



OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION

APPLICATION FOR OSHPD PREAPPROVAL OF MANUFACTURER'S CERTIFICATION (OPM)

OFFICE USE ONLY
APPLICATION #: OPM-0072-13

OSHPD Preapproval of Manufacturer's Certification (OPM)

Type: [X] New [] Renewal [] Update to Pre-CBC 2013 OPA Number:

Manufacturer Information

Manufacturer: The Siemon Company

Manufacturer's Technical Representative: Justin St Jean

Mailing Address: 101 Siemon Company Dr., Watertown, CT, 06795

Telephone: 860-945-8416 Email: justin_stjean@siemon.com

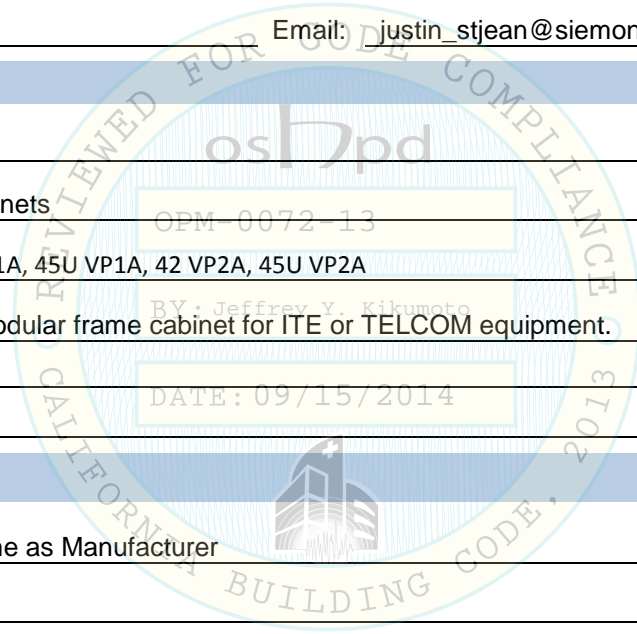
Product Information

Product Name: VersaPOD

Product Type: Data Center Cabinets

Product Model Number: 42U VP1A, 45U VP1A, 42 VP2A, 45U VP2A

General Description: 4 post, modular frame cabinet for ITE or TELCOM equipment.



Applicant Information

Applicant Company Name: Same as Manufacturer

Contact Person:

Mailing Address:

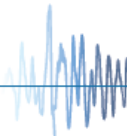
Telephone: Email:

I hereby agree to reimburse the Office of Statewide Health Planning and Development review fees in accordance with the California Administrative Code, 2013.

Signature of Applicant: [Signature] Date: 01/14/2014

Title: Sr. ME TECH, R&D LAB Company Name: The Siemon Company

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





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

Registered Design Professional Preparing Engineering Recommendations

Company Name: RMJ, Robinson, Meier, Juilly & Associates

Name: Jayson Haines California License Number: No.4801

Mailing Address: 241 Joaquin Ave, San Leandro, CA, 94577

Telephone: 501-991-0977 Email: jhaines@rmjse.com

OSHPD Special Seismic Certification Preapproval (OSP)

Special Seismic Certification is preapproved under OSP-
(Separate application for OSP is required)

Special Seismic Certification is no preapproved

Certification Method(s)

Testing in accordance with: ICC-ES AC156 FM 1950-10

Other* (Please Specify): _____

*Use of criteria other than those adopted by the California Building Standards Code, 2013 (CBSC 2013) for component supports and attachments are not permitted. For distribution system, interior partition wall, and suspended ceiling seismic bracings, test criteria other than those adopted in the CBSC 2013 may be used when approved by OSHPD prior to testing.

Analysis

Experience Data

Combination of Testing, Analysis, and/or Experience Data (Please Specify): _____

List of Attachments Supporting the Manufacturer's Certification

Test Report Drawings Calculations Manufacturer's Catalog

Other(s) (Please Specify): _____

OFFICE USE ONLY – OSHPD APPROVAL VALID FOR CBC 2013 ONLY

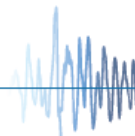
Signature:  Date: 09/15/2014

Print Name: Jeffrey Kikumoto

Title: SSE

Condition of Approval (if applicable): _____

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



Robinson
Meier
Juilly & Associates

Principals
Peter Robinson, S.E.
Jayson E. Haines, S.E.



VersaPOD Series Unit

Structural Drawings

OSHPD PREAPPROVAL OF MANUFACTURER'S CERTIFICATION

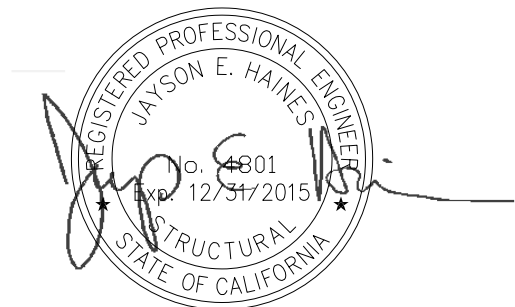
(OPM)

OPM-0072-13



Prepared for:

Siemon
September 3, 2014
RMJ Job No. 14104



241 Joaquin Avenue
San Leandro, CA 94577
(510) 991.0977

GENERAL NOTES

DESIGN

This OSHPD Preapproval of Manufacturer's Certification (OPM) is based on CBC 2013. The demand (design forces) for use with this OPM shall be based on the CBC 2013. This Document may only be used with the express written consent of the manufacturer listed above for the specific project site and installation location. This document is invalid without such consent.

Design Criteria:

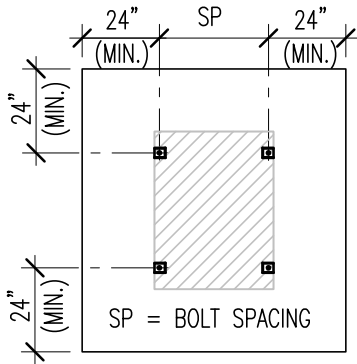
Importance Factor1.5
 Maximum Value of $S_{DS}=2.0$, $a_p=1.0$, $R_p=2.5$, $\Omega_0=2.5$ (As req'd for anchorage to concrete), $z/h=0.0$ (Concrete slab on grade)
 Forces per ASCE 7-10 section 13.3.1, Equations 13.3-1, 13.3-2 & 13.3-3.
 Note: For Site Specific S_{DS} , SEOR shall determine appropriate value to be utilized.

Dimensions: Refer to rough concrete surfaces, or top of slab, unless otherwise indicated.

Fasteners Expansion Anchors:

Anchor Diameter	Concrete Type	Min. f'c (psi)	Anchor Type	ICC Report No.	Min. Embed.	Min. Spacing	Min. Edge Dist.	Min. Conc. Thickness	Torque Test	Direct Tension Test
3/4"	Normal Weight	3000	Hilti Kwik Bolt TZ SS 304	ESR-1917	3 3/4"	26.9"	24"	6"	110 FT-LB	5,514 lb

This preapproval allows for up to a maximum of two adjacent concrete slab edges, 24" away minimum. See detail below for additional minimum allowable concrete edge distances. Testing of expansion anchors per 2013 CBC, 1913A.7: Tension test shall be done in the presence of the special inspector and a report of the test results shall be submitted to OSHPD (After at least 24 hours have elapsed since installation, direct pull tension test or torque test at least 50% of the anchors.) Testing shall be done in the presence of Special Inspector, and a report shall be submitted to the enforcement agency.



TYPICAL CONCRETE EDGE DETAIL

Acceptance Criteria:

Direction Tension Test:

Anchor shall have maintain test load of (15) seconds & shall exhibit no discernable movement during the tension test, e.g., as evidenced by loosening of the washer under the nut.

Torque Test:

The applicable torque must be achieved within the following limits: wedge type: 1/2 turn of the nut.

*If any anchor fails testing, all anchors of the same type shall be tested, which are install by the same trade, not previously tested until twenty (20) consecutive anchors pass, then resume initial test frequency.



<p>Robinson Meier Julliy & Associates 241 Joaquin Ave. San Leandro, CA 94577 510 991-0977</p>	<p>SIEMON VersaPOD Supports & Attachments</p>	<p>Job No. 14104</p>
	<p>Signed by JEH Date 9/2014</p>	<p>Sheet No. SK1</p>

Test Loads:

The pre-approval is in accordance with the 2013 California Building Code.

The details in this pre-approval are applicable to any location in the State of California where S_{DS} is not greater than 2.0. For site specific S_{DS} , SEOR shall determine appropriate value to be utilized.

Anchor forces shown on the drawings are factored loads that shall be used for strength design.

This pre-approval covers only the supports & attachments of the unit to the structure.

RESPONSIBILITY OF STRUCTURAL ENGINEER OF RECORD

1. Verify that the concrete meets the requirements of the applicable ICC ESR.
2. Verify that the anchors are at an adequate distance from any slab opening or edges.
3. Verify that all new or existing anchors are at an adequate distance from the anchors shown in this pre-approval. The SEOR shall verify that there is no adverse interaction where other anchors are within 18" or 6 hef from the unit's anchors.
4. Verify the adequacy of the structure to support the weight and forces shown in this pre-approval in addition to all other weights and forces that are imposed on it.
5. Provide any supplementary structure required for strength and stability.
6. Verify that the installation is in conformance with the 2013 CBC and with the notes and details shown in this pre-approval. Verify that the equipment's actual weight, cg location anchor locations, anchor details and the material and gage of the unit where attachments are made conform with the information shown in this pre-approval.
7. If content weight is less than 33 pcf, maximum live loads permitted shall be posted.

THIS PRE-APPROVAL IS FOR SIEMON VERSAPOD SERIES UNIT

This pre-approval covers cabinet sizes that are from 30" wide either 39" or 47" deep, and a maximum height of 85". Specific Model Numbers are as follows:

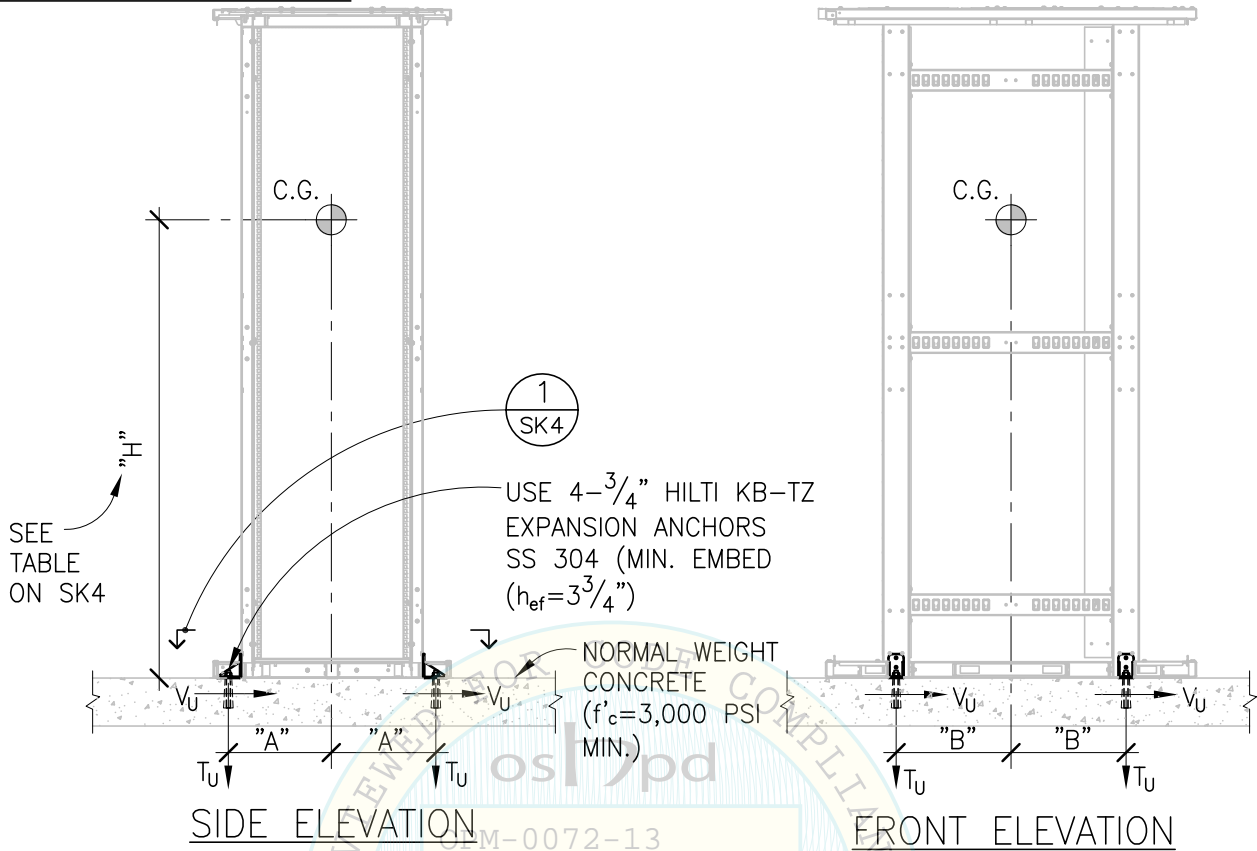
SIEMON VERSAPOD UNITS:

MODEL #	WIDTH x HEIGHT x DEPTH (IN)
42U VP1A	30"x79"x39"
45U VP1A worst case	30"x85"x39"
42U VP2A	30"x79"x47"
45U VP2A	30"x85"x47"



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SEISMIC SUPPORT & ANCHORAGE

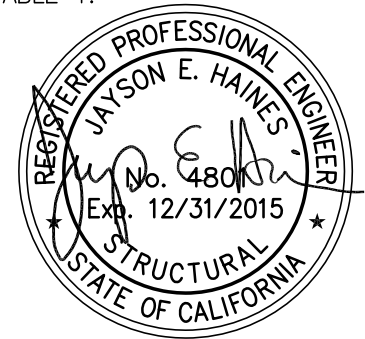


NOTES:

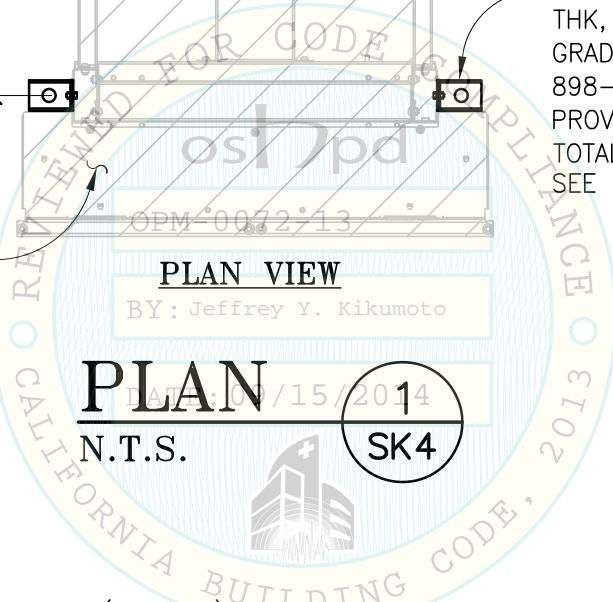
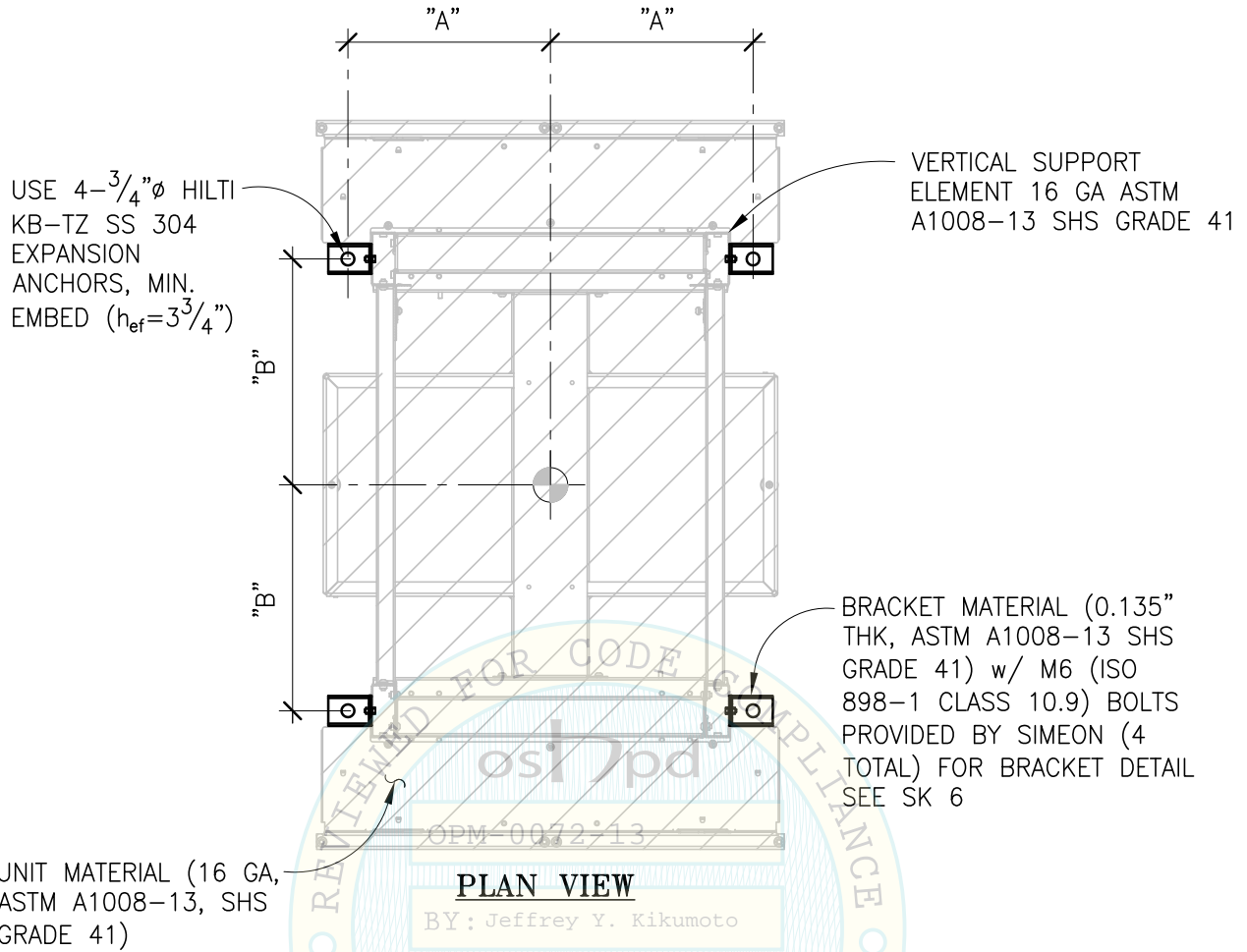
- DESIGN CENTER OF GRAVITY AT 2/3 THE HEIGHT OF THE UNIT. (NOTE: ACTUAL CENTER OF GRAVITY DOES NOT EXCEED DESIGN HEIGHT.)
- FORCES ARE DETERMINED PER 2013 CALIFORNIA BUILDING CODE AND ASCE 7-10 STRENGTH DESIGN.
 HORIZONTAL FORCE ($E_h = 0.9 W_p$ ($S_{DS}=2.0, a_p=1.0, I_p=1.5, R_p=2.5, \Omega_0=2.5, z/h=0$))
 HORIZONTAL FORCE ($E_{HC}=2.25W_p$ ($\Omega_0=2.5$ FOR ANCHORAGE TO CONCRETE)) VERTICAL FORCE ($E_v=0.4W_p$)
- CENTER OF GRAVITY (C.G.) AND WEIGHT ARE THE GOVERNING PARAMETERS FOR DESIGN. PREAPPROVAL ENCOMPASSES ALL WEIGHTS UP TO THE MAX SHOWN.
- SEE GENERAL NOTES FOR ALL OTHER CONDITIONS AND LIMITATIONS.
- SIEMON VERSAPOD EXTERIOR CABINET UNIT COVER COMPOSED OF 14 ga COLD ROLLED STEEL 29.4 ksi.
- SIGN MUST BE POSTED INDICATING CABINET TOTAL WT. LIMITS LISTED IN THE TABLE 1.
- WEIGHTS LISTED IN "TABLE 1" APPLY TO ALL UNITS IRRESPECTIVE OF SIZE.
- MAX CABINET WT CALCULATED w/ THE FOLLOWING OPTIONS: (2) SIDE PANELS, (1) FULL VENTED DOOR, & (1) SPLIT VENTED DOOR.

MAXIMUM CABINET TOTAL WEIGHT (UNIT+CONTENTS) LB (TABLE 1) (for $S_{DS}=2.0$)

MODEL NUMBER	CABINET WT. (LB)	CONTENT WT. (LB)
42U VP1A	316	1,000
45U VP1A	331	1,000
42U VP2A	347	1,000
45U VP2A	358	1,000



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PLAN VIEW

BY: Jeffrey Y. Kikumoto

PLAN 09/15/2014

N.T.S.

SK4

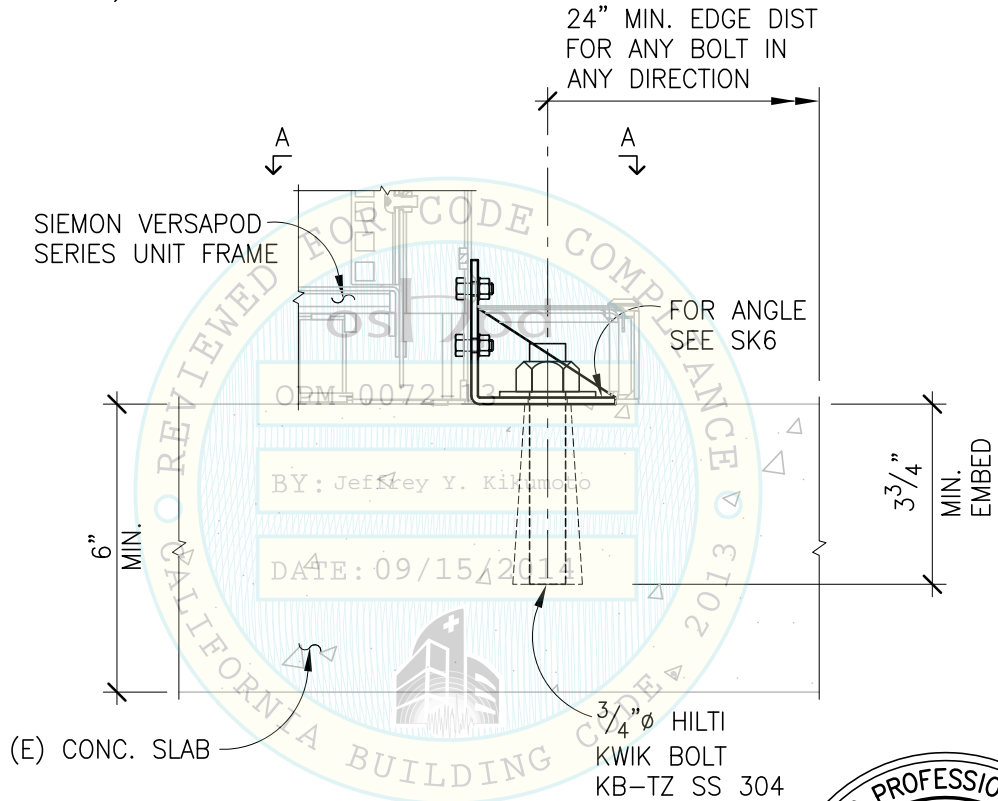
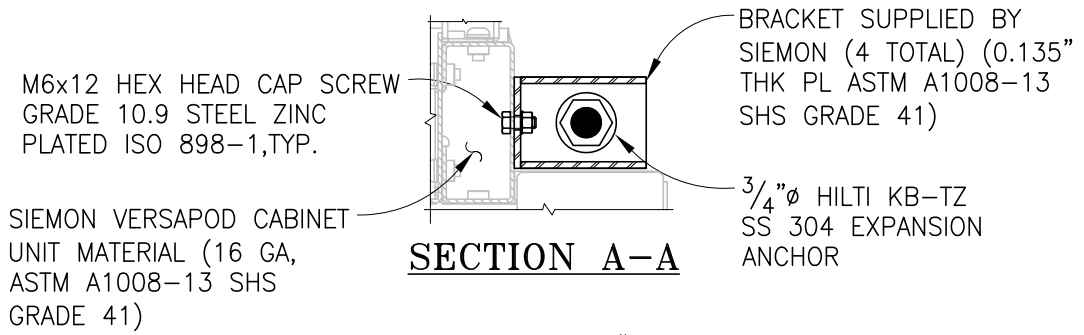
DIMENSIONS, AND DEMAND LOADING (TABLE 2)

MODEL NUMBERS	"H" MAX (in.)	"A" MAX (in.)	"B" MAX (in.)	T _U (lb.)	V _U (lb.)	CABINET WT. (lb.)
42U VP1A	54"	13.47"	14.37"	4,411	1,700	316
45U VP1A	57"	13.47"	14.37"	4,411	1,700	331
42U VP2A	54"	13.47"	18.37"	4,411	1,700	347
45U VP2A	57"	13.47"	18.37"	4,411	1,700	358

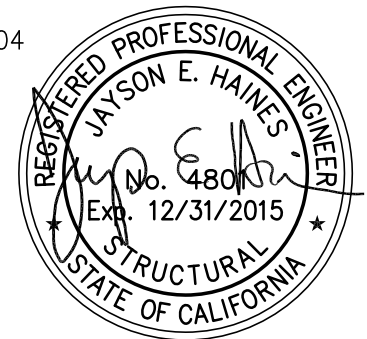
(INCLUDES Ω_0 FOR ANCHORAGE TO CONCRETE)



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	Signed by JEH		Sheet No. <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; text-align: center; line-height: 30px;">SK4</div>
	Date 9/2014		

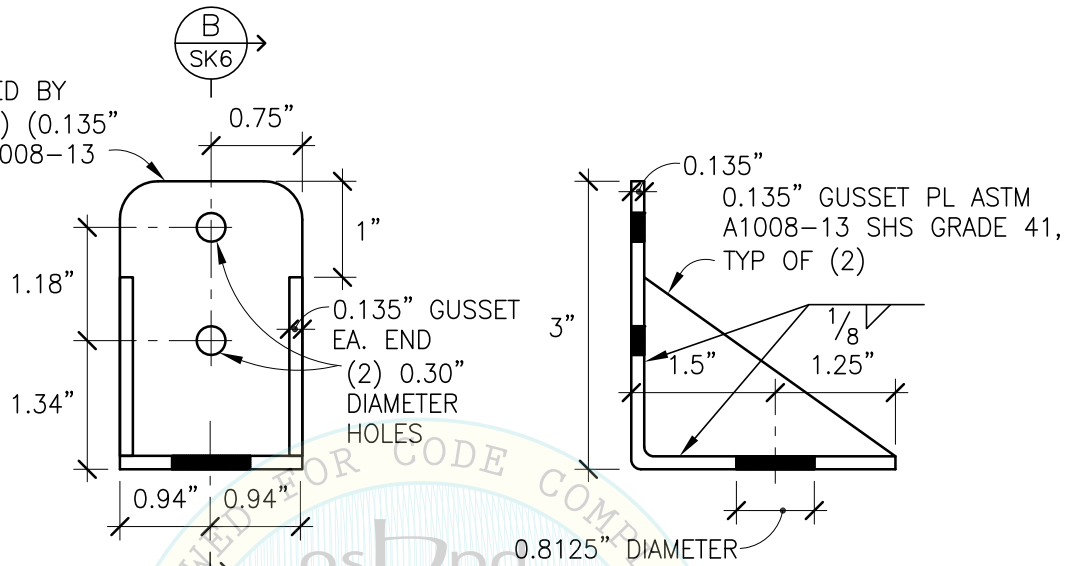


DETAIL 1
3" = 1'-0" SK5



<p>Robinson Meier Jully & Associates</p> <p>Structural Engineers 241 Joaquin Ave. San Leandro, CA 94577 510 991-0977</p>	SIEMON VersaPOD Supports & Attachments	Job No. 14104	
	Signed by JEH	Date 9/2014	Sheet No. SK5

BRACKET SUPPLIED BY
SIEMON (4 TOTAL) (0.135"
THK PL ASTM A1008-13
SHS GRADE 41)



ELEVATION

SECTION

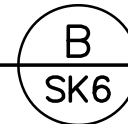
DETAIL A

DETAIL B

N.T.S.



N.T.S.



DATE: 09/15/2014



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