1A/2/3R	46	20	90 - 120	1200	44	interpolated
SWBD-SBx-HD-25x38	SB1/2/3	1/1A/2	25	38	90 - 120	1200	48	interpolated
SWBD-SB3-HD-38x58	**SB3**	**1/1A/2**	**38**	**58**	**90**	**1240**	**44**	**UUT_z-3**
SWBD-SBx-HD-25x48	SB1/2/3	1/1A/2/3R	25	48	90 - 120	1300	48	interpolated

General Notes:

The switchboard product is constructed using the same structural design configurations; one with standard wall thicknesses and one with a heavy duty wall thickness.

[1] The units were tested at different times and the subscripts on the UUT's reference the following lab test reports:

v - 17715 / w - 13977 / x - 14155 / y - 14997 / z - 16873

TABLE 1	SIEMENS SWITCHBOARD & IPS SWITCHBOARD CERTIFIED PRODUCT LINE MATRIX							WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING
ID Number	Designation	NEMA	Width (in.)	Depth (in.)	Height (in.)	Max Weight (lbs)	Max CG (in)	Representative UUT[1]
Service and Distribution Sections - Heavy Duty Frame - cont'd								
SWBD-SB3-HD-25x20	**SB3**	**1/1A/2**	**25**	**38**	**90**	**1312**	**48**	**UUT_v-1**
SWBD-SBx-HD-32x28	SB1/2/3	1/1A/2/3R	32	28	90 - 120	1400	44	interpolated
SWBD-SB3-HD-52x38	**SB3**	**3R**	**52**	**38**	**90**	**1408**	**47**	**UUT_w-10**
SWBD-SB3-HD-25x20	**SB3**	**1/1A/2**	**25**	**38**	**120**	**1442**	**49**	**UUT_v-1A**
SWBD-SBx-HD-38x48	SB1/2/3	1/1A/2/3R	38	48	90 - 120	1600	54	interpolated
SWBD-SBx-HD-40x28	SB1/2/3	1/1A/2/3R	40	28	90 - 120	2000	44	interpolated
SWBD-SBx-HD-38x28	SB1/2/3	1/1A/2/3R	38	28	90 - 120	2000	44	interpolated
SWBD-SBx-HD-46x28	SB1/2/3	1/1A/2/3R	46	28	90 - 120	2000	45	interpolated
SWBD-SBx-HD-32x38	SB1/2/3	1/1A/2/3R	32	38	90 - 120	2200	44	interpolated
SWBD-SBx-HD-58x28	SB1/2/3	1/1A/2/3R	58	28	90 - 120	2200	45	interpolated
SWBD-SB3-HD-46x38	**SB3**	**1/1A/2**	**46**	**38**	**90**	**2430**	**45**	**UUT_x-1**
SWBD-SB3-HD-46x38	**SB3**	**1/1A/2**	**46**	**38**	**90**	**2490**	**43**	**UUT_y-15**
SWBD-SBx-HD-38x38	SB1/2/3	1/1A/2/3R	38	38	90 - 120	2500	45	interpolated
SWBD-SBx-HD-40x38	SB1/2/3	1/1A/2/3R	40	38	90 - 120	2500	45	interpolated
SWBD-SBx-HD-38x48	SB1/2/3	1/1A/2/3R	38	48	90 - 120	2600	45	interpolated
SWBD-SBx-HD-46x38	SB1/2/3	1/1A/2/3R	46	38	90 - 120	2850	45	interpolated
SWBD-SBx-HD-40x48	SB1/2/3	1/1A/2/3R	40	48	90 - 120	2900	45	interpolated
SWBD-SBx-HD-46x48	SB1/2/3	1/1A/2/3R	46	48	90 - 120	2900	45	interpolated
SWBD-SBx-HD-52x38	SB1/2/3	1/1A/2/3R	52	38	90 - 120	2990	44	interpolated
SWBD-SBx-HD-58x38	SB1/2/3	1/1A/2/3R	58	38	90 - 120	2990	45	interpolated
SWBD-SBx-HD-38x58	SB1/2/3	1/1A/2/3R	38	58	90 - 120	2990	45	interpolated
SWBD-SBx-HD-46x58	SB1/2/3	1/1A/2/3R	46	58	90 - 120	2990	45	interpolated
SWBD-SBx-HD-52x58	SB1/2/3	1/1A/2/3R	52	58	90 - 120	2990	45	interpolated
SWBD-SBx-HD-58x58	SB1/2/3	1/1A/2/3R	58	58	90 - 120	2990	45	interpolated
SWBD-SBx-HD-46x38	**SB3**	**1/1A/2**	**46**	**38**	**90**	**2992**	**44**	**UUT_v-2**

General Notes:

The switchboard product is constructed using the same structural design configurations; one with standard wall thicknesses and one with a heavy duty wall thickness.

[1] The units were tested at different times and the subscripts on the UUT's reference the following lab test reports:

v - 17715 / w - 13977 / x - 14155 / y - 14997 / z - 16873

TABLE 1	SIEMENS SWITCHBOARD & IPS SWITCHBOARD CERTIFIED PRODUCT LINE MATRIX							WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING
ID Number	Designation	NEMA	Width (in.)	Depth (in.)	Height (in.)	Max Weight (lbs)	Max CG (in)	Representative UUT[1]
IPS Sections - Standard Frame								
SWBD-IPS-20x20	IPS	1/1A/2/3R	20	20	90	450	42	extrapolated
SWBD-IPS-25x20	**IPS**	**1/1A/2**	**25**	**20**	**90**	**511**	**43**	**UUT_w-9**
SWBD-IPS-20x28	IPS	1/1A/2/3R	20	28	90	530	43	interpolated
SWBD-IPS-20x32	IPS	1/1A/2/3R	20	32	90	640	42	interpolated
SWBD-IPS-32x20	IPS	1/1A/2/3R	32	20	90	730	40	interpolated
SWBD-IPS-25x28	IPS	1/1A/2/3R	25	28	90	790	44	interpolated
SWBD-IPS-20x38	IPS	1/1A/2/3R	20	38	90	800	41	interpolated
SWBD-IPS-38x20	IPS	1/1A/2/3R	38	20	90	800	41	interpolated
SWBD-IPS-28x32	IPS	1/1A/2/3R	28	32	90	1110	44	interpolated
SWBD-IPS-32x28	IPS	1/1A/2/3R	32	28	90	1110	44	interpolated
SWBD-IPS-38x38	**IPS**	**1/1A/2**	**38**	**38**	**90**	**1200**	**45**	**UUT_y-14**
SWBD-IPS-32x38	IPS	1/1A/2/3R	32	38	90	1240	49	interpolated
SWBD-IPS-38x32	IPS	1/1A/2/3R	38	32	90	1240	49	interpolated
SWBD-IPS-32x32	IPS	1/1A/2/3R	32	32	90	1390	44	interpolated
SWBD-IPS-38x38	IPS	1/1A/2/3R	38	38	90	1440	52	interpolated
SWBD-IPS-38x28	**IPS**	**1/1A/2**	**38**	**28**	**90**	**1435**	**43**	**UUT_w-6**
IPS Sections - Heavy Duty Frame								
SWBD-IPS-HD-20x20	IPS	1/1A/2/3R	20	20	90	410	43	extrapolated
SWBD-IPS-HD-25x20	IPS	1/1A/2/3R	25	20	90	460	44	extrapolated
SWBD-IPS-HD-20x28	IPS	1/1A/2/3R	20	28	90	490	44	extrapolated
SWBD-IPS-HD-32x20	IPS	1/1A/2/3R	32	20	90	570	44	interpolated
SWBD-IPS-HD-25x28	IPS	1/1A/2/3R	25	28	90	730	44	interpolated
SWBD-IPS-HD-20x38	IPS	1/1A/2/3R	20	38	90	750	42	interpolated

General Notes:

The switchboard product is constructed using the same structural design configurations; one with standard wall thicknesses and one with a heavy duty wall thickness.

[1] The units were tested at different times and the subscripts on the UUT's reference the following lab test reports:

v - 17715 / w - 13977 / x - 14155 / y - 14997 / z - 16873

TABLE 1	SIEMENS SWITCHBOARD & IPS SWITCHBOARD CERTIFIED PRODUCT LINE MATRIX							WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING
ID Number	Designation	NEMA	Width (in.)	Depth (in.)	Height (in.)	Max Weight (lbs)	Max CG (in)	Representative UUT[1]
IPS Sections - Heavy Duty Frame - cont'd								
SWBD-IPS-HD-38x20	IPS	1/1A/2/3R	38	20	90	750	42	interpolated
SWBD-IPS-HD-46x20	IPS	1/1A/2/3R	46	20	90	1000	40	interpolated
SWBD-IPS-HD-48x20	IPS	1/1A/2/3R	48	20	90	1060	40	interpolated
SWBD-IPS-HD-25x38	IPS	1/1A/2/3R	25	38	90	1080	43	interpolated
SWBD-IPS-HD-32x28	IPS	1/1A/2/3R	32	28	90	1080	43	interpolated
SWBD-IPS-HD-38x28	IPS	1/1A/2/3R	38	28	90	1300	43	interpolated
SWBD-IPS-HD-46x28	IPS	1/1A/2/3R	46	28	90	1610	43	interpolated
SWBD-IPS-HD-32x38	IPS	1/1A/2/3R	32	38	90	1640	43	interpolated
SWBD-IPS-HD-48x28	IPS	1/1A/2/3R	48	28	90	1680	43	interpolated
SWBD-IPS-HD-38x38	IPS	1/1A/2/3R	38	38	90	2220	45	interpolated
SWBD-IPS-HD-46x38	IPS	1/1A/2/3R	46	38	90	2630	46	interpolated
SWBD-IPS-HD-48x38	IPS	1/1A/2/3R	48	38	90	2730	46	interpolated
SWBD-IPS-HD-46x38	**IPS**	**1/1A/2**	**46**	**38**	**90**	**2877**	**45**	**UUT_y-16**

General Notes:

The switchboard product is constructed using the same structural design configurations; one with standard wall thicknesses and one with a heavy duty wall thickness.

[1] The units were tested at different times and the subscripts on the UUT's reference the following lab test reports:

v - 17715 / w - 13977 / x - 14155 / y - 14997 / z - 16873

TABLE 2	SIEMENS SWITCHBOARD & IPS SWITCHBOARD CERTIFIED CERTIFIED SUBCOMPONENT MATRIX						WEGAI W.E. Gundy & Associates, Inc. Structural & Earthquake Engineering
Subcomponent ID	Manufacturer	Description	Width (in)	Depth (in)	Height (in)	Weight (lbs)	Representative UUT[1]
Surge Protection Devices							
TPS3A0610 - 50	Siemens	120/240V, 1 Ph 3 W, 100 kA - 500kA	11.5	4.5	10.8	7 - 10	interpolated
TPS3B0610 - 50	Siemens	120/240V, 3 Ph, 4W, 100 kA - 500kA	11.5	4.5	10.8	7 - 10	interpolated
TPS3C0610 -50	Siemens	120/208V, 3 Ph, 4W, 100 kA - 500kA	11.5	4.5	10.8	7	UUT_w-1
TPS3D0610 - 50	Siemens	240V, 3Ph, 100 kA - 500kA	11.5	4.5	10.8	7 - 10	interpolated
TPS3E0610 - 50	Siemens	277/480V, 3 Ph, 4W, 100 kA - 500kA	11.5	4.5	10.8	10	UUT_x-1
TPS3F0610 - 50	Siemens	480V, 3Ph, 100 kA - 500kA	11.5	4.5	10.8	7 - 10	interpolated
TPS3K0610 - 50	Siemens	380/220V, 3 Ph, 4W, 100 kA - 500kA	11.5	4.5	10.8	7 - 10	interpolated
TPS3S0610 - 50	Siemens	400/230V, 3 Ph, 4W, 100 kA - 500kA	11.5	4.5	10.8	7 - 10	interpolated
TPS3G0610 - 50	Siemens	600V, 3 Ph, 100 kA - 500kA	11.5	4.5	10.8	7 - 10	interpolated
TPS4A0610 - X2	Siemens	120/240V, 1 Ph 3 W, 100 kA - 500kA	11.5	4.5	10.8	6.8 - 9.8	Interpolation
TPS4B0610 - X0	Siemens	120/240V, 3 Ph, 4W, 100 kA - 500kA	11.5	4.5	10.8	6.8 - 9.8	Interpolation
TPS4C0610 -X1	Siemens	120/208V, 3 Ph, 4W, 100 kA - 500kA	11.5	4.5	10.8	6.8 - 9.8	Interpolation
TPS4D0610 - X2	Siemens	240V, 3Ph, 100 kA - 500kA	11.5	4.5	10.8	6.8 - 9.8	Interpolation
TPS4E0610 - X0	Siemens	277/480V, 3 Ph, 4W, 100 kA - 500kA	11.5	4.5	10.8	6.8 - 9.8	UUT_z-1
TPS4F0610 - X1	Siemens	480V, 3Ph, 100 kA - 500kA	11.5	4.5	10.8	6.8 - 9.8	Interpolation
TPS4K0610 - X2	Siemens	380/220V, 3 Ph, 4W, 100 kA - 500kA	11.5	4.5	10.8	6.8 - 9.8	Interpolation
TPS4S0610 - X0	Siemens	400/230V, 3 Ph, 4W, 100 kA - 500kA	11.5	4.5	10.8	6.8 - 9.8	Interpolation
TPS4G0610 - X1	Siemens	600V, 3 Ph, 100 kA - 500kA	11.5	4.5	10.8	6.8 - 9.8	Interpolation
Current Transformers							
Model 19	ITI	50-400Hz, 0.6kV, BIL 10kV	6.0	2.9	6.0	3	UUT_w-1
Model 125	ITI	50-400Hz, 0.6kV, BIL 10kV	8.5	8.5	4.1	3	UUT_y-16
Model 126	ITI	50-400Hz, 0.6kV, BIL 10kV	10.5	4.35	10.5	5.5	UUT_z-1

General Notes:

[1] The units were tested at different times and the subscripts on the UUT's reference the following lab test reports:
v - 17715 / w - 13977 / x - 14155 / y - 14997 / z - 16873

TABLE 2	SIEMENS SWITCHBOARD & IPS SWITCHBOARD CERTIFIED CERTIFIED SUBCOMPONENT MATRIX						WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING
Subcomponent ID	Manufacturer	Description	Width (in)	Depth (in)	Height (in)	Weight (lbs)	Representative UUT[1]
General Purpose Transformers Standard Units							
3F3Y015CD16CCIPS	Siemens	CU, 15kVA, 480V In, 208Y/120V Out	19.5	19.5	27.5	250	UUT_w-9
3F3Y015CCIPS	Siemens	AL, 15kVA, 480V In, 208Y/120V Out	19.5	19.5	27.5	250	interpolated
3F3Y030CD16CCIPS	Siemens	CU, 30kVA, 480V In, 208Y/120V Out	24.0	24.0	32.0	375	interpolated
3F3Y045CD16CCIPS	Siemens	CU, 45kVA, 480V In, 208Y/120V Out	25.0	24.0	32.0	500	interpolated
3F3Y075CD16CCIPS	Siemens	CU, 75kVA, 480V In, 208Y/120V Out	32.0	26.0	38.0	750	interpolated
3F3Y112CD16CCIPS	Siemens	CU, 112kVA, 480V In, 208Y/120V Out	32.0	26.0	40.0	975	interpolated
3F3Y150CD16CCIPS	Siemens	CU, 150kVA, 480V In, 208Y/120V Out	35.0	32.0	46.0	1250	UUT_w-6
3F3Y300CD16CCIPS	Siemens	CU, 300kVA, 480V In, 208Y/120V Out	39.5	39.5	57.0	2604	UUT_y-16
Control Power Transformers							
MT0750M	Siemens	750VA,240/480-120/240	5.4	5.3	7.7	28	UUT_y-14
MT0500A	Siemens	500VA,240/480-120/240	5.25	6.4	5.39	19.2	Interpolation
MT0300A	Siemens	300VA,240/480-120/240	4.5	4.64	4.04	11.3	UUT_z-2
High Resistance Ground (HRG)							
SPL48YK0000-NQ	Post Glover	480V WYE w/o Ethernet	25.0	40.0	13.0	65	UUT_y-14
Uniteruptable Power Supply							
CPE3000RC	Minuteman	3000VA UPS with Relay Card	7.5	17.8	14.4	79	UUT_y-16
Voltage Transformers							
Model 468	Phasetronics (TTL)	60Hz, 600V, 10kV Bill, 75VA	3.63	4.06	2.81	4	UUT_z-1
Model 460	Phasetronics (TTL)	60Hz, 600V, 10kV Bill, 150VA	4.12	3.46	4.75	7.75	Interpolation
Model 456	Phasetronics (TTL)	60Hz, 600V, 10kV Bill, 500VA	6.0	6.1	6.5	19	UUT_y-15

General Notes:

[1] The units were tested at different times and the subscripts on the UUT's reference the following lab test reports:
v - 17715 / w - 13977 / x - 14155 / y - 14997 / z - 16873

TABLE 2	SIEMENS SWITCHBOARD & IPS SWITCHBOARD CERTIFIED CERTIFIED SUBCOMPONENT MATRIX						WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING
Subcomponent ID	Manufacturer	Description	Width (in)	Depth (in)	Height (in)	Weight (lbs)	Representative UUT[1]
Power Meters							
9510	Siemens	320 channels via 20 data recorders	7.6	6.3	7.6	7	UUT_w-1
9610	Siemens	640 channels via 40 data recorders	7.6	6.3	7.6	7	UUT_w-1
9810	Siemens	IEC 62053-22 class 0.1S and ANSI C12.20 0	6.3	5.33	6.3	7.1	UUT_z-2
9410	Siemens	IEC 62053-22 class 0.2S and ANSI C12.20 0	3.78	3.57	3.78	2.0	UUT_z-1
PAC3200	Siemens	96x96x51mm	3.8	2.0	3.8	1	UUT_x-1
PAC4200	Siemens	96x96x77mm, opt. digit I/O (exp. Module)	3.8	2.0	3.8	1	UUT_x-1
VACU Break & HCP Switches							
V7A2211	Siemens	240VAC, 30-30A, 2P, 1.5HP	12.0	4.5	2.5	9	UUT_w-4
V2E2203	Siemens	240VAC, 100A, 2P, 7.5HP	12.7	6.8	7.5	14	interpolated
V2E3203	Siemens	240VAC, 100A, 3P, 15HP	12.7	6.8	7.5	14	interpolated
V7E3203	Siemens	240VAC, 100A, 3P, 15HP	17.2	6.8	7.5	14	interpolated
V7E2611	Siemens	600VAC, 30-30A, 2P, 3HP	17.2	6.8	7.5	14	interpolated
V7E3611	Siemens	600VAC, 30-30A, 3P, 7.5HP	17.2	6.8	7.5	14	interpolated
V7E3611R	Siemens	600VAC, 30-30A, 3P, 7.5HP, R-fuse	17.2	6.8	7.5	14	interpolated
V7E2612	Siemens	600VAC, 30-60A, 2P, 3-5HP	17.7	6.8	10.0	14	interpolated
V7E3612	Siemens	600VAC, 30-60A, 3P, 7.5-15HP	17.7	6.8	10.0	14	interpolated
V7E2622	Siemens	600VAC, 60-60A, 3P, 10HP	17.2	6.8	7.5	14	interpolated
V7E3622	Siemens	600VAC, 60-60A, 3P, 15HP	17.2	6.8	7.5	14	interpolated
V7E3622R	Siemens	600VAC, 60-60A, 3P, 15HP, R-fuse	17.7	6.8	10.0	14	interpolated
V7E2603	Siemens	600VAC, 100A, 2P, 15HP	17.2	6.8	7.5	14	interpolated
V7E3603	Siemens	600VAC, 100A, 3P, 30HP	17.2	6.8	7.5	14	interpolated
V7E2223	Siemens	240VAC, 60-100A, 2P, 3-7.5HP	17.2	6.8	7.5	18	interpolated
V7E3223	Siemens	240VAC, 60-100A, 3P, 7.5-15HP	17.2	6.8	7.5	18	interpolated

General Notes:

[1] The units were tested at different times and the subscripts on the UUT's reference the following lab test reports:
v - 17715 / w - 13977 / x - 14155 / y - 14997 / z - 16873

TABLE 2	SIEMENS SWITCHBOARD & IPS SWITCHBOARD CERTIFIED CERTIFIED SUBCOMPONENT MATRIX						WEGAI W.E. Gundy & Associates, Inc. Structural & Earthquake Engineering
Subcomponent ID	Manufacturer	Description	Width (in)	Depth (in)	Height (in)	Weight (lbs)	Representative UUT[1]
VACU Break & HCP Switches							
V7E2233	Siemens	240VAC, 100-100A, 2P, 7.5HP	17.2	6.8	7.5	20	interpolated
V7E3233	Siemens	240VAC, 100-100A, 3P, 15HP	17.2	6.8	7.5	20	interpolated
V7E3233R	Siemens	240VAC, 100-100A, 3P, 15HP, R-fuse	17.2	6.8	7.5	20	interpolated
V7E2633	Siemens	600VAC, 100-100A, 2P, 15HP	22.0	6.8	7.5	20	interpolated
V7E3633	Siemens	600VAC, 100-100A, 3P, 30HP	22.0	6.8	7.5	20	interpolated
V7E3633R	Siemens	600VAC, 100-100A, 3P, 30HP, R-fuse	17.2	6.8	7.5	20	interpolated
V2F3204	Siemens	240VAC, 200A, 3P, 25HP	12.7	6.8	10.0	21	interpolated
V7E2204	Siemens	240VAC, 200A, 2P, 15HP	17.2	6.8	7.5	21	interpolated
V7F3204	Siemens	240VAC, 200A, 3P, 25HP	17.2	6.8	10.0	21	interpolated
V7F2604	Siemens	600VAC, 200A, 2P, 30HP	17.2	6.8	10.0	21	interpolated
V7F3604	Siemens	600VAC, 200A, 3P, 60HP	17.2	6.8	10.0	21	interpolated
V7F3604R	Siemens	600VAC, 200A, 3P, 60HP, R-fuse	17.2	6.8	10.0	21	interpolated
V7F3644	Siemens	240VAC, 200-200A, 3P, 25HP	17.7	6.8	10.0	40	interpolated
V7F3244R	Siemens	240VAC, 200-200A, 3P, 25HP, R-fuse	17.2	6.8	7.5	40	interpolated
V7F3644	Siemens	600VAC, 200-200A, 3P, 60HP	22.0	6.8	10.0	40	interpolated
V7H2205	Siemens	400A, 2P, 50HP (250VDC only)	17.2	10.5	15.0	44	interpolated
V7H3205	Siemens	240VAC, 400A, 2P, 50HP	17.2	10.5	15.0	44	interpolated
V7H3205	Siemens	240VAC, 400A, 3P, 50HP	17.2	10.5	15.0	44	interpolated
V7H2206	Siemens	240VAC, 600A, 2P	17.2	10.5	15.0	44	interpolated
V7H2605	Siemens	600VAC, 400A, 2P	17.2	10.5	15.0	44	interpolated
VYH3605	Siemens	600VAC, 400A, 3P, 100HP	17.2	10.5	15.0	44	interpolated
V7H3605	Siemens	600VAC, 400A, 3P, 100HP	17.2	10.5	15.0	44	interpolated
V7H2606	Siemens	600VAC, 600A, 2P	17.2	10.5	15.0	44	interpolated
V7H3606	Siemens	600VAC, 600A, 3P, 200HP	17.2	10.5	15.0	44	UUT_w-4

General Notes:

[1] The units were tested at different times and the subscripts on the UUT's reference the following lab test reports:
v - 17715 / w - 13977 / x - 14155 / y - 14997 / z - 16873

TABLE 2	SIEMENS SWITCHBOARD & IPS SWITCHBOARD CERTIFIED CERTIFIED SUBCOMPONENT MATRIX							WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING
Subcomponent ID	Manufacturer	Description		Width (in)	Depth (in)	Height (in)	Weight (lbs)	Representative UUT[1]
VACU Break & HCP Switches - cont'd								
V7H3206	Siemens	240VAC, 600A, 3P, 75HP		17.2	10.5	15.0	66	interpolated
HCP367H	Siemens	600VAC, 800A, 3P, 500HP, L-fuse class		16.3	7.4	17.0	77	interpolated
HCP368H	Siemens	600VAC, 1200A, 3P, 500HP, L-fuse class		16.3	7.4	17.0	77	UUT_w-3
HCP367HJ400	Siemens	600VAC, 400A, 3P, 350HP, J-fuse class		16.3	7.4	17.0	80	UUT_w-4
HCP367HJ600	Siemens	600VAC, 600A, 3P, 400HP, J-fuse class		16.3	7.4	17.0	80	interpolated
Molded Case Breakers								
FD6	Siemens	FD (70-250A)	2/3P	4.5	4.0	9.5	10	interpolated
HFD6	Siemens		2/3P	4.5	4.0	9.5	10	interpolated
HHFD6	Siemens		2/3P, EHIC	4.5	4.0	9.5	10	interpolated
FXD6	Siemens		2/3P, NIT	4.5	4.0	9.5	10	UUT_w-4
HFXD6	Siemens		2/3P, NIT, HIC	4.5	4.0	9.5	10	interpolated
HHFXD6	Siemens		2/3P, NIT, EHIC	4.5	4.0	9.5	10	interpolated
CFD6	Siemens		2/3P, CL	4.5	4.0	9.5	10	interpolated
JD2	Siemens	JD (200-400A)	2P	7.5	4.0	11.0	20	interpolated
JXD2	Siemens		2P, NIT	7.5	4.0	11.0	20	UUT_w-4
JD6	Siemens		2/3P	7.5	4.0	11.0	20	interpolated
HJD6	Siemens		2/3P, HIC	7.5	4.0	11.0	20	interpolated
HHJD6	Siemens		2/3P, EHIC	7.5	4.0	11.0	20	interpolated
JXD6	Siemens		2/3P, NIT	7.5	4.0	11.0	20	interpolated
HJXD6	Siemens	JD (200-400A)	2/3P, NIT	7.5	4.0	11.0	20	interpolated
HHJXD6	Siemens		2/3P, NIT	7.5	4.0	11.0	20	interpolated
CJD6	Siemens		2/3P, CL	7.5	4.0	11.0	20	interpolated
SCJD6	Siemens		3P, SST	7.5	4.0	11.0	20	UUT_w-4
SHLD6	Siemens		3P, SST, HIC	7.5	4.0	11.0	20	interpolated

General Notes:

[1] The units were tested at different times and the subscripts on the UUT's reference the following lab test reports:
v - 17715 / w - 13977 / x - 14155 / y - 14997 / z - 16873

TABLE 2	SIEMENS SWITCHBOARD & IPS SWITCHBOARD CERTIFIED CERTIFIED SUBCOMPONENT MATRIX							WEGAI W.E. Gundy & Associates, Inc. Structural & Earthquake Engineering
Subcomponent ID	Manufacturer	Description		Width (in)	Depth (in)	Height (in)	Weight (lbs)	Representative UUT[1]
Molded Case Breakers - cont'd								
SCLD6	Siemens	LD (250-6000A)	3P, SST, CL	7.5	4.0	11.0	20	interpolated
LD6	Siemens		2/3P	7.5	4.7	16.0	20	interpolated
HLD6	Siemens		2/3P, HIC	7.5	4.7	16.0	20	interpolated
HHLD6	Siemens		2/3P, EHIC	7.5	4.7	16.0	20	interpolated
LXD6	Siemens		2/3P, NIT	7.5	4.7	16.0	20	interpolated
HLXD6	Siemens		2/3P, NIT, HIC	7.5	4.7	16.0	20	interpolated
HHLXD6	Siemens		2/3P, NIT, EHIC	7.5	4.7	16.0	20	interpolated
CLD6	Siemens		2/3P, CL	7.5	4.7	16.0	20	interpolated
SLD6	Siemens		3P, SST	7.5	4.7	16.0	20	interpolated
SHLD6	Siemens		3P, SST, HIC	7.5	4.7	16.0	20	interpolated
MD6	Siemens	MD (500-800A)	2/3P	7.5	4.7	16.0	20	interpolated
LMD6	Siemens		2/3P, line/load lug installed	7.5	4.7	16.0	20	interpolated
HMD6	Siemens		2/3P, HIC	7.5	4.7	16.0	20	interpolated
HLMD6	Siemens		2/3P, HIC, line/load lug installed	7.5	4.7	16.0	20	interpolated
MXD6	Siemens		2P, NIT	9.0	6.0	16.0	35	interpolated
LMXD6	Siemens		2/3P, NIT, line/load lug installed	9.0	6.0	16.0	35	interpolated
HMXD6	Siemens		2/3P, NIT, HIC	9.0	6.0	16.0	36	interpolated
HLMXD6	Siemens		2/3P, NIT, HIC, line/load lug insta	9.0	6.0	16.0	37	interpolated
CMD6	Siemens		2/3P, CL	9.0	6.0	16.0	38	interpolated
SMD6	Siemens	MD (500-800A)	3P, SST	9.0	6.0	16.0	39	interpolated
SHMD6	Siemens		3P, SST, HIC	9.0	6.0	16.0	40	interpolated
SCMD6	Siemens		3P, SST, CL	9.0	6.0	16.0	41	interpolated

General Notes:

[1] The units were tested at different times and the subscripts on the UUT's reference the following lab test reports:
v - 17715 / w - 13977 / x - 14155 / y - 14997 / z - 16873

TABLE 2	SIEMENS SWITCHBOARD & IPS SWITCHBOARD CERTIFIED CERTIFIED SUBCOMPONENT MATRIX							WEGAI W.E. Gundy & Associates, Inc. Structural & Earthquake Engineering
Subcomponent ID	Manufacturer	Description		Width (in)	Depth (in)	Height (in)	Weight (lbs)	Representative UUT[1]
Molded Case Breakers - cont'd								
ND6	Siemens	ND (800-1200A)	2/3P	9.0	6.0	16.0	62	interpolated
HND6	Siemens		2/3P, HIC	9.0	6.0	16.0	62	interpolated
NXD6	Siemens	ND (800-1200A)	2/3P, NIT	9.0	6.0	16.0	62	interpolated
HNXD6	Siemens		2/3P, NIT, HIC	9.0	6.0	16.0	62	interpolated
CND6	Siemens		2/3P, CL	9.0	6.0	16.0	62	UUT_w-3
SND6	Siemens		3P, SST	9.0	6.0	16.0	62	interpolated
SHND6	Siemens		3P, SST, HIC	9.0	6.0	16.0	62	interpolated
SCND6	Siemens		3P, SST, CL	9.0	6.0	16.0	62	UUT_w-3
JG (70-400A)	Siemens	70-400A, 480/600V, 2/3P		4.1	3.4	6.9	6	UUT_w-4
LG (150-600A)	Siemens	150-600A, 480/600V, 2/3P		4.1	3.4	6.9	6	interpolated
MG (200-800A)	Siemens	200-800A, 480/600V, 2/3P		7.5	4.7	16.0	35	interpolated
NG (300-1200A)	Siemens	300-1200A, 480/600V, 2/3P		9.0	6.0	16.0	62	UUT_w-3
				9.0	6.0	16.0	62	UUT_w-3
Bolted Pressure Switches								
CB3033T120480	Eaton	Top Feed,3000A,CBC		22.5	44.0	28.0	390	same
CB4033T120480	Eaton	Top Feed,4000A,CBC		22.5	44.0	28.0	390	UUT_w-6
3VA Circuit Breakers								
3VA41	Siemens	15-125A	1/2/3P, TM	3	3.6	5.1	2	interpolated
3VA52	Siemens	40-250A	2/3/4P, TM	5.5	3.3	7.3	5	interpolated
3VA53	Siemens	200-400A	2/3/4P, TM	7.2	5.4	9.8	15	interpolated
3VA54	Siemens	450-600A	2/3/4P, TM	7.2	5.4	9.8	15	UUT_z-3
3VA61	Siemens	40-150A	3/4P, ETU	5.5	3.4	7.8	7	interpolated
3VA62	Siemens	100, 250A	3/4P, ETU	5.5	3.4	7.8	7	interpolated
3VA63	Siemens	250, 400A	3/4P, ETU	7.2	5.4	9.8	15	UUT_z-3

General Notes:

[1] The units were tested at different times and the subscripts on the UUT's reference the following lab test reports:
v - 17715 / w - 13977 / x - 14155 / y - 14997 / z - 16873

TABLE 2	SIEMENS SWITCHBOARD & IPS SWITCHBOARD CERTIFIED CERTIFIED SUBCOMPONENT MATRIX							WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING
Subcomponent ID	Manufacturer	Description		Width (in)	Depth (in)	Height (in)	Weight (lbs)	Representative UUT[1]
3VA Circuit Breakers - cont'd								
3VA64	Siemens	400/600A	3/4P, ETU	7.2	5.4	9.8	15	interpolated
3VA55	Siemens	600-800A	2/3/4P, TM	11	5.8	12.5	37	interpolated
3VA65	Siemens	600-800A	3/4P, ETU	11	5.8	12.5	37	interpolated
3VA66	Siemens	1000A	3/4P, ETU	11	5.8	12.5	37	UUT_z-3
3VA57	Siemens	1200A	2/3P, TM	11	6.19	16	55.1	interpolated
3VA58	Siemens	1600A	2/3P, TM	9	6.19	16	69	interpolated
3VA59	Siemens	2000A	2/3P, TM	9	6.19	16	69	interpolated
3VA67	Siemens	1200A	2/3P, ETU	9	6.19	16	55.1	UUT_z-2
3VA68	Siemens	1600A	2/3P, ETU	9	6.19	16	69	UUT_z-3
3VA69	Siemens	2000A	2/3P, ETU	9	6.19	16	69	UUT_z-1

General Notes:

[1] The units were tested at different times and the subscripts on the UUT's reference the following lab test reports:
v - 17715 / w - 13977 / x - 14155 / y - 14997 / z - 16873

TABLE 2		SIEMENS SWITCHBOARD & IPS SWITCHBOARD CERTIFIED SUBCOMPONENT MATRIX							
ID Number	Standard	Breaker Ampre	Frame Size	Breaker Type	Width (in)	Depth (in.)	Height (in.)	Weight (lbs) Min-Max	Representative UUT[1]
Type WL ANSI / UL 489 and 1066 (3-Pole & 4-Pole) Circuit Breakers									
S1F3xx L1F3xx	UL 489	800A to 2000A	FS1	Fixed 3P	18.13	10.1	15	86	extrapolated
S2F308	UL 489	800A	FS2	Fixed 3P	18.13	15.1	22.5	124	UUT_w-1
S2F3xx L2F3xx C2F3xx	UL 489	800A to 3000A	FS2	Fixed 3P	18.13	15.1	22.5	124-148	interpolated
L3F3xx C3F3xx	UL 489	4000A to 5000A	FS3	Fixed 3P	27.72	16.3	22.5	181-200	interpolated
S2K420	ANSI / UL 1066	2000A	FS2	Fixed 4P	23.2	19.1	22.5	203	UUT_y-14
S2K4xx H2K4xx L2K4xx	ANSI / UL 1066	800A to 3200A	FS2	Fixed 4P	23.2	19.1	22.5	185-229	interpolated
S1D3xx L1D3xx	UL 489	800A to 2000A	FS1	D/O 3P	23.2	19.1	15	245	interpolated
N2A3xx S2A3xx H2A3xx L2A3xx	ANSI / UL 1066	800A to 3200A	FS2	D/O 3P	23.2	19.1	22.5	271-361	interpolated
L3K4xx M3K4xx	ANSI / UL 1066	4000A to 5000A	FS3	Fixed 4P	36	19.1	22.5	375	interpolated
S2D3xx L2D3xx C2D3xx	UL 489	800A to 3000A	FS2	D/O 3P	23.2	19.1	22.5	271-383	interpolated

General Notes:

All drawout breaker weights include the weight of the cradle, rear wall & connectors.

[1] The units were tested at different times and the subscripts on the UUT's reference the following lab test reports:

v - 17715 / w - 13977 / x - 14155 / y - 14997 / z - 16873

TABLE 2		SIEMENS SWITCHBOARD & IPS SWITCHBOARD CERTIFIED SUBCOMPONENT MATRIX							
ID Number	Standard	Breaker Ampre	Frame Size	Breaker Type	Width (in)	Depth (in.)	Height (in.)	Weight (lbs) Min-Max	Representative UUT[1]
Type WL ANSI / UL 489 and 1066 (3-Pole & 4-Pole) Circuit Breakers - cont'd									
S2A4xx H2A4xx L2A4xx	ANSI / UL 1066	800A to 3200A	FS2	D/O 4P	23.2	19.1	22.5	370-470	interpolated
F3A3xx	ANSI / UL 1066	3200A to 6000A	FS3	D/O 3P	27.7	19.1	22.5	531	interpolated
H3A3xx L3A3xx M3A3xx	ANSI / UL 1066	4000A to 6000A	FS3	D/O 3P	27.7	19.1	22.5	566	interpolated
L3D3xx C3D3xx	UL 489	4000A to 5000A	FS3	D/O 3P	27.7	19.1	22.5	584	interpolated
C3D340	UL 489	4000A	FS3	D/O 3P	27.7	19.1	22.5	584	UUT_x-1
L3A4xx M3A4xx	ANSI / UL 1066	4000A to 6000A	FS3	D/O 4P	36	19.1	22.5	744	interpolated
L3A440	ANSI / UL 1066	4000A to 6000A	FS3	D/O 4P	36	19.1	22.5	744	UUT_y-14
Type 3WA ANSI / UL 489 and 1066 (3-Pole & 4-Pole) Circuit Breakers									
3WA21xx0	UL 489	800A to 2000A	FS1	Fixed 3P	13	14	18	85-101	extrapolated
3WA31xx0	ANSI / UL 1066	800A to 2000A	FS1	Fixed 3P	13	14	18	85-101	extrapolated
3WA31xx1	ANSI / UL 1066	800A to 2000A	FS1	Fixed 4P	17	14	18	108-121	extrapolated
3WA32xx0	ANSI / UL 1066	800A to 3200A	FS2	Fixed 3P	18	14	18	122-163	extrapolated
3WA22xx0	UL 489	800A to 3200A	FS2	Fixed 3P	18	14	18	122-163	extrapolated
3WA2230	**UL 489**	**3000A**	**FS2**	**Fixed 3P**	**18**	**14**	18	**163**	**UUT_v-1 / UUT_v-1A**
3WA32xx1	ANSI / UL 1066	800A to 3200A	FS2	Fixed 4P	23.2	14	18	163-203	interpolated
3WA23xx0	UL 489	3000A to 5000A	FS3	Fixed 3P	28	14	18	301-350	interpolated

General Notes:

All drawout breaker weights include the weight of the cradle, rear wall & connectors.

[1] The units were tested at different times and the subscripts on the UUT's reference the following lab test reports:

v - 17715 / w - 13977 / x - 14155 / y - 14997 / z - 16873

TABLE 2		SIEMENS SWITCHBOARD & IPS SWITCHBOARD CERTIFIED SUBCOMPONENT MATRIX							
ID Number	Standard	Breaker Ampre	Frame Size	Breaker Type	Width (in)	Depth (in.)	Height (in.)	Weight (lbs) Min-Max	Representative UUT[1]
Type 3WA ANSI / UL 489 and 1066 (3-Pole & 4-Pole) Circuit Breakers - cont'd									
3WA33xx0	ANSI / UL 1066	3000A to 5000A	FS3	Fixed 3P	28	14	18	301-350	interpolated
3WA31xx3	ANSI / UL 1066	800A to 2000A	FS1	D/O 3P	14	19.5	22.5	233-251	interpolated
3WA21xx3	UL 489	800A to 2000A	FS1	D/O 3P	14	19.5	22.5	233-251	interpolated
3WA23xx1	UL 489	3000A to 5000A	FS3	Fixed 4P	36	14	18	257-281	interpolated
3WA33xx1	ANSI / UL 1066	3000A to 5000A	FS3	Fixed 4P	36	14	18	257-281	interpolated
3WA31xx4	ANSI / UL 1066	800A to 2000A	FS1	D/O 4P	11	19.5	22.5	286-294	interpolated
3WA21xx4	UL 489	800A to 2000A	FS1	D/O 4P	11	19.5	22.5	286-294	interpolated
3WA32xx3	ANSI / UL 1066	800A to 3200A	FS2	D/O 3P	22	19.5	22.5	234-362	interpolated
3WA22xx3	UL 489	800A to 3200A	FS2	D/O 3P	22	19.5	22.5	234-362	interpolated
3WA32xx4	ANSI / UL 1066	800A to 3200A	FS2	D/O 4P	32	19.5	22.5	314-478	interpolated
3WA22xx4	UL 489	800A to 3200A	FS2	D/O 4P	32	19.5	22.5	314-478	interpolated
3WA33xx	ANSI / UL 1066	3000A to 5000A	FS3	D/O 3P	32	19.5	22.5	678-711	interpolated
3WA23xx	UL 489	3000A to 5000A	FS3	D/O 3P	32	19.5	22.5	678-711	interpolated
3WA2350	**UL 489**	**5000A**	**FS3**	**D/O 3P**	**32**	**19.5**	22.5	**711**	**UUT_v-2**

General Notes:

All drawout breaker weights include the weight of the cradle, rear wall & connectors.

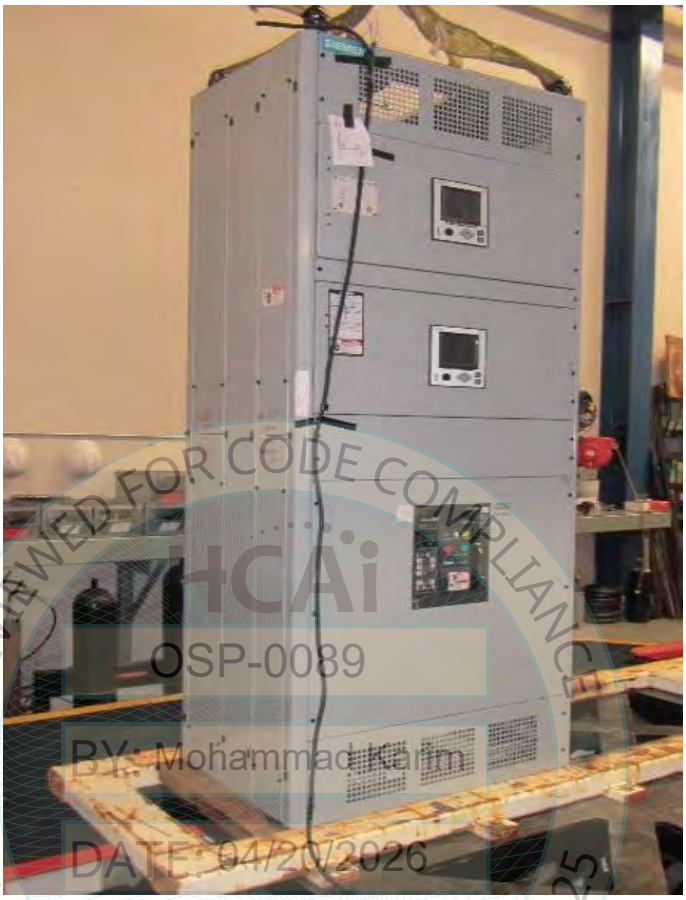
[1] The units were tested at different times and the subscripts on the UUT's reference the following lab test reports:

v - 17715 / w - 13977 / x - 14155 / y - 14997 / z - 16873

TABLE 3	SIEMENS SWITCHBOARD & IPS SWITCHBOARD UNIT UNDER TEST INDEX				
UUT	**Section Type**	**Lab**	**Report #**	**Test Date**	**Tested S_{DS} z / h = 1.0**
UUT_w-1	SWBD-SB3-38x28	ETL, TX	13977, Rev 2	January 2016	2.00
UUT_w-3	SWBD-SB2-HD-38x20	ETL, TX	13977, Rev 2	January 2016	1.70
UUT_w-4	SWBD-SB3-38x20	ETL, TX	13977, Rev 2	January 2016	2.00
UUT_w-6	SWBD-IPS-38x28	ETL, TX	13977, Rev 2	January 2016	2.00
UUT_w-9	SWBD-IPS-25x20	ETL, TX	13977, Rev 2	January 2016	2.00
UUT_w-10	SWBD-SB3-HD-52x38	ETL, TX	13977, Rev 2	January 2016	1.70
UUT_w-11	SWBD-SB3-HD-52x38	ETL, TX	13977, Rev 2	January 2016	1.70
UUT_w-12	SWBD-SB3-HD-52x38	ETL, TX	13977, Rev 2	January 2016	1.70
UUT_x-1	SWBD-SB3-HD-46x38	ETL, TX	14155, Rev 0	September 2016	1.70
UUT_y-14	SWBD-IPS-38x38	ETL, TX	14997, Rev 2	September 2018	1.70
UUT_y-15	SWBD-SB3-HD-46x38	ETL, TX	14997, Rev 2	September 2018	1.70
UUT_y-16	SWBD-IPS-HD-46x38	ETL, TX	14997, Rev 2	September 2018	1.70
UUT_z-1	SWBD-SB3-HD-38x28	ETL, TX	16873	February 2023	1.70
UUT_z-2	SWBD-SB3-HD-25x20	ETL, TX	16873	February 2023	1.70
UUT_z-3	SWBD-SB3-HD-38x58	ETL, TX	16873	February 2023	1.70
UUT_v-1	SWBD-SB3-HD-25x20	ETL, TX	17715	April 2025	1.70
UUT_v-1A	SWBD-SB3-HD-25x20	ETL, TX	17715	April 2025	1.70
UUT_v-2	SWBD-SBx-HD-46x38	ETL, TX	17715	April 2025	1.70

UUT_w-1	UNIT UNDER TEST (UUT) SUMMARY SHEET	WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING

Mounting Details: Floor mounted with 4 - 3/8" diameter grade 5 bolts with 3.5x1.5x0.25" A36 seismic plate washers.



Manufacturer: Siemens Industry, Inc.	**Test Location:** ETL
Product Line: Switchboard and IPS Switchgear	**Report Number:** 13977, Rev 2
Model Number: SWBD-SB3-38x28	**UUT No. in Test Report:** UUT-1

UUT Function: Switchboards redirect and control the flow of electricity, as well as, providing low voltage circuit protection.

UUT Description: The unit is comprised of a NEMA 1/1A/2 carbon steel enclosure that contains a 800A aluminum bus, (1) 3-Pole circuit breaker, surge protection device, current transformer, and power meters.

UUT PROPERTIES

Weight (lb)	Enclosure Dimensions (inches)				Natural Fequency (Hz)		
	Width	Depth	Height	CG	FB	SS	V
710	38.0	29	90	45	23.3	12.9	19.2

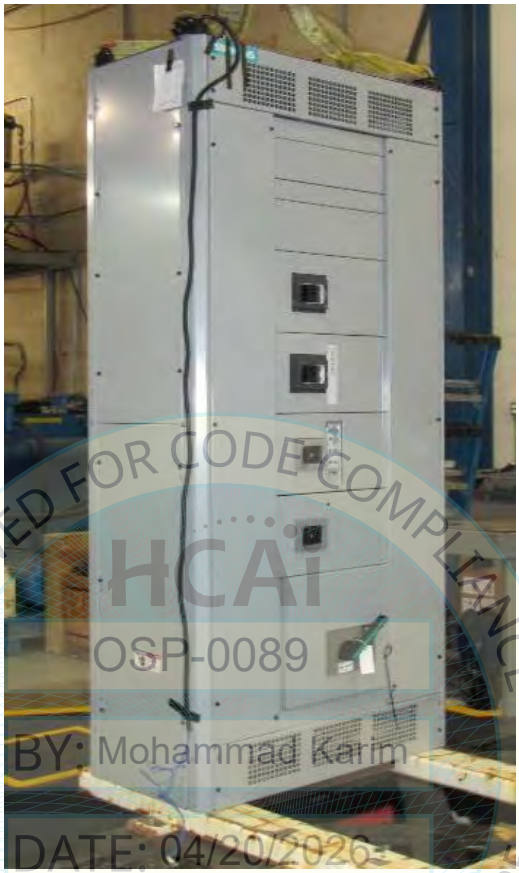
SEISMIC TEST PARAMETERS - CBC 2025 / ICC-ES AC 156-24

	S_{DS} (g)	I_P	z / h	H_f	R_μ	A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
	2.00	1.5	1.0	3.5	1.30	3.2g	2.15g	-	-
	2.50		0.0	1.0	1.00	-	-	1.68g	0.68g

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.

UUT_w-3	UNIT UNDER TEST (UUT) SUMMARY SHEET	WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING

Mounting Details: Floor mounted with 4 - 3/8" diameter grade 5 bolts with 3.5x1.5x0.25" A36 seismic plate washers.



Manufacturer: Siemens Industry, Inc.	**Test Location:** ETL
Product Line: Switchboard and IPS Switchgear	**Report Number:** 13977, Rev 2
Model Number: SWBD-SB2-HD-38x20	**UUT No. in Test Report:** UUT-3

UUT Function: Switchboards redirect and control the flow of electricity, as well as, providing low voltage circuit protection.

UUT Description: The unit is comprised of a NEMA 1/1A/2 heavy duty carbon steel enclosure that contains 1200A aluminum bus, HCP switch, and molded case breakers.

UUT PROPERTIES

Weight (lb)	Enclosure Dimensions (inches)				Natural Fequency (Hz)		
	Width	Depth	Height	CG	FB	SS	V
743	38.0	20	90	45	3.9	5.6	31.1

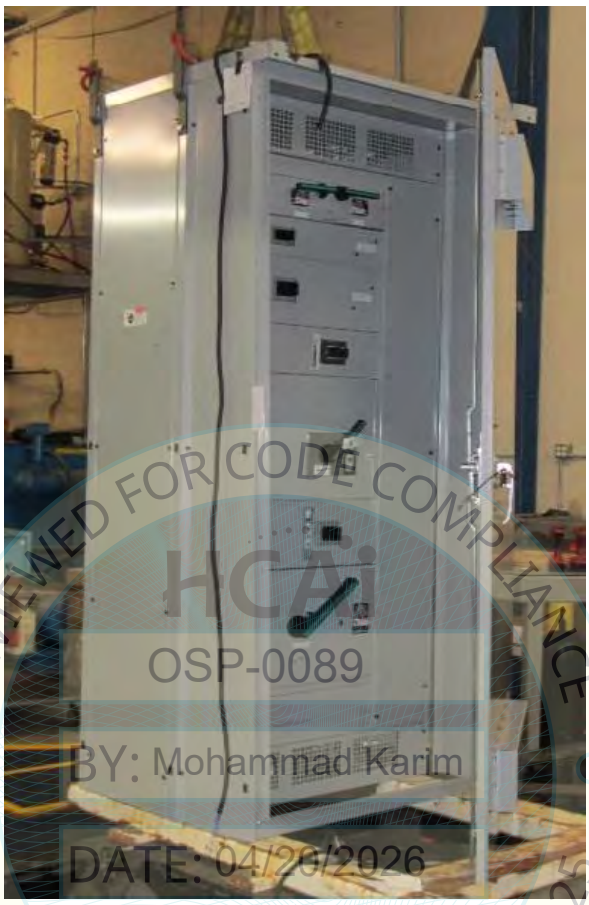
SEISMIC TEST PARAMETERS - CBC 2025 / ICC-ES AC 156-24

	S_{DS} (g)	I_P	z / h	H_f	R_μ	A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
	1.70	1.5	1.0	3.5	1.30	2.72g	1.83g	-	-
	2.50		0.0	1.0	1.00	-	-	1.68g	0.68g

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.

UUT_w-4	UNIT UNDER TEST (UUT) SUMMARY SHEET	WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING

Mounting Details: Floor mounted with 4 - 3/8" diameter grade 5 bolts with 3.5x1.5x0.25" A36 seismic plate washers.



Manufacturer: Siemens Industry, Inc.	**Test Location:** ETL
Product Line: Switchboard and IPS Switchgear	**Report Number:** 13977, Rev 2
Model Number: SWBD-SB3-38x20	**UUT No. in Test Report:** UUT-4

UUT Function: Switchboards redirect and control the flow of electricity, as well as, providing low voltage circuit protection.

UUT Description: The unit is comprised of a NEMA 3R carbon steel enclosure that contains 1200A aluminum bus, HCP switch, and molded case breakers.

UUT PROPERTIES

Weight (lb)	Enclosure Dimensions (inches)				Natural Fequency (Hz)		
	Width	Depth	Height	CG	FB	SS	V
820	38.0	20	90	45	5.8	5.6	>33

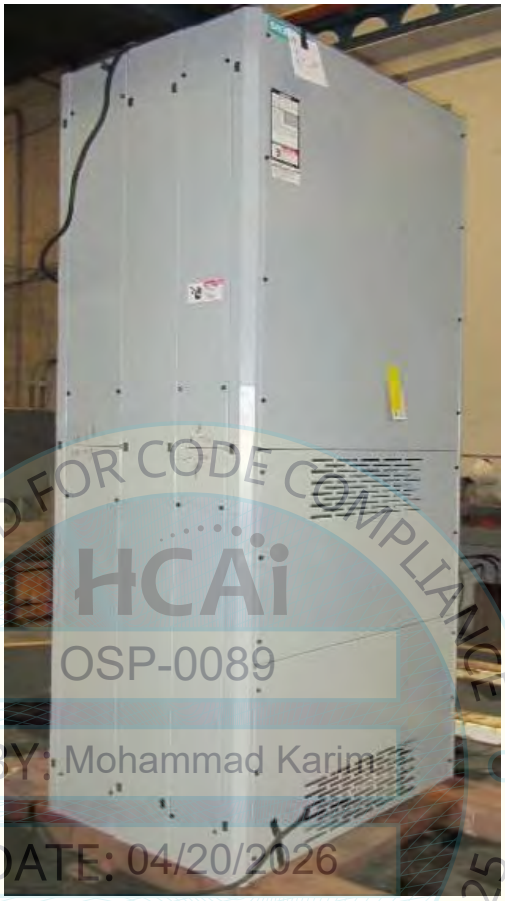
SEISMIC TEST PARAMETERS - CBC 2025 / ICC-ES AC 156-24

	S_{DS} (g)	I_P	z / h	H_f	R_μ	A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
	2.00	1.5	1.0	3.5	1.30	3.2g	2.15g	-	-
	2.50		0.0	1.0	1.00	-	-	1.68g	0.68g

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.

UUT_w-6	UNIT UNDER TEST (UUT) SUMMARY SHEET	WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING

Mounting Details: Floor mounted with 4 - 1/2" diameter grade 5 bolts with 3.5x1.5x0.25" A36 seismic plate washers.



Manufacturer: Siemens Industry, Inc.	**Test Location:** ETL
Product Line: Switchboard and IPS Switchgear	**Report Number:** 13977, Rev 2
Model Number: SWBD-IPS-38x28	**UUT No. in Test Report:** UUT-6

UUT Function: Switchboards redirect and control the flow of electricity, as well as, providing low voltage circuit protection.

UUT Description: The unit is comprised of a NEMA 1/1A/2 carbon steel enclosure that contains a general purpose transformer and pressure switch.

UUT PROPERTIES

Weight (lb)	Enclosure Dimensions (inches)				Natural Fequency (Hz)		
	Width	Depth	Height	CG	FB	SS	V
1,435	38	28	90	43	26.3	13.0	20.7

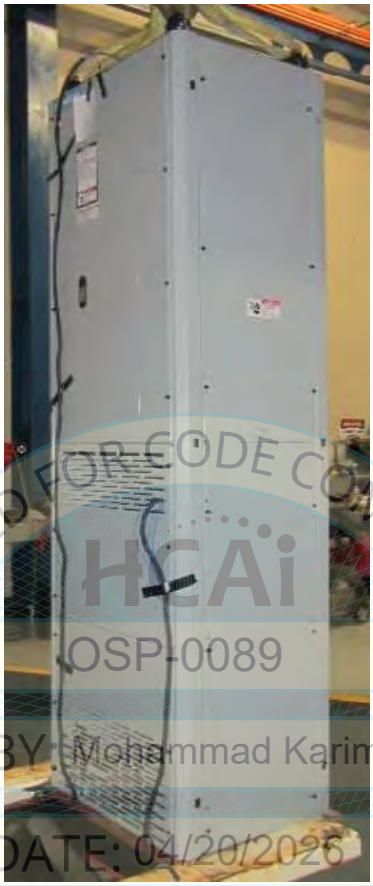
SEISMIC TEST PARAMETERS - CBC 2025 / ICC-ES AC 156-24

	S_{DS} (g)	I_P	z / h	H_f	R_μ	A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
	2.00	1.5	1.0	3.5	1.30	3.2g	2.15g	-	-
	2.50		0.0	1.0	1.00	-	-	1.68g	0.68g

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.

UUT_w-9	UNIT UNDER TEST (UUT) SUMMARY SHEET	WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING

Mounting Details: Floor mounted with 4 - 3/8" diameter grade 5 bolts with 3.5x1.5x0.25" A36 seismic plate washers.



Manufacturer: Siemens Industry, Inc.	**Test Location:** ETL
Product Line: Switchboard and IPS Switchgear	**Report Number:** 13977, Rev 2
Model Number: SWBD-IPS-25x20	**UUT No. in Test Report:** UUT-9

UUT Function: Switchboards redirect and control the flow of electricity, as well as, providing low voltage circuit protection.

UUT Description: The unit is comprised of a NEMA 1/1A/2 carbon steel enclosure that contains a general purpose transformer.

UUT PROPERTIES

Weight (lb)	Enclosure Dimensions (inches)				Natural Fequency (Hz)		
	Width	Depth	Height	CG	FB	SS	V
511	25	20	90	43	7.3	9.60	16.0

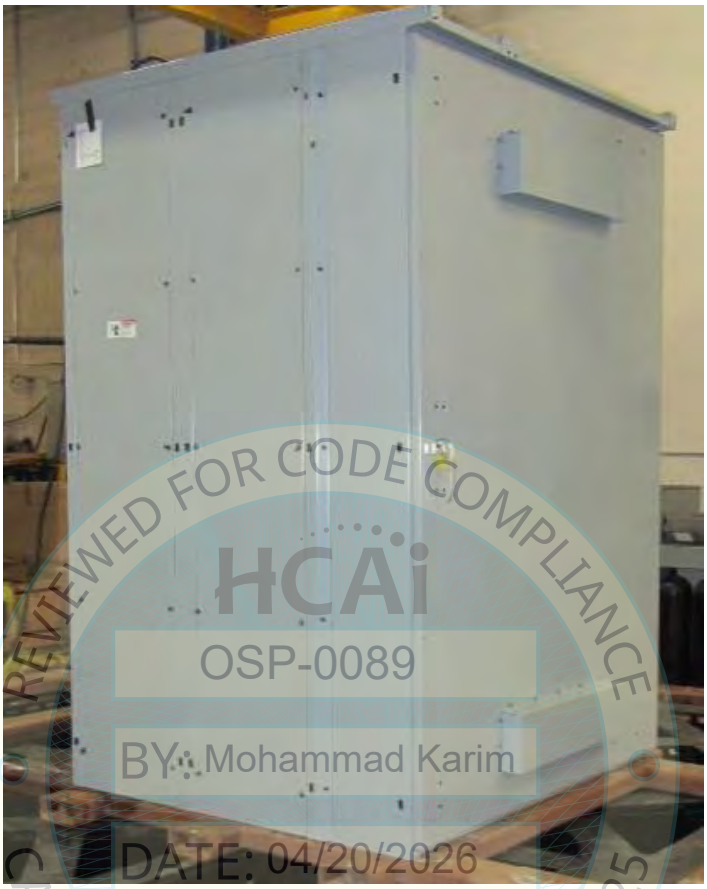
SEISMIC TEST PARAMETERS - CBC 2025 / ICC-ES AC 156-24

	S_{DS} (g)	I_P	z / h	H_f	R_μ	A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
	2.00	1.5	1.0	3.5	1.30	3.2g	2.15g	-	-
	2.50		0.0	1.0	1.00	-	-	1.68g	0.68g

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.

UUT_w-10	UNIT UNDER TEST (UUT) SUMMARY SHEET	WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING

Mounting Details: Floor mounted with 4 - 1/2" diameter grade 5 bolts with 3.5x1.5x0.25" A36 seismic plate washers.



Manufacturer: Siemens Industry, Inc.	**Test Location:** ETL
Product Line: Switchboard and IPS Switchgear	**Report Number:** 13977, Rev 2
Model Number: SWBD-SB3-HD-52x38	**UUT No. in Test Report:** UUT-10

UUT Function: Switchboards redirect and control the flow of electricity, as well as, providing low voltage circuit protection.

UUT Description: The unit is comprised of a NEMA 3R heavy duty carbon steel enclosure that contains 4000A AL/4000A CU bus and circuit breaker.

UUT PROPERTIES

Weight (lb)	Enclosure Dimensions (inches)				Natural Fequency (Hz)		
	Width	Depth	Height	CG	FB	SS	V
1,408	52.0	38	90	47	7.4	6.6	>33

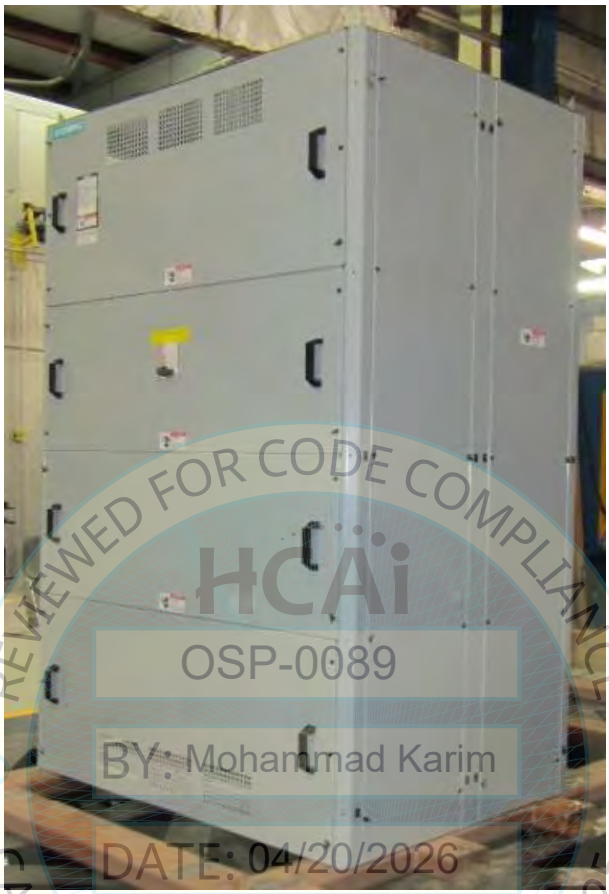
SEISMIC TEST PARAMETERS - CBC 2025 / ICC-ES AC 156-24

	S_{DS} (g)	I_P	z / h	H_f	R_μ	A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
	1.70	1.5	1.0	3.5	1.30	2.72g	1.83g	-	-
	2.50		0.0	1.0	1.00	-	-	1.68g	0.68g

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.

UUT_w-11	UNIT UNDER TEST (UUT) SUMMARY SHEET	WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING

Mounting Details: Floor mounted with 4 - 1/2" diameter grade 5 bolts with 3.5x1.5x0.25" A36 seismic plate washers.



Manufacturer: Siemens Industry, Inc.	**Test Location:** ETL
Product Line: Switchboard and IPS Switchgear	**Report Number:** 13977, Rev 2
Model Number: SWBD-SB3-HD-52x38	**UUT No. in Test Report:** UUT-11

UUT Function: Switchboards redirect and control the flow of electricity, as well as, providing low voltage circuit protection.

UUT Description: The unit is comprised of a NEMA 1/1A/2 heavy duty carbon steel enclosure that contains 4000A AL/4000A CU bus and circuit breaker.

UUT PROPERTIES

Weight (lb)	Enclosure Dimensions (inches)				Natural Fequency (Hz)		
	Width	Depth	Height	CG	FB	SS	V
1,089	52.0	38	90	47	6.2	8.8	14.8

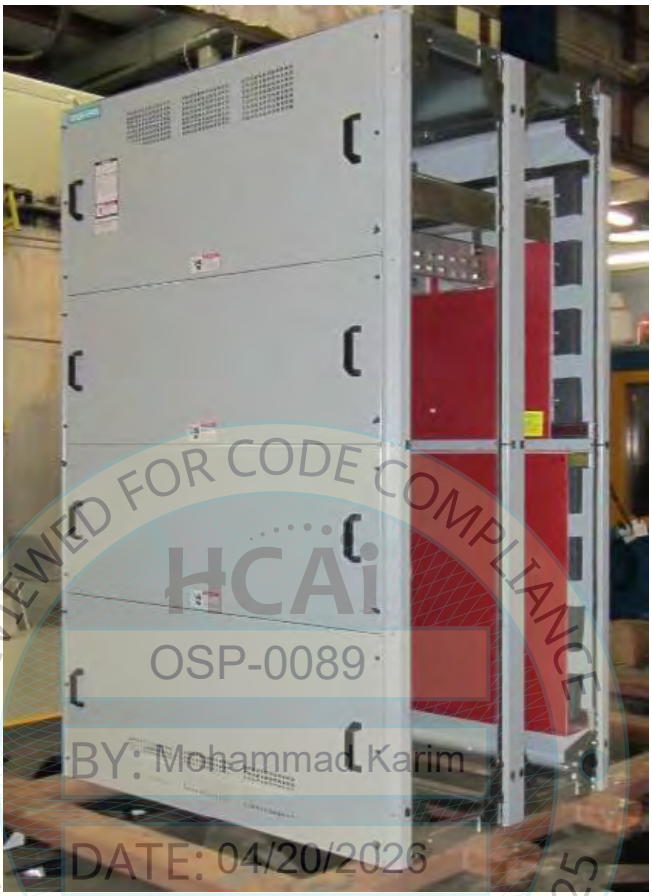
SEISMIC TEST PARAMETERS - CBC 2025 / ICC-ES AC 156-24

	S_{DS} (g)	I_P	z / h	H_f	R_μ	A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
	1.70	1.5	1.0	3.5	1.30	2.72g	1.83g	-	-
	2.50		0.0	1.0	1.00	-	-	1.68g	0.68g

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.

UUT_w-12	UNIT UNDER TEST (UUT) SUMMARY SHEET	WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING

Mounting Details: Floor mounted with 4 - 1/2" diameter grade 5 bolts with 3.5x1.5x0.25" A36 seismic plate washers.



Manufacturer: Siemens Industry, Inc.	**Test Location:** ETL
Product Line: Switchboard and IPS Switchgear	**Report Number:** 13977, Rev 2
Model Number: SWBD-SB3-HD-52x38	**UUT No. in Test Report:** UUT-12

UUT Function: Switchboards redirect and control the flow of electricity, as well as, providing low voltage circuit protection.

UUT Description: The unit is comprised of a NEMA 1/1A/2 heavy duty carbon steel enclosure that contains 4000A AL/4000A CU bus and circuit breaker.

UUT PROPERTIES

Weight (lb)	Enclosure Dimensions (inches)				Natural Fequency (Hz)		
	Width	Depth	Height	CG	FB	SS	V
1,027	52.0	38	90	47	4.3	8.9	15.0

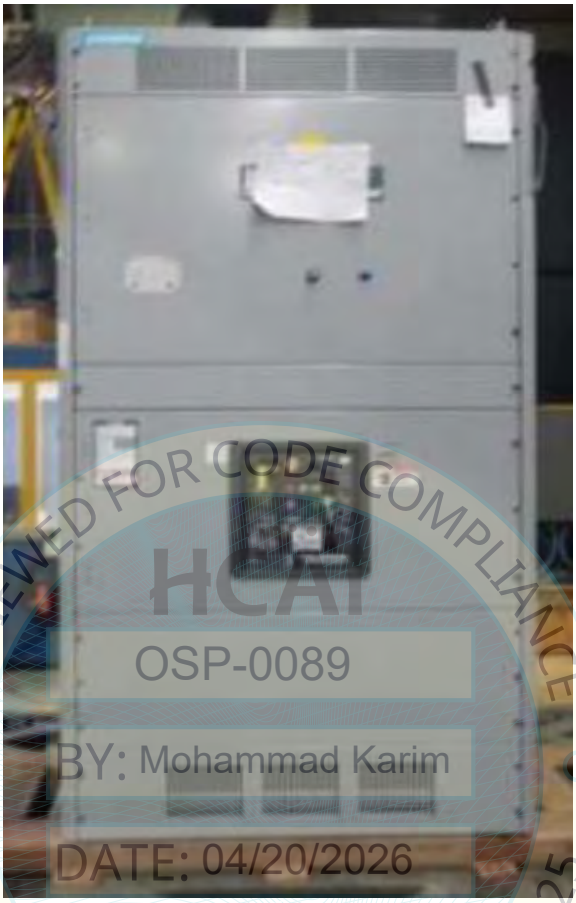
SEISMIC TEST PARAMETERS - CBC 2025 / ICC-ES AC 156-24

	S_{DS} (g)	I_P	z / h	H_f	R_μ	A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
	1.70	1.5	1.0	3.5	1.30	2.72g	1.83g	-	-
	2.50		0.0	1.0	1.00	-	-	1.68g	0.68g

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.

UUT_x-1	UNIT UNDER TEST (UUT) SUMMARY SHEET	WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING

Mounting Details: Floor mounted with 4 - 1/2" diameter grade 8 bolts with 3.5x1.5x0.25" A36 seismic plate washers.



Manufacturer: Siemens Industry, Inc.	**Test Location:** ETL
Product Line: Switchboard and IPS Switchgear	**Report Number:** 14155, Rev 0
Model Number: SWBD-SB3-HD-46x38	**UUT No. in Test Report:** UUT-1

UUT Function: Switchboards redirect and control the flow of electricity, as well as, providing low voltage circuit protection.

UUT Description: The unit is comprised of a NEMA 1/1A/2 heavy duty carbon steel enclosure that contains 4000A AL/4000 CU bus, 4000A circuit breaker, surge protection device, and power meters.

UUT PROPERTIES

Weight (lb)	Enclosure Dimensions (inches)				Natural Fequency (Hz)		
	Width	Depth	Height	CG	FB	SS	V
2,430	46.0	38	90	45	6.1	6.1	>33

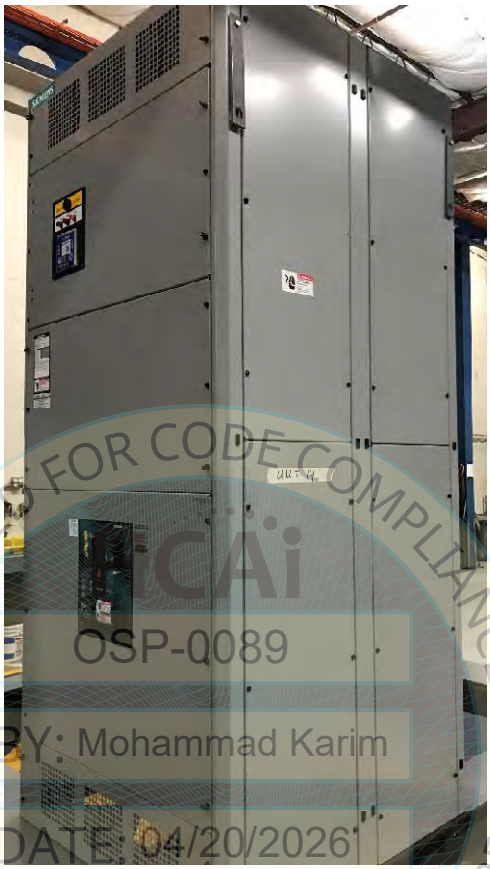
SEISMIC TEST PARAMETERS - CBC 2025 / ICC-ES AC 156-24

	S_{DS} (g)	I_P	z / h	H_f	R_μ	A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
	1.70	1.5	1.0	3.5	1.30	2.72g	1.83g	-	-
	2.50		0.0	1.0	1.00	-	-	1.68g	0.68g

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.

UUT_y-14	UNIT UNDER TEST (UUT) SUMMARY SHEET	WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING

Mounting Details: Floor mounted with 4 - 1/2" diameter grade 5 bolts with 3.5x1.5x0.25" A36 seismic plate washers.



Manufacturer: Siemens Industry, Inc.	**Test Location:** ETL
Product Line: Switchboard and IPS Switchgear	**Report Number:** 14997, Rev 2
Model Number:SWBD-IPS-38x38	**UUT No. in Test Report:** UUT-14

UUT Function: Switchboards redirect and control the flow of electricity, as well as, providing low voltage circuit protection.

UUT Description: The unit is comprised of a NEMA 1/1A/2 carbon steel enclosure that contains a 600A-4000A bus, 4-pole circuit breaker, control power transformer, and HRG.

UUT PROPERTIES

Weight (lb)	Enclosure Dimensions (inches)				Natural Fequency (Hz)		
	Width	Depth	Height	CG	FB	SS	V
1,200	38	38	90	45	7.5	6.1	>33

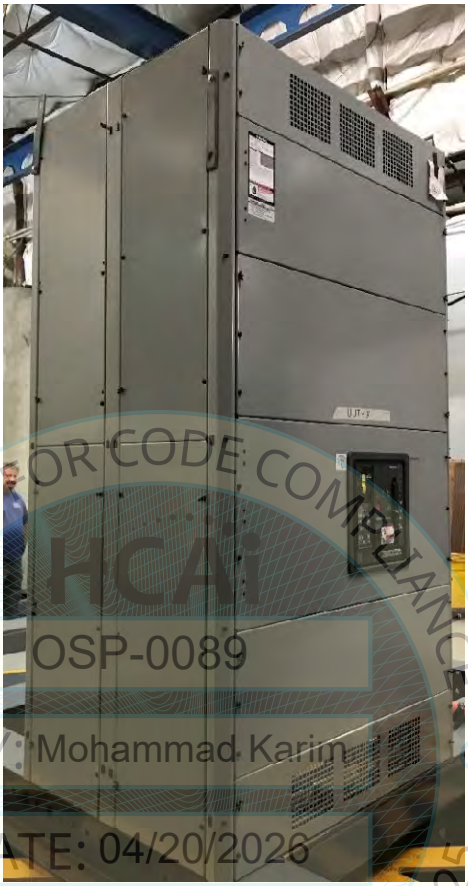
SEISMIC TEST PARAMETERS - CBC 2025 / ICC-ES AC 156-24

	S_{DS} (g)	I_P	z / h	H_f	R_μ	A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
	1.70	1.5	1.0	3.5	1.30	2.72g	1.83g	-	-
	2.50		0.0	1.0	1.00	-	-	1.68g	0.68g

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.

UUT_y-15	UNIT UNDER TEST (UUT) SUMMARY SHEET	WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING

Mounting Details: Floor mounted with 4 - 1/2" diameter grade 5 bolts with 3.5x1.5x0.25" A36 seismic plate washers.



Manufacturer: Siemens Industry, Inc.	**Test Location:** ETL
Product Line: Switchboard and IPS Switchgear	**Report Number:** 14997, Rev 2
Model Number: SWBD-SB3-HD-46x38	**UUT No. in Test Report:** UUT-15

UUT Function: Switchboards redirect and control the flow of electricity, as well as, providing low voltage circuit protection.

UUT Description: The unit is comprised of a NEMA 1/1A/2 carbon steel enclosure that contains a 600A-4000A bus, 4-pole circuit breaker, and voltage transformers.

UUT PROPERTIES

Weight (lb)	Enclosure Dimensions (inches)				Natural Fequency (Hz)		
	Width	Depth	Height	CG	FB	SS	V
2,490	46	38	90	43	6.7	5.4	17.4

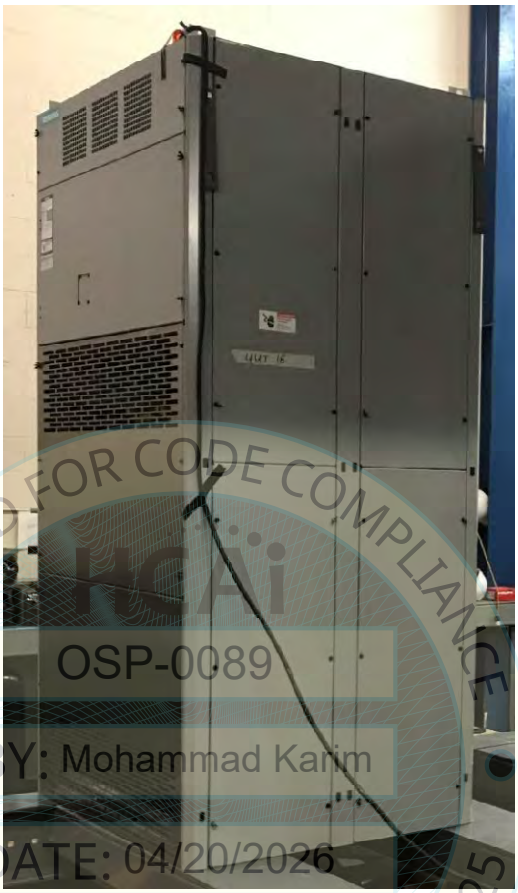
SEISMIC TEST PARAMETERS - CBC 2025 / ICC-ES AC 156-24

	S_{DS} (g)	I_P	z / h	H_f	R_μ	A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
	1.70	1.5	1.0	3.5	1.30	2.72g	1.83g	-	-
	2.50		0.0	1.0	1.00	-	-	1.68g	0.68g

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.

UUT_y-16	UNIT UNDER TEST (UUT) SUMMARY SHEET	WEGAI W.E. Gundy & Associates, Inc. Structural & Earthquake Engineering

Mounting Details: Floor mounted with 4 - 1/2" diameter grade 5 bolts with 3.5x1.5x0.25" A36 seismic plate washers.



Manufacturer: Siemens Industry, Inc.	**Test Location:** ETL
Product Line: Switchboard and IPS Switchgear	**Report Number:** 14997, Rev 2
Model Number: SWBD-IPS-HD-46x38	**UUT No. in Test Report:** UUT-16

UUT Function: Switchboards redirect and control the flow of electricity, as well as, providing low voltage circuit protection.

UUT Description: The unit is comprised of a NEMA 1/1A/2 carbon steel enclosures that contains a 600A-4000A bus, general purpos transformer, current transformer, and UPS.

UUT PROPERTIES

Weight (lb)	Enclosure Dimensions (inches)				Natural Fequency (Hz)		
	Width	Depth	Height	CG	FB	SS	V
2,877	46	38	90	45	7.5	6.9	7.4

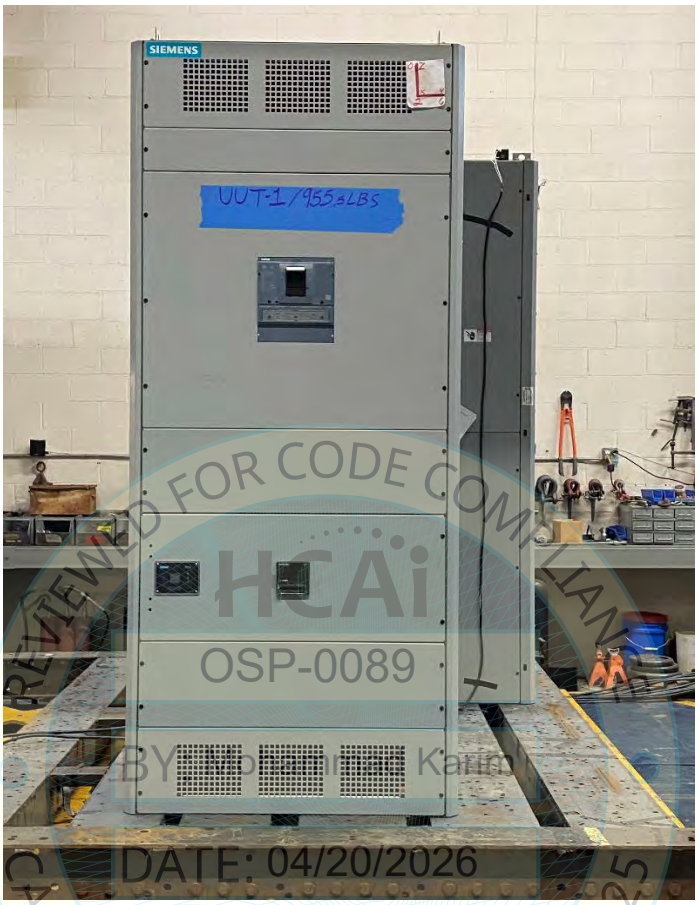
SEISMIC TEST PARAMETERS - CBC 2025 / ICC-ES AC 156-24

	S_{DS} (g)	I_P	z / h	H_f	R_μ	A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
	1.70	1.5	1.0	3.5	1.30	2.72g	1.83g	-	-
	2.50		0.0	1.0	1.00	-	-	1.68g	0.68g

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.

UUT_z-1	UNIT UNDER TEST (UUT) SUMMARY SHEET	WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING

Mounting Details: Floor mounted with 4 - 1/2" diameter grade 5 bolts with 3.5x1.5x0.25" A36 seismic plate washers.



Manufacturer: Siemens Industry, Inc.	**Test Location:** ETL
Product Line: Switchboard and IPS Switchgear	**Report Number:** 16873
Model Number: SWBD-SB3-HD-38x28	**UUT No. in Test Report:** UUT-1

UUT Function: Switchboards redirect and control the flow of electricity, as well as, providing low voltage circuit protection.

UUT Description: The unit is comprised of a NEMA 1/1A/2 carbon steel enclosures that contains a 1600A-2000A bus, 3VA circuit breaker (3VA69), surge protection device (TPS4E0610-X0), voltage transformer (Model 468), current transformer (Model 126), and power meter (9410).

UUT PROPERTIES

Weight (lb)	Enclosure Dimensions (inches)				Natural Fequency (Hz)		
	Width	Depth	Height	CG	FB	SS	V
955	38	28	90	54	16.4	6.2	>33

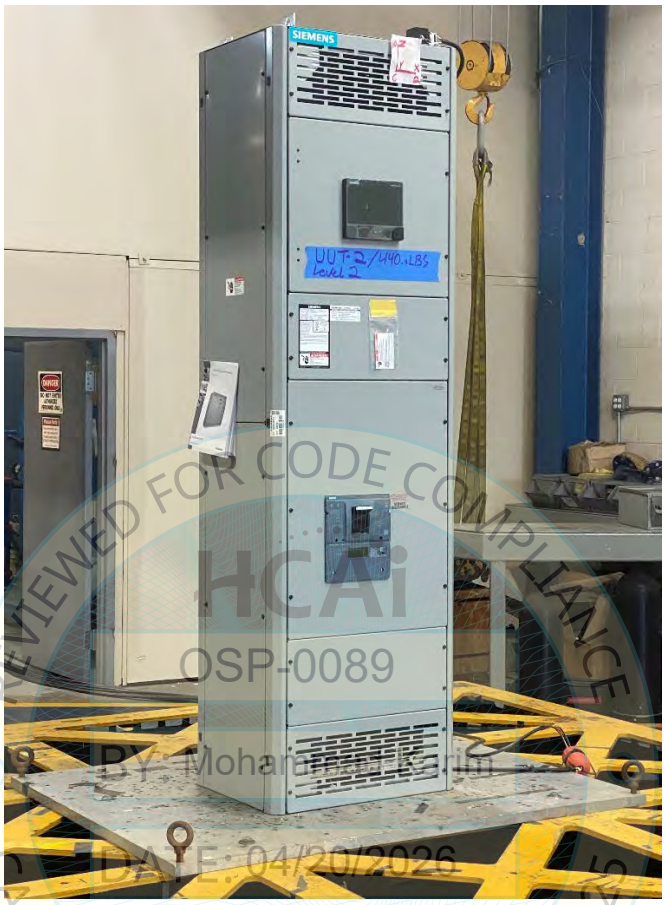
SEISMIC TEST PARAMETERS - CBC 2025 / ICC-ES AC 156-24

	S_{DS} (g)	I_P	z / h	H_f	R_μ	A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
	1.70	1.5	1.0	3.5	1.30	2.72g	1.83g	-	-
	2.50		0.0	1.0	1.00	-	-	1.68g	0.68g

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.

UUT_z-2	UNIT UNDER TEST (UUT) SUMMARY SHEET	WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING

Mounting Details: Floor mounted with 4 - 1/2" diameter grade 5 bolts with 3.5x1.5x0.25" A36 seismic plate washers.



Manufacturer: Siemens Industry, Inc.	**Test Location:** ETL
Product Line: Switchboard and IPS Switchgear	**Report Number:** 16873
Model Number: SWBD-SB3-HD-25X20	**UUT No. in Test Report:** UUT-2

UUT Function: Switchboards redirect and control the flow of electricity, as well as, providing low voltage circuit protection.

UUT Description: The unit is comprised of a NEMA 1/1A/2 carbon steel enclosures that contains a 1200A bus, 3VA circuit breaker (3VA67), control power transformer (MT0300A), and power meter (9810).

UUT PROPERTIES

Weight (lb)	Enclosure Dimensions (inches)				Natural Fequency (Hz)		
	Width	Depth	Height	CG	FB	SS	V
440	25	20	90	48	9.2	11.4	>33

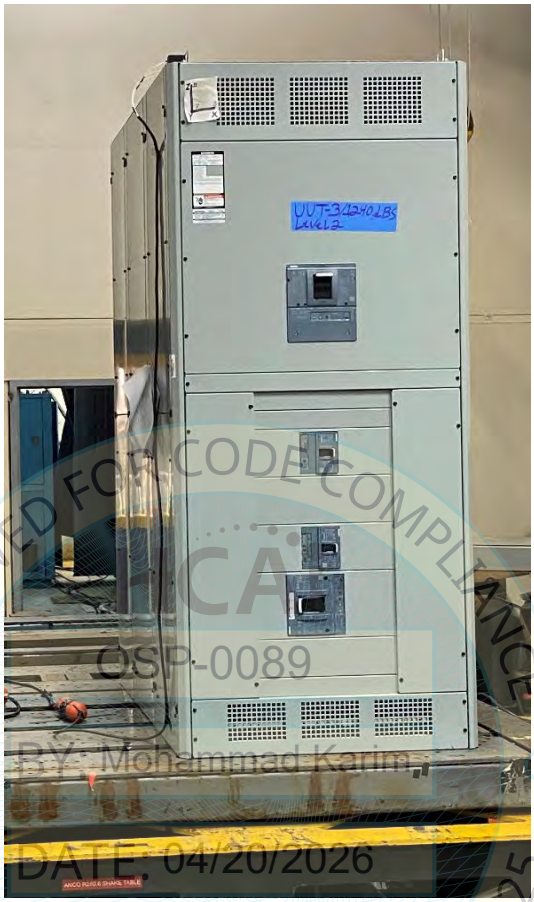
SEISMIC TEST PARAMETERS - CBC 2025 / ICC-ES AC 156-24

	S_{DS} (g)	I_P	z / h	H_f	R_μ	A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
	1.70	1.5	1.0	3.5	1.30	2.72g	1.83g	-	-
	2.50		0.0	1.0	1.00	-	-	1.68g	0.68g

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.

UUT_z-3	UNIT UNDER TEST (UUT) SUMMARY SHEET	WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING

Mounting Details: Floor mounted with 4 - 1/2" diameter grade 5 bolts with 3.5x1.5x0.25" A36 seismic plate washers.



Manufacturer: Siemens Industry, Inc.	**Test Location:** ETL
Product Line: Switchboard and IPS Switchgear	**Report Number:** 16873
Model Number: SWBD-SB3-HD-38X58	**UUT No. in Test Report:** UUT-3

UUT Function: Switchboards redirect and control the flow of electricity, as well as, providing low voltage circuit protection.

UUT Description: The unit is comprised of a NEMA 1/1A/2 carbon steel enclosures that contains a 1600A bus and 3VA circuit breaker (3VA54, 3VA53, 3VA66, 3VA68).

UUT PROPERTIES

Weight (lb)	Enclosure Dimensions (inches)				Natural Fequency (Hz)		
	Width	Depth	Height	CG	FB	SS	V
1,240	38	58	90	44	9.1	6.3	22.2

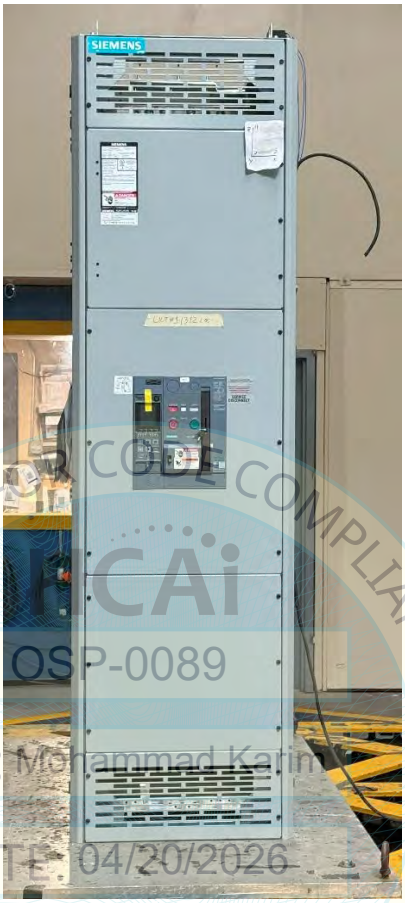
SEISMIC TEST PARAMETERS - CBC 2025 / ICC-ES AC 156-24

	S_{DS} (g)	I_P	z / h	H_f	R_μ	A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
	1.70	1.5	1.0	3.5	1.30	2.72g	1.83g	-	-
	2.50		0.0	1.0	1.00	-	-	1.68g	0.68g

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.

UUT_v-1	UNIT UNDER TEST (UUT) SUMMARY SHEET	WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING

Mounting Details: Floor mounted with 4 - 1/2" diameter grade 5 bolts with 3.5x1.5x0.25" A36 seismic plate washers.



Manufacturer: Siemens Industry, Inc.	**Test Location:** ETL
Product Line: Switchboard and IPS Switchgear	**Report Number:** 17715
Model Number: SWBD-SB3-HD-25x38	**UUT No. in Test Report:** UUT-1

UUT Function: Switchboards redirect and control the flow of electricity, as well as, providing low voltage circuit protection.

UUT Description: The unit is comprised of a NEMA 1/1A/2 carbon steel enclosures that contains a 3000A bus and a 3WA circuit breaker (3WA2230).

UUT PROPERTIES

Weight (lb)	Enclosure Dimensions (inches)				Natural Fequency (Hz)		
	Width	Depth	Height	CG	FB	SS	V
1,312	25	38	90	48.5	10.3	5.2	>33

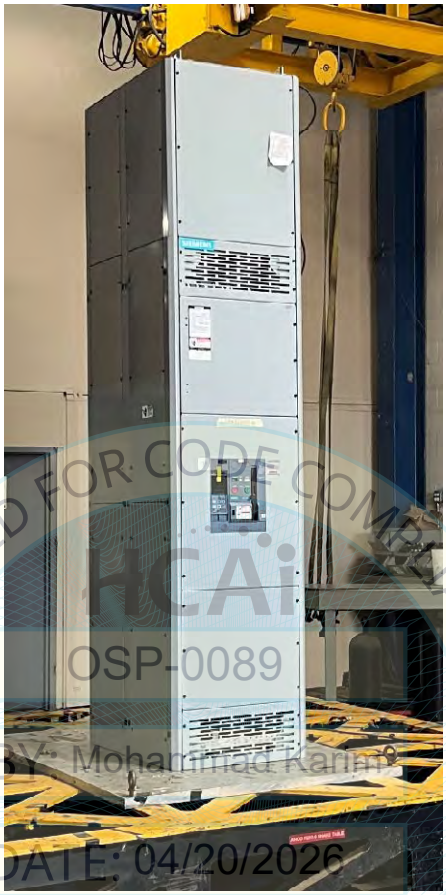
SEISMIC TEST PARAMETERS - CBC 2025 / ICC-ES AC 156-24

	S_{DS} (g)	I_P	z / h	H_f	R_μ	A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
	1.70	1.5	1.0	3.5	1.30	2.72g	1.83g	-	-
	2.50		0.0	1.0	1.00	-	-	1.68g	0.68g

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.

UUT_v-1A	UNIT UNDER TEST (UUT) SUMMARY SHEET	WEGAI W.E. Gundy & Associates, Inc. Structural & Earthquake Engineering

Mounting Details: Floor mounted with 4 - 1/2" diameter grade 5 bolts with 3.5x1.5x0.25" A36 seismic plate washers.



Manufacturer: Siemens Industry, Inc.	**Test Location:** ETL
Product Line: Switchboard and IPS Switchgear	**Report Number:** 17715
Model Number: SWBD-SB3-HD-25x38	**UUT No. in Test Report:** UUT-1a

UUT Function: Switchboards redirect and control the flow of electricity, as well as, providing low voltage circuit protection.

UUT Description: The unit is comprised of a NEMA 1/1A/2 carbon steel enclosures that contains a 3000A bus, 3WA circuit breaker (3WA2230) and a 30" top cable extension box.

UUT PROPERTIES

Weight (lb)	Enclosure Dimensions (inches)				Natural Fequency (Hz)		
	Width	Depth	Height	CG	FB	SS	V
1,442	25	38	120	49.5	7.0	4.0	27.7

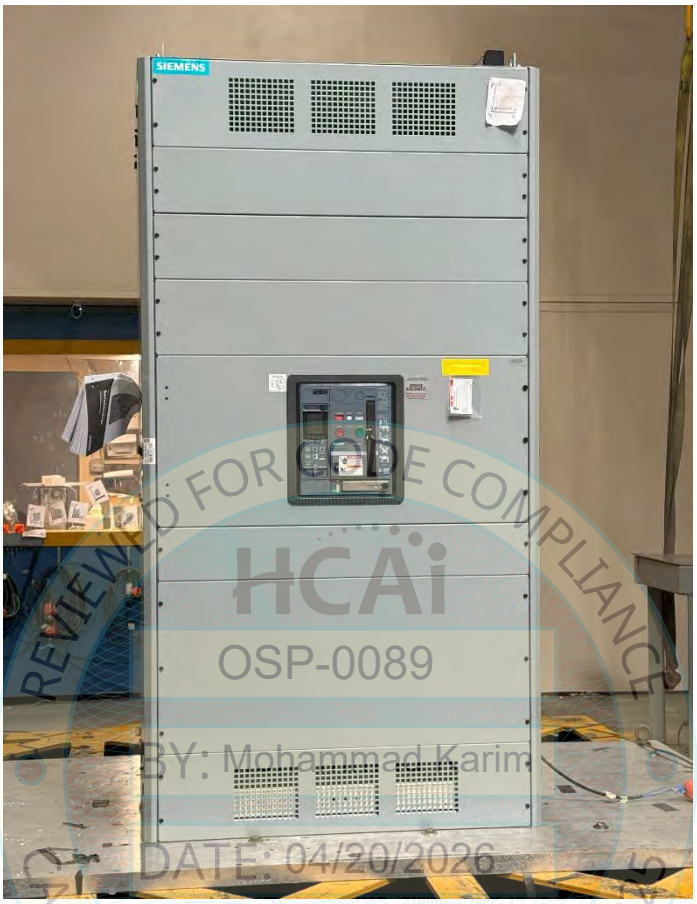
SEISMIC TEST PARAMETERS - CBC 2025 / ICC-ES AC 156-24

	S_{DS} (g)	I_P	z / h	H_f	R_μ	A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
	1.70	1.5	1.0	3.5	1.30	2.72g	1.83g	-	-
	2.50		0.0	1.0	1.00	-	-	1.68g	0.68g

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.

UUT_v-2	UNIT UNDER TEST (UUT) SUMMARY SHEET	WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING

Mounting Details: Floor mounted with 4 - 1/2" diameter grade 5 bolts with 3.5x1.5x0.25" A36 seismic plate washers.



Manufacturer: Siemens Industry, Inc.	**Test Location:** ETL
Product Line: Switchboard and IPS Switchgear	**Report Number:** 17715
Model Number: SWBD-SB3-HD-46X38	**UUT No. in Test Report:** UUT-2

UUT Function: Switchboards redirect and control the flow of electricity, as well as, providing low voltage circuit protection.

UUT Description: The unit is comprised of a NEMA 1/1A/2 carbon steel enclosures that contains a 5000A bus and a 3WA circuit breaker (3WA2350).

UUT PROPERTIES

Weight (lb)	Enclosure Dimensions (inches)				Natural Fequency (Hz)		
	Width	Depth	Height	CG	FB	SS	V
2,992	46	38	90	48	5.5	5.1	>33

SEISMIC TEST PARAMETERS - CBC 2025 / ICC-ES AC 156-24

	S_{DS} (g)	I_P	z / h	H_f	R_μ	A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
	1.70	1.5	1.0	3.5	1.30	2.72g	1.83g	-	-
	2.50		0.0	1.0	1.00	-	-	1.68g	0.68g

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.