



OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION

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

OFFICE USE ONLY
APPLICATION #: OPM-0514-13

OSHPD Preapproval of Manufacturer's Certification (OPM)

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

Manufacturer Information

Manufacturer: MAC Medical

Manufacturer's Technical Representative: Gary Oliveros

Mailing Address: 820 South Mulberry Street, Millstadt, IL 62260

Telephone: 618-476-3550 Ext. 318 Email: goliveros@macmedical.com

Product Information

Product Name: DUAL CHAMBER WARMING CABINET; DUAL CHAMBER BLANKET/FLUID WARMER; SINGLE CHAMBER WARMING CABINET

Product Type: Blanket warming cabinets.

Product Model Number: DWC183064T, DWC183074E, DWC183074T, DWC242474T, DWC243064T, DWC243074E, DWC243074T, SWC182464, SWC183024, SWC183036, SWC183064, SWC183074, SWC242464, SWC243024, SWC243036, SWC243064, SWC243074

General Description: The blanket and fluid warming cabinets are either single, dual or triple chamber temperature controlled stainless steel cabinets used to warm blankets and fluids.

Applicant Information

Applicant Company Name: MAC Medical

Contact Person: Gary Oliveros

Mailing Address: 820 South Mulberry Street, Millstadt, IL 62260

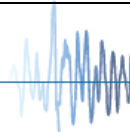
Telephone: 618-476-3550 Ext. 318 Email: goliveros@macmedical.com

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: [Signature] Date: 11/16/18

Title: Director of Quality Compliance Company Name: MAC Medical

"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: CYS STRUCTURAL ENGINEERS, INC.

Name: David M. Calia California License Number: S5614

Mailing Address: 2495 Natomas Park Drive, Suite 650, Sacramento, CA 95833

Telephone: (916) 920-2020 Email: davidc@cyseng.com

OSHPD Special Seismic Certification Preapproval (OSP)

- Special Seismic Certification is preapproved under OSP-
(Separate application for OSP is required)
- Special Seismic Certification is not preapproved

Certification Method(s)

- Testing in accordance with: ICC-ES AC156 FM 1950-16
- Other* (Please Specify): Calculation in accordance with 2016 CBC

*Use of criteria other than those adopted by the California Building Standards Code, 2016 (CBSC 2016) 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 2016 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 2016 & ALL PRE-2016 CODE BASED PROJECTS

Signature:  Date: 6/12/2019

Print Name: Jeffrey Kikumoto

Title: SSE

Condition of Approval (if applicable): _____

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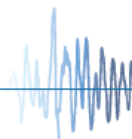
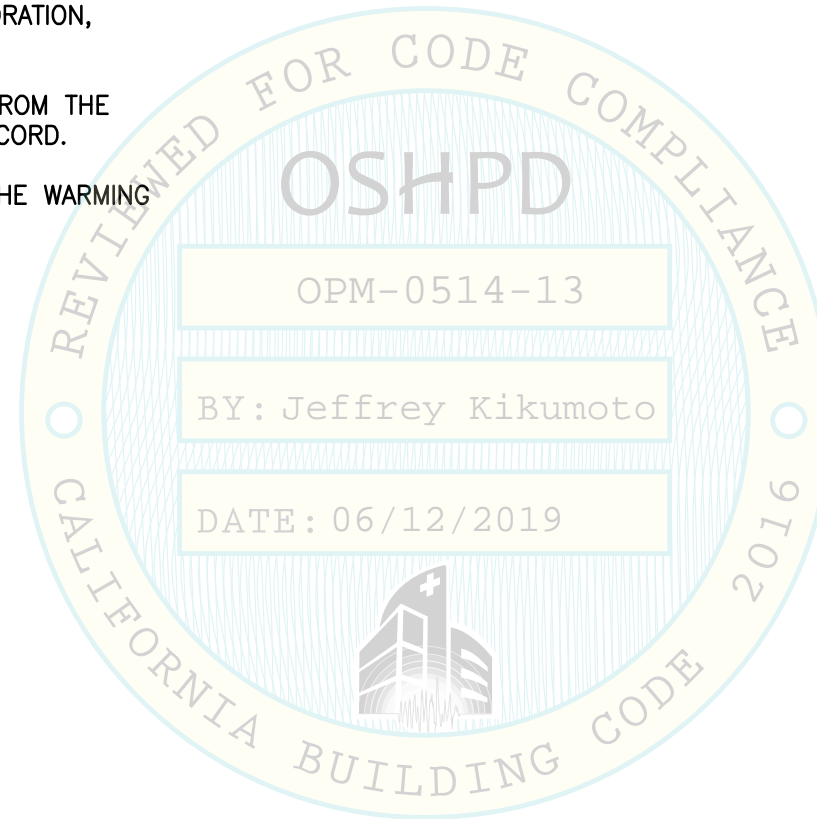


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NOTES: THESE DRAWINGS ARE PREPARED FOR MAC MEDICAL, AN ILLINOIS CORPORATION, MILLSTADT, ILLINOIS.

1. THE CONTRACTOR SHALL OBTAIN A COPY OF THIS PRE-APPROVAL FROM THE OSHPD WEBSITE & PROVIDE ONE COPY FOR THE INSPECTOR OF RECORD.
2. THIS PRE-APPROVAL COVERS THE ATTACHMENTS & SUPPORTS OF THE WARMING CABINET TO THE STRUCTURE.



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MAC MEDICAL
WARMING CABINETS



CYS STRUCTURAL ENGINEERS, INC.

2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833

TEL (916) 920-2020
www.cyseng.com

GENERAL NOTES:

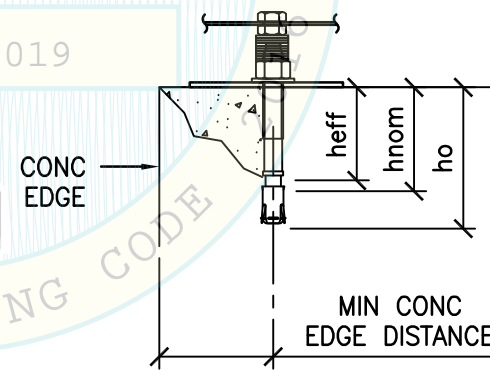
1. THIS OSHPD PRE-APPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE CBC 2016. THE DEMAND (DESIGN FORCES) FOR USE WITH THIS OPM SHALL BE BASED ON THE CBC 2016.
2. THIS OPM PROVIDES SUPPORTS & ATTACHMENT DESIGN & INFORMATION FOR INCORPORATION INTO A CONSTRUCTION DOCUMENT SUBMITTAL TO BE PREPARED BY A REGISTERED DESIGN PROFESSIONAL APPROPRIATELY LICENSED TO DO SO IN THE STATE OF CALIFORNIA & WHOM SHALL FURNISH THE SUBMITTAL TO OSHPD FOR APPROVAL & PERMITTING PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
3. IT IS THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER OF RECORD FOR A SITE SPECIFIC PROJECT TO VERIFY:
 - A. THE ADEQUACY OF THE NEW OR EXISTING STRUCTURE TO RESIST THE FORCES & WT SPECIFIED FOR THE COMPONENT IN ADDITION TO ALL OTHER LOADS. PROVIDE & DESIGN SUPPLEMENTARY MEMBERS AS REQUIRED.
 - B. THAT THE INSTALLATION IS IN CONFORMANCE W/ THE 2016 CBC & W/ THE DETAILS SHOWN IN THIS PRE-APPROVAL.
 - C. THAT THE COMPONENT'S WT, CENTER OF GRAVITY LOCATION & ATTACHMENT HT TO THE MTL STUD WALL FRAMING AGREE W/ THE INFORMATION SHOWN ON THE PRE-APPROVAL DOCUMENTS.
 - D. THAT POST-INSTALLED CONC ANCHORS ARE LOCATED AT AN ADEQUATE DISTANCE FROM ANY WALL EDGES OR OPENINGS.
 - E. THAT POST-INSTALLED CONC ANCHORS ARE LOCATED AT AN ADEQUATE DISTANCE FROM ANY NEW OR EXISTING CONC ANCHORS.
4. THIS PRE-APPROVAL MAY BE USED AT THE GEOGRAPHICAL LOCATIONS IN THE STATE OF CALIFORNIA & HTS WITHIN THE FACILITY SPECIFIED IN THE DESIGN CRITERIA ON PG 4.
5. COORD THE MOUNTING ANCHOR LAYOUT WITH THE COMPONENT IN THE FIELD.
6. WARMER COMPONENTS & MOUNTING HARDWARE AS NOTED SHALL BE PROVIDED BY MFR. CONTRACTOR SHALL FURNISH & INSTALL HARDWARE NOT SUPPLIED BY MFR. SEOR SHALL VERIFY THE METAL STUD WALL FRAMING IS IN ACCORDANCE WITH THESE PRE-APPROVAL DOCUMENTS OR SHALL DESIGN THE METAL STUD FRAMING IN ACCORDANCE WITH THESE PRE-APPROVAL DOCUMENTS. CONTRACTOR SHALL ALSO INSTALL THE WARMER'S MOUNTING HARDWARE TO THE MTL STUD WALL FRAMING AS WELL AS THE WARMER ITSELF.
7. DRAWING SCALES ARE NOT PROVIDED. DO NOT SCALE OFF OF THESE DRAWINGS. THE INTENT OF THESE DRAWINGS IS TO SHOW HOW TO ATTACH THE SPECIFIED WARMER TO THE WALL STRUCTURE. THE REPRESENTATIONS OF THE EQUIP ARE ONLY INTENDED TO SHOW THE COORD W/ THE ATTACHMENTS.
8. CYS STRUCTURAL ENGINEERS, INC. IS NOT THE SEOR AS IT RELATES TO VERIFICATION OF SITE CONDITIONS & REQ OBSERVATIONS PER CHAPTER 17/17A OF THE CBC, UNLESS CYS STRUCTURAL ENGINEERS, INC. IS LISTED AS THE SEOR ON THE APPROVED CONSTRUCTED DOCUMENTS.
9. A. EXPANSION ANCHORS INSTALLED IN NWC SHALL BE CARBON STL HILTI KB-TZ EXPANSION ANCHORS COMPLYING W/ ICC-ES ESR-1917 REVISED APRIL 2018.
 B. INSTALLATION: INSTALL THE POST-INSTALLED ANCHORS IN ACCORDANCE W/ THE REQUIREMENTS GIVEN IN THE ICC EVALUATION SERVICE REPORT FOR THE SPECIFIC ANCHOR & THE PARAMETERS GIVEN IN TABLE 1A ON PG 6 OF 16 IN THE REPORT.
 C. TESTING:
 - JOB TESTING: FOR VERIFYING SATISFACTORY INSTALLATION WORKMANSHIP, PERFORM JOB SITE TESTING IN ACCORDANCE W/ THE TEST LOAD TABLE PROVIDED IN THIS DOCUMENT. TEST 50% OF THE INSTALLED ANCHORS. FOR TENSION TESTING, THE TEST LOAD MAY BE APPLIED BY ANY METHOD THAT WILL EFFECTIVELY MEASURE THE TENSION IN THE ANCHOR SUCH AS DIRECT PULL W/ A HYDRAULIC JACK OR CALIBRATED SPRING LOADING DEVICES. FOR TORQUE TESTING, THE TEST LOAD SHALL BE APPLIED W/ A CALIBRATED TORQUE WRENCH. ALL TESTS SHALL BE CONDUCTED IN THE PRESENCE OF THE INSPECTOR OF RECORD. REPORT OF TEST RESULTS SHALL BE SUBMITTED TO THE ENFORCEMENT AGENCY. IF ANY ANCHOR FAILS THE TEST, TEST ALL ANCHORS. THE TEST SHALL BE PERFORMED 24 HOURS OR MORE AFTER INSTALLATION. TESTING MAY BE DONE PRIOR TO EQUIP INSTALLATION. ALSO REFER TO CBC 1913A.7 "FIELD TESTS FOR POST-INSTALLED ANCHORS IN CONCRETE".

GENERAL NOTES: (CONTINUED)

9. C. (CONTINUED)
 - FAILURE/ACCEPTANCE CRITERIA: THE FOLLOWING CRITERIA APPLY FOR THE ACCEPTANCE OF INSTALLED ANCHORS:
 - **HYDRAULIC RAM METHOD:** APPLY & HOLD TEST LOAD FOR A MIN OF 15 SECONDS. THE ANCHOR SHOULD HAVE NO OBSERVABLE MOVEMENT AT THE APPLICABLE TEST LOAD WHERE WASHERS ARE USED. A PRACTICAL WAY TO DETERMINE OBSERVABLE MOVEMENT IS THAT THE WASHER UNDER THE NUT BECOMES LOOSE OR BY A CONTINUOUS LOSS OF JACKING PRESSURE.
 - **TORQUE WRENCH METHOD:** THE APPLICABLE TEST TORQUE MUST BE REACHED WITHIN THE FOLLOWING LIMITS:
 1. WEDGE TYPE: ONE-HALF (1/2) TURN OF THE NUT.
 - D. TEST VALUES: APPLY TEST LOADS TO ANCHORS WITHOUT REMOVING THE NUT IF POSSIBLE, SEE TABLE BELOW.
 - E. POST-INSTALLED ANCHORS SHALL BE INSTALLED WITH FULL THRD ENGAGEMENT OF THE NUT & WASHER.
 - F. ANCHORS SHALL BE INSTALLED IN NWC W/ A MIN COMPRESSIVE STRENGTH OF 2,500 PSI (f'c = 2500 PSI MIN).
 - G. COORDINATE THE AB LAYOUT W/ THE COMPONENT IN THE FIELD PRIOR TO SETTING AB'S.

TABLE 1: POST-INSTALLED ANCHOR SCHEDULE

ANCHOR TYPE & DIA (INCH)	INSTALLATION EMBED (INCH) hnom	EFFECTIVE EMBED (INCH) heff	HOLE DEPTH (INCH) ho	MIN CONC THICKNESS (INCH) h	MIN CONC EDGE DISTANCE (INCH)	MIN AB SPACING UNO (INCH)	TEST LOAD	
							TENSION LOAD (LBS)	TORQUE (FT-LBS)
KB-TZ CS 0.375"φ	3.0625	2.75	3.375	6	12	6	1925	25



MECHANICAL ANCHOR



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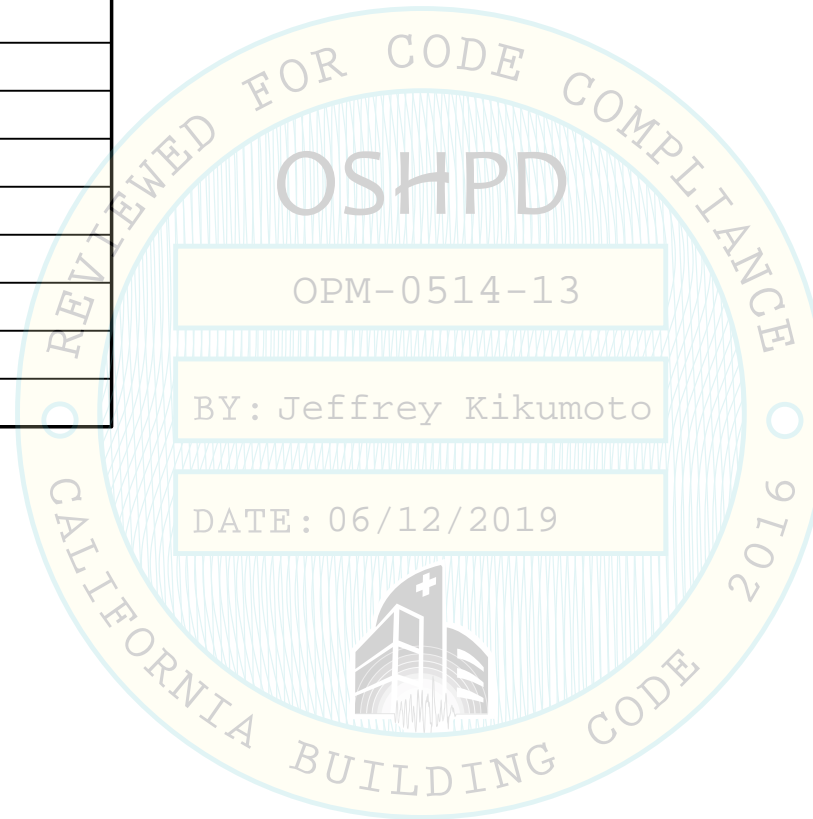
mac MEDICAL
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WARMING CABINETS

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TABLE 2: PRODUCT MODEL & DESCRIPTION

MODEL NO.	CABINET TYPE	CABINET DESCRIPTION
DWC183064T	64.75" DWC	DUAL CHAMBER WARMING CABINET
DWC183074E	74.5" DWC	DUAL CHAMBER BLANKET/FLUID WARMER
DWC183074T	74.5" DWC	DUAL CHAMBER WARMING CABINET
DWC242474T	74.5" DWC	DUAL CHAMBER BLANKET/FLUID WARMER
DWC243064T	64.75" DWC	DUAL CHAMBER BLANKET/FLUID WARMER
DWC243074E	74.5" DWC	DUAL CHAMBER BLANKET/FLUID WARMER
DWC243074T	74.5" DWC	DUAL CHAMBER BLANKET/FLUID WARMER
SWC182464	64.75" SWC	SINGLE CHAMBER WARMING CABINET
SWC183024	24" SWC	SINGLE CHAMBER WARMING CABINET
SWC183036	36" SWC	WARMER, SINGLE CHAMBER
SWC183064	64.75" SWC	SINGLE CHAMBER WARMING CABINET
SWC183074	74.5" SWC	SINGLE CHAMBER WARMING CABINET
SWC242464	74.5" SWC	SINGLE CHAMBER WARMING CABINET
SWC243024	24" SWC	SINGLE CHAMBER CABINET
SWC243036	36" SWC	WARMER, SINGLE CHAMBER
SWC243064	64.75" SWC	SINGLE CHAMBER CABINET
SWC243074	74.5" SWC	SINGLE CHAMBER WARMING CABINET



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DESIGN CRITERIA

SUPPORTS & ATTACHMENTS DESIGN FOR ALL EQUIP COMPONENTS IS PER 2016 CBC

ALL EQUIP (UNO)
 ASCE 7-10 TABLE 13.6-1
 MECHANICAL & ELECTRICAL COMPONENTS – CABINET HEATERS

MTL STUD WALL
 $z/h \leq 1.0$
 $S_{ps} \leq 2.5$

$I_p = 1.5$
 $R_p = 2.5$
 $R_p = 6.0$
 $\Omega_b = 2.0$

W_p AS NOTED ON COMPONENT DIM SCHED SHOWN ON PG 5.

SEISMIC LOADS

AT MTL STUD WALL (LRFD)

$F_p = 1.875 W_p$

$F_v = 0.50 W_p$

CONC WALL (LRFD)

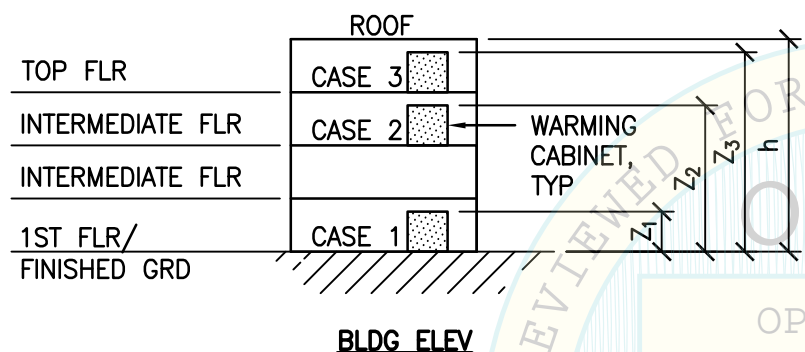


TABLE 3: SEISMIC DESIGN CRITERIA / LOAD CASE

	CASE 1: ($z_1/h \leq 0.4$)			CASE 2: ($z_2/h \leq 0.75$)			CASE 3: ($z_3/h \leq 1.0$)		
	S_{ps}	F_p/W_p	F_v/W_p	S_{ps}	F_p/W_p	F_v/W_p	S_{ps}	F_p/W_p	F_v/W_p
WARMING CABINET									
24" SWC	2.50	1.125	0.50	2.50	1.563	0.50	2.50	1.875	0.50
36" SWC	2.50	1.125	0.50	2.00	1.250	0.40	1.65	1.238	0.33
64.75" SWC	1.85	0.833	0.37	1.35	0.844	0.27	1.10	0.825	0.22
64.75" DWC	2.10	0.945	0.42	1.50	0.938	0.30	1.25	0.938	0.25
74.5" SWC	2.50	1.125	0.50	2.00	1.250	0.40	1.65	1.238	0.33
74.5" DWC	1.75	0.788	0.35	1.25	0.781	0.25	1.05	0.788	0.21

NOTES:

- CASE 2 MAY BE USED FOR WARMERS LOCATED ON THE FIRST FLR OF A ONE-STORY BLDG.
- BOLD TEXT INDICATES GOVERNING CONDITION. REFER TO TABLE 5 AND 6 FOR RESULTING ATTACHMENT REACTIONS TO THE WALL AND FLOOR RESPECTIVELY.

ABBREVIATIONS:

- @ AT
- AB ANCHOR BOLT
- AISI AMERICAN INSTITUTE FOR STEEL CONSTRUCTION
- ASCE AMERICAN SOCIETY OF CIVIL ENGINEERS
- ASME AMERICAN SOCIETY OF MECHANICAL ENGINEERS
- ASTM AMERICAN SOCIETY FOR TESTING & MATERIALS
- BLDG BUILDING
- BOTT BOTTOM
- BTW BETWEEN
- CBC CALIFORNIA BUILDING CODE
- CG CENTER OF GRAVITY
- CLR CLEAR OR CLEARANCE
- CLSE CALIFORNIA LICENSED STRUCTURAL ENGINEER
- CL CENTERLINE
- CONC CONCRETE
- CONN CONNECTION
- COORD COORDINATE/COORDINATION
- CTR CENTER
- DBL DOUBLE
- DIA (ϕ) DIAMETER
- DIM DIMENSION
- DTL DETAIL
- DWC DUAL WARMING CABINET
- EA EACH
- ELEV ELEVATION
- EQ EQUAL
- EQUIP EQUIPMENT
- ES EACH SIDE
- FF FINISHED FLOOR
- FLR FLOOR
- FT (') FOOT/FEET
- f'c MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE
- F_p HORIZONTAL SEISMIC FORCE PER ASCE 7-10 SEISMIC FORCE REQUIREMENTS
- F_u SPECIFIED ULTIMATE STRENGTH OF REINFORCING, PSI OR SPECIFIED MINIMUM ULTIMATE STRESS OF STEEL, KSI
- F_v VERTICAL SEISMIC FORCE PER ASCE 7-10 SEISMIC FORCE REQUIREMENTS
- F_y SPECIFIED YIELD STRENGTH OF REINFORCING, PSI OR SPECIFIED MINIMUM YIELD STRESS OF STEEL, KSI
- GA GAUGE
- GAL GALLON(S)
- GRD GRADE
- HT HEIGHT
- ICC INTERNATIONAL CODE COUNCIL
- IN (") INCH
- KSI KIPS PER SQUARE INCH
- L LENGTH
- LBS POUNDS
- LRFD LOAD & RESISTANCE FACTOR DESIGN
- MAX MAXIMUM
- MFR MANUFACTURER
- MIL MILLIMETER
- MIN MINIMUM
- MTL METAL

- NO.(#) NUMBER
- NTS NOT TO SCALE
- NWC NORMAL WEIGHT CONCRETE
- OH OPPOSITE HAND
- OPM OSHPD PRE-APPROVAL OF MANUFACTURER'S CERTIFICATION
- OSHPD OFFICE OF STATEWIDE HEALTH PLANNING & DEVELOPMENT
- PG PAGE
- PL PLATE
- PSI POUNDS PER SQUARE INCH
- R RADIUS OF GYRATION
- REQ REQUIRED
- SCHED SCHEDULE
- SDST SELF-DRILLING SELF-TAPPING
- SEOR STRUCTURAL ENGINEER OF RECORD
- SFRS SEISMIC FORCE RESISTING SYSTEM
- SIM SIMILAR
- SMS SHEET METAL SCREW
- SPCG SPACING
- SQ SQUARE
- SS STAINLESS STEEL
- STIFF STIFFENER
- STL STEEL
- STRUC STRUCTURAL
- SWC SINGLE WARMING CABINET
- T&B TOP & BOTTOM
- TEMP TEMPORARY
- THK THICKNESS
- THRD THREAD OR THREADED
- T_{max} MAXIMUM TENSION DUE TO SEISMIC FORCE
- T.O. TOP OF
- T_u ANCHORAGE TENSION REACTION DUE TO SEISMIC FORCE
- TYP TYPICAL
- UNO UNLESS NOTED OTHERWISE
- V ANCHORAGE SHEAR REACTION DUE TO SEISMIC FORCE
- V_u ANCHORAGE SHEAR REACTION DUE TO SEISMIC FORCE
- V_{max} MAXIMUM SHEAR DUE TO SEISMIC FORCE
- W/ WITH
- W_p COMPONENT SELF-WEIGHT
- WT WEIGHT



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SHEET TITLE: DESIGN CRITERIA & ABBREVIATIONS

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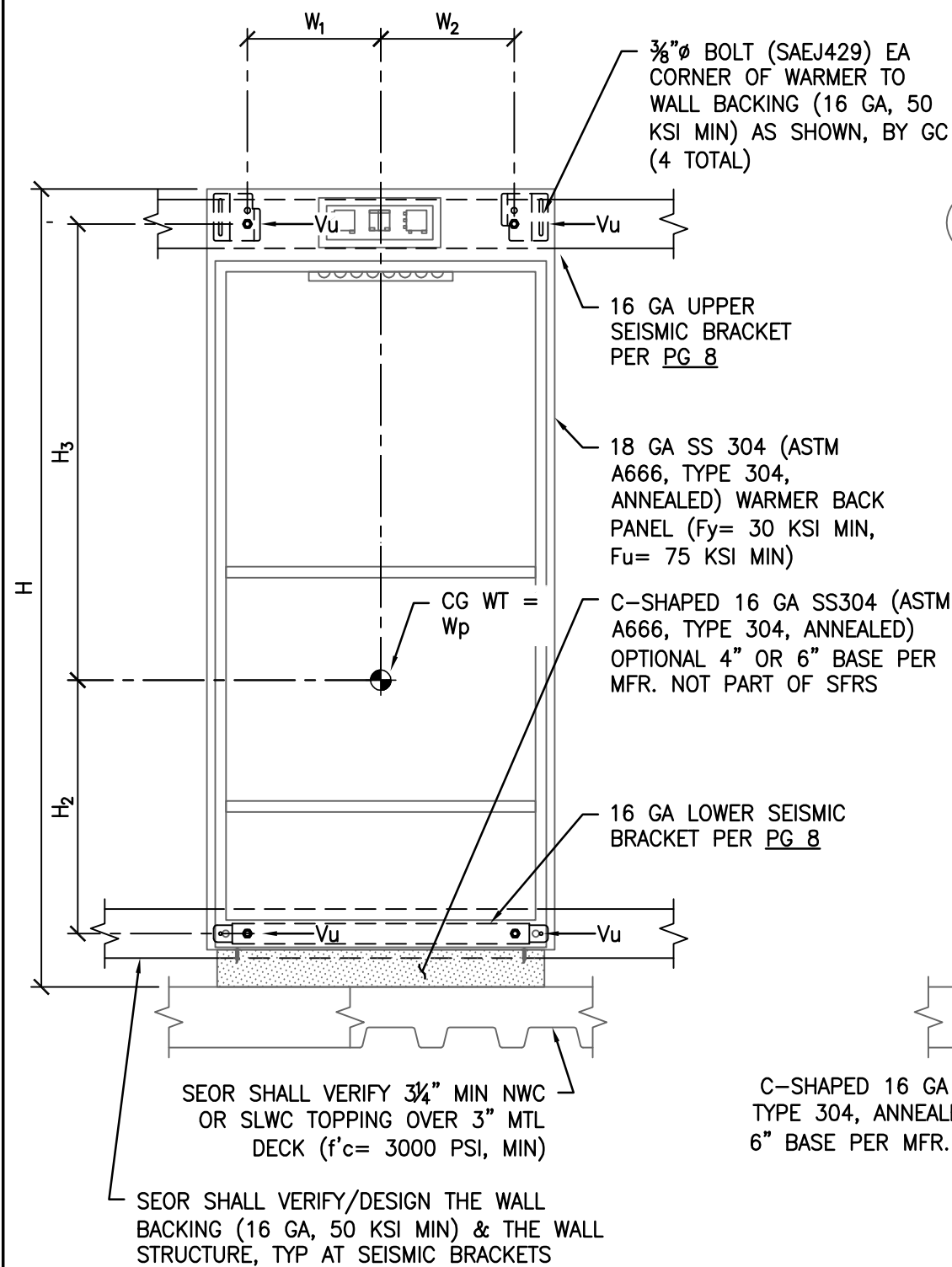
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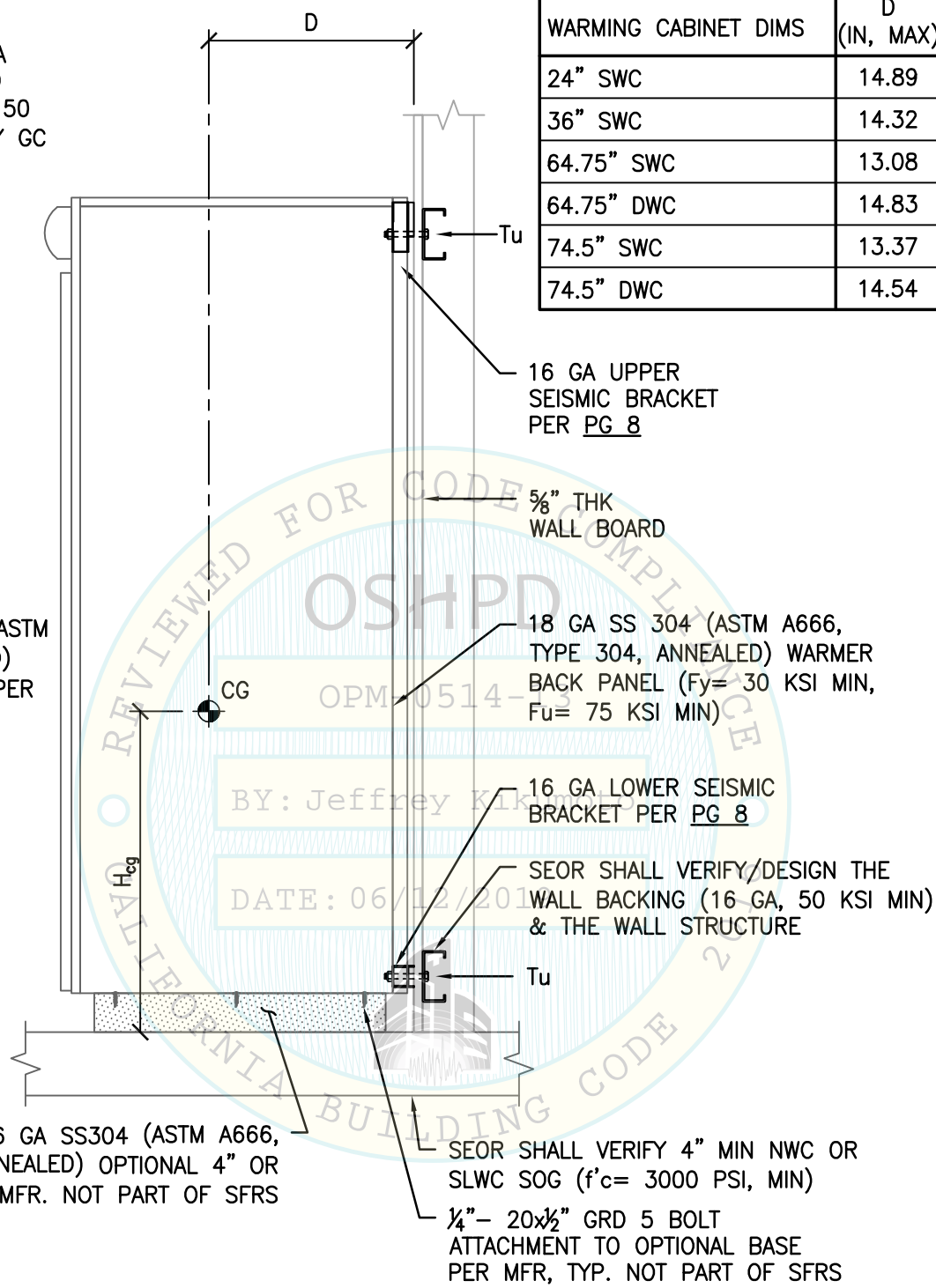
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ELEVATIONS & DIMENSIONS:



FRONT ELEV

$H_{RATIO} = \text{MAX}(H_2, H_3) / (H_2 + H_3)$



SIDE ELEV

TABLE 4: COMPONENT DIMENSIONS

WARMING CABINET DIMS	D (IN, MAX)	H (IN, MAX)	H ₂ (IN)	H ₃ (IN)	H _{RATIO} (MAX)	H _{cg} (IN, MAX)	W ₁ (IN, MIN)	W ₂ (IN, MIN)	W _p (LBS, MAX)
24" SWC	14.89	24.74	10.65	5.8	0.65	18.073	11.5	11.5	169.05
36" SWC	14.32	40.48	2.68	13.97	0.84	23.407	11.5	11.5	243.18
64.75" SWC	13.08	66.42	14.17	28.96	0.67	34.661	8.5	8.5	421.42
64.75" DWC	14.83	66.51	14.21	29.18	0.67	36.094	11.5	11.5	395.22
74.5" SWC	13.37	76.72	19.99	32.45	0.62	39.02	11.5	11.5	341.16
74.5" DWC	14.54	76.23	18.8	33.84	0.64	40.575	8.50	8.50	471.44

TABLE 5: MAX ATTACHMENT REACTIONS AT METAL STUD WALLS

WARMING CABINET REACTIONS (LRFD)	PER ATTACHMENT		GOVERNING SEISMIC DESIGN CRITERIA / CASE	
	Tu (LBS)	Vu (LBS)		
24" SWC	235	103	S _{DS} = 2.50	z ₃ /h ≤ 1.0
36" SWC	429	191	S _{DS} = 2.00	z ₂ /h ≤ 0.75
64.75" SWC	674	265	S _{DS} = 1.35	z ₂ /h ≤ 0.75
64.75" DWC	571	249	S _{DS} = 2.10	z ₁ /h ≤ 0.40
74.5" SWC	428	198	S _{DS} = 2.00	z ₂ /h ≤ 0.75
74.5" DWC	770	284	S _{DS} = 1.75	z ₁ /h ≤ 0.40

NOTES:

- REFER TO TABLE 3 FOR OTHER SEISMIC DESIGN / LOAD CASES.
- REFER TO TABLE 6 FOR MAX ANCHORAGE REACTIONS TO CONC WALL.

NOTES:

- SEOR FOR THE BLDG SHALL PROVIDE RIGID (α_p = 1.0) SUPPORT STRUCTURE DESIGNED TO SUPPORT WTS & FORCES SHOWN, IN ADDITION TO ALL OTHER LOADS.
- SEE GENERAL NOTES: PGS 2-4.



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SHEET TITLE: WARMING CABINET ELEVATIONS & DIMENSIONS

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MOUNTING WALL TYPES:

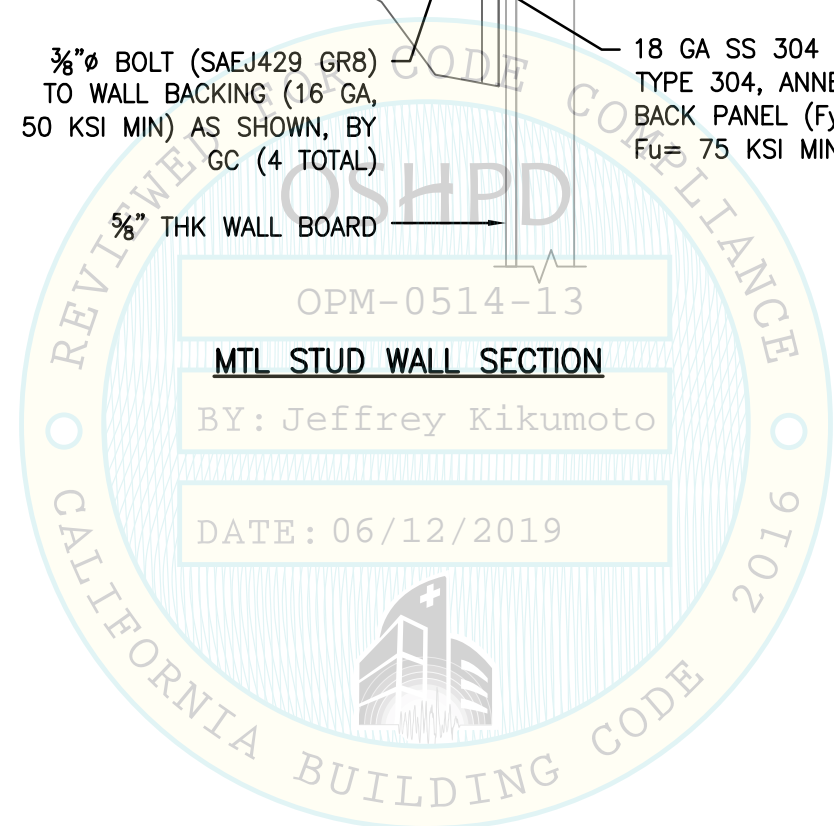
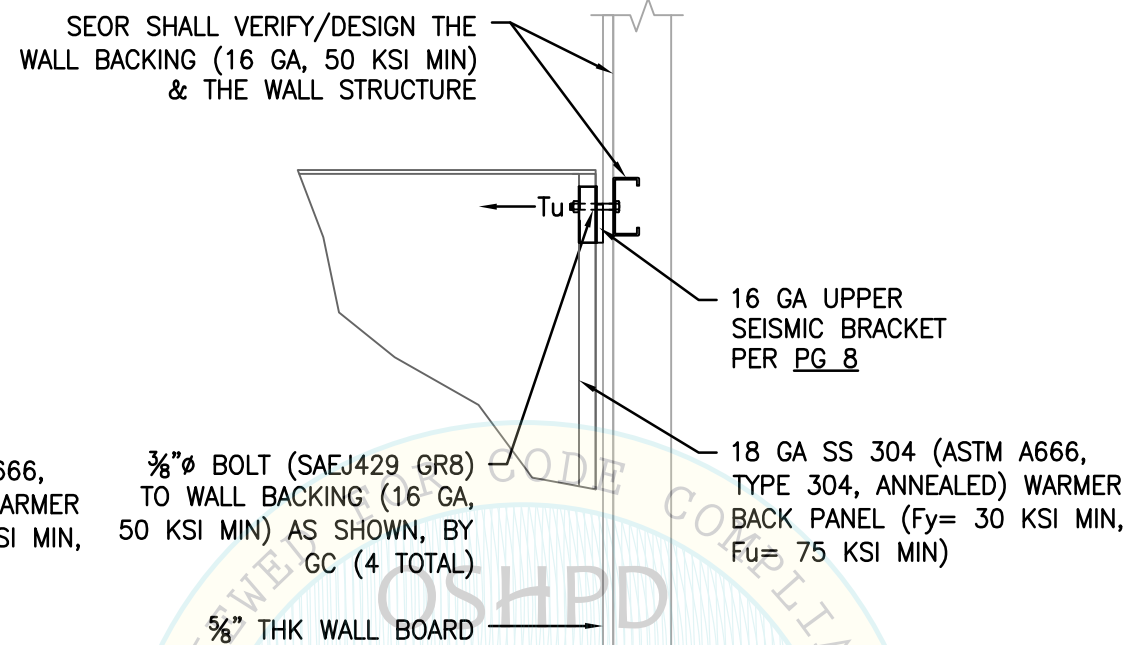
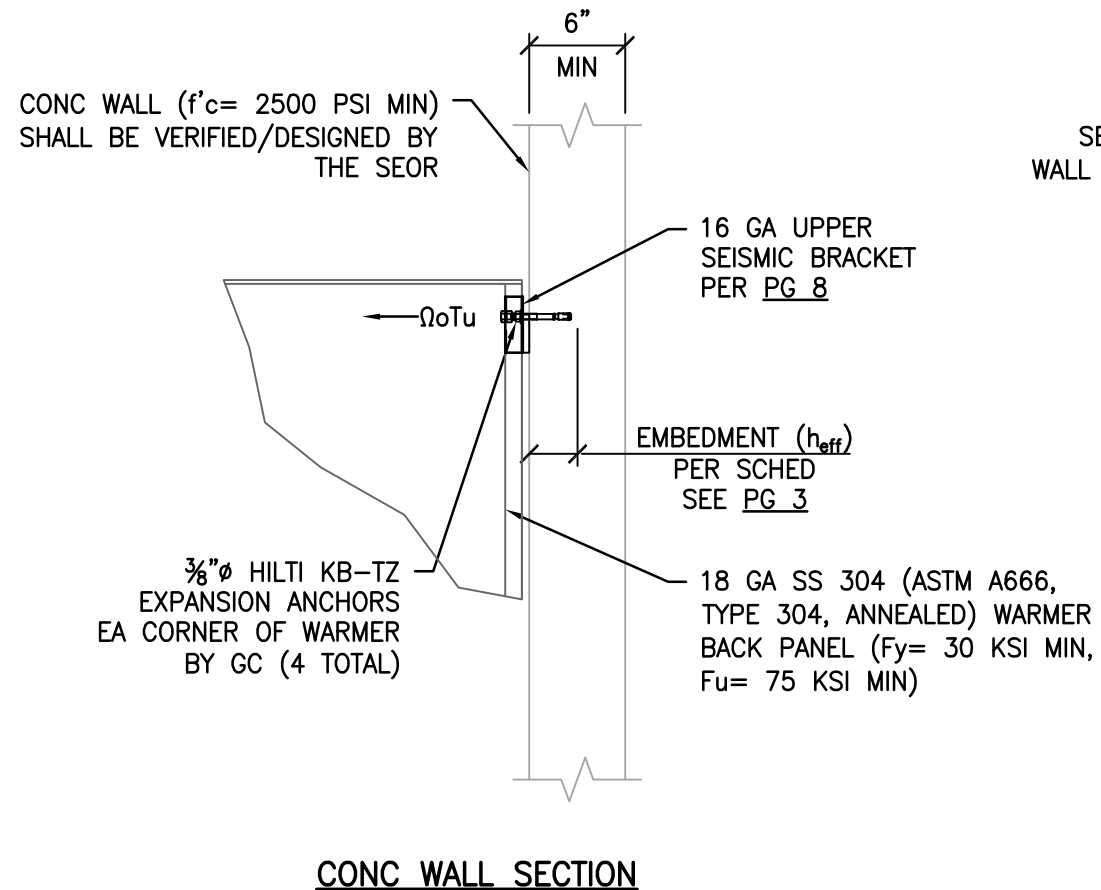


TABLE 6: MAX ANCHORAGE REACTIONS AT CONCRETE WALLS			GOVERNING SEISMIC DESIGN CRITERIA / CASE	
WARMING CABINET REACTIONS (LRFD W / Ω_o)	PER ATTACHMENT			
	$\Omega_o T_u$ (LBS)	$\Omega_o V_u$ (LBS)	S_{DS}	$z_3/h \leq 1.0$
24" SWC	471	205	$S_{DS} = 2.50$	$z_2/h \leq 0.75$
36" SWC	573	255	$S_{DS} = 2.00$	$z_1/h \leq 0.40$
64.75" SWC	611	241	$S_{DS} = 1.35$	$z_2/h \leq 0.75$
64.75" DWC	578	252	$S_{DS} = 2.10$	$z_1/h \leq 0.40$
74.5" SWC	571	264	$S_{DS} = 2.00$	$z_2/h \leq 0.75$
74.5" DWC	657	242	$S_{DS} = 1.75$	$z_1/h \leq 0.40$

NOTES:

- REFER TO TABLE 3 FOR OTHER SEISMIC DESIGN / LOAD CASES.
- REFER TO TABLE 5 FOR MAX ATTACHMENT REACTIONS TO MTL STUD WALLS.

2019-06-10 NOT SEOR



SHEET TITLE: WARMING CABINET MOUNTING WALL TYPES

COORDINATION SET

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			16023
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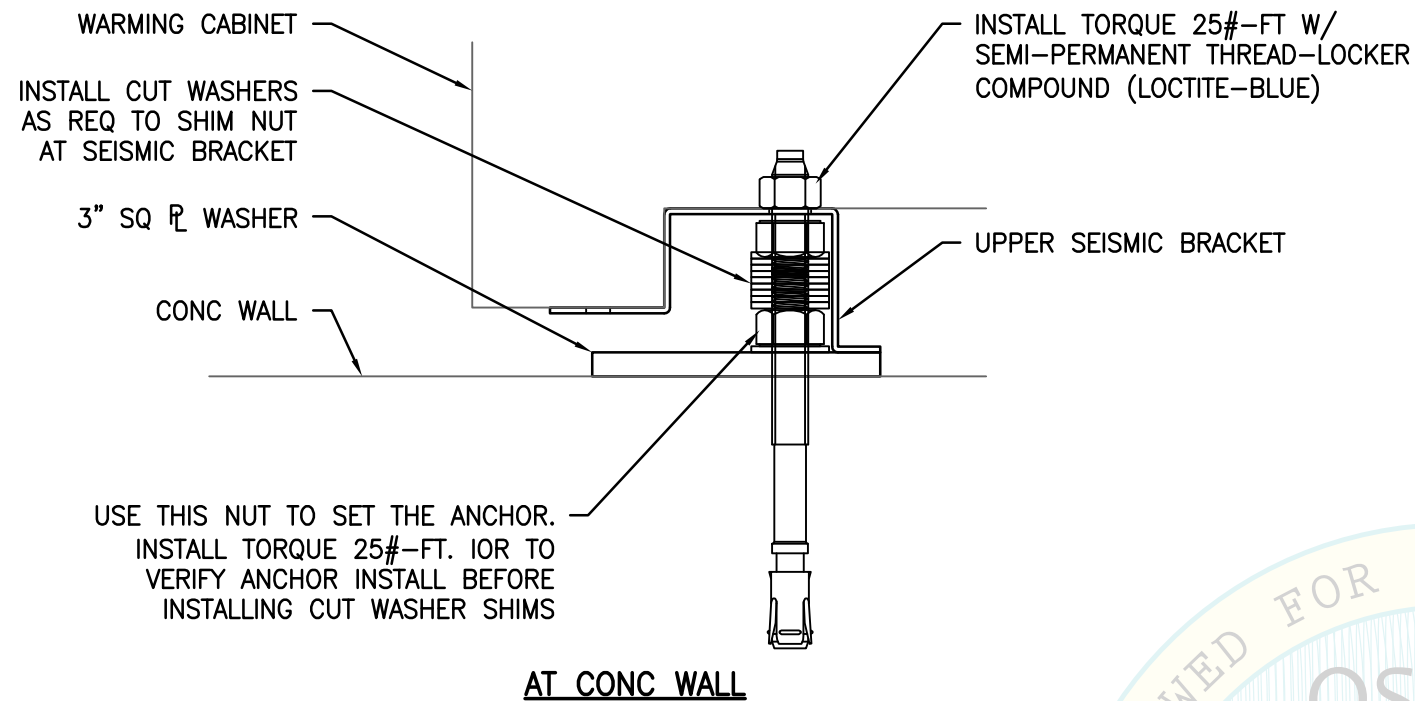
MAC MEDICAL
WARMING CABINETS



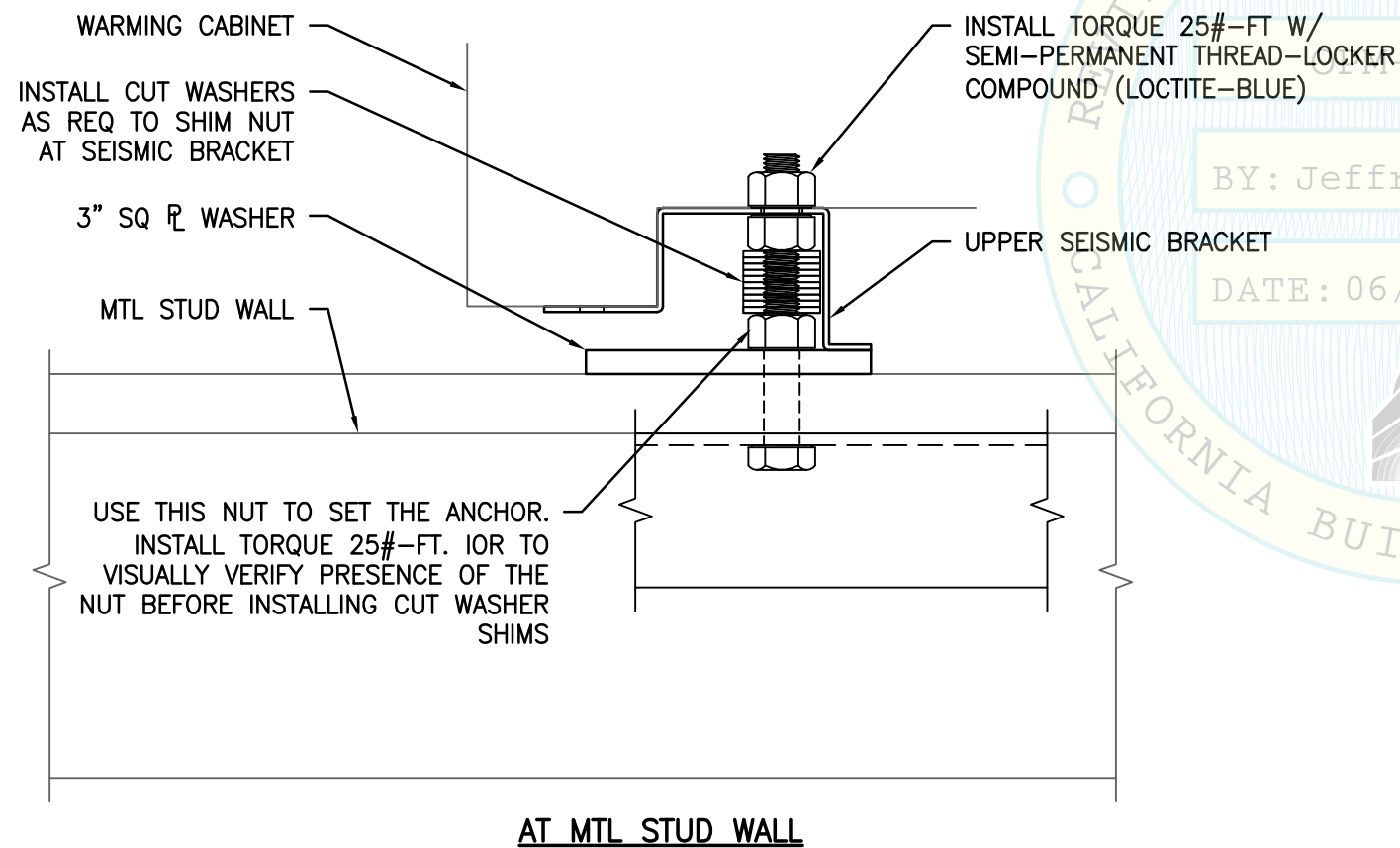
CYS STRUCTURAL ENGINEERS, INC.
2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833
TEL (916) 920-2020
www.cyseng.com

L:\Jobs\16023 MAC Med OPA to OPM's\ACAD\STRU\S1.dwg Time:Jun 10, 2019 09:55am Login:shawnm DimScale:1 L1Scale:6

UPPER SEISMIC BRACKET:

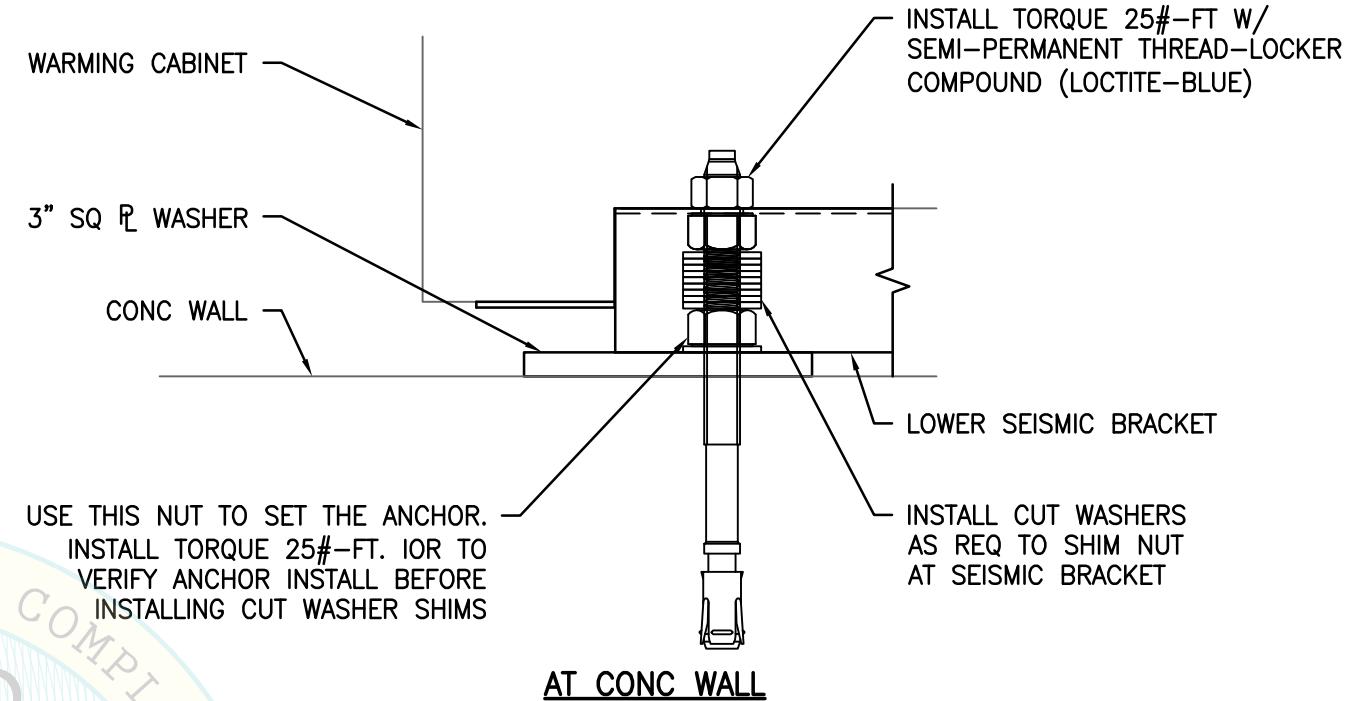


AT CONC WALL

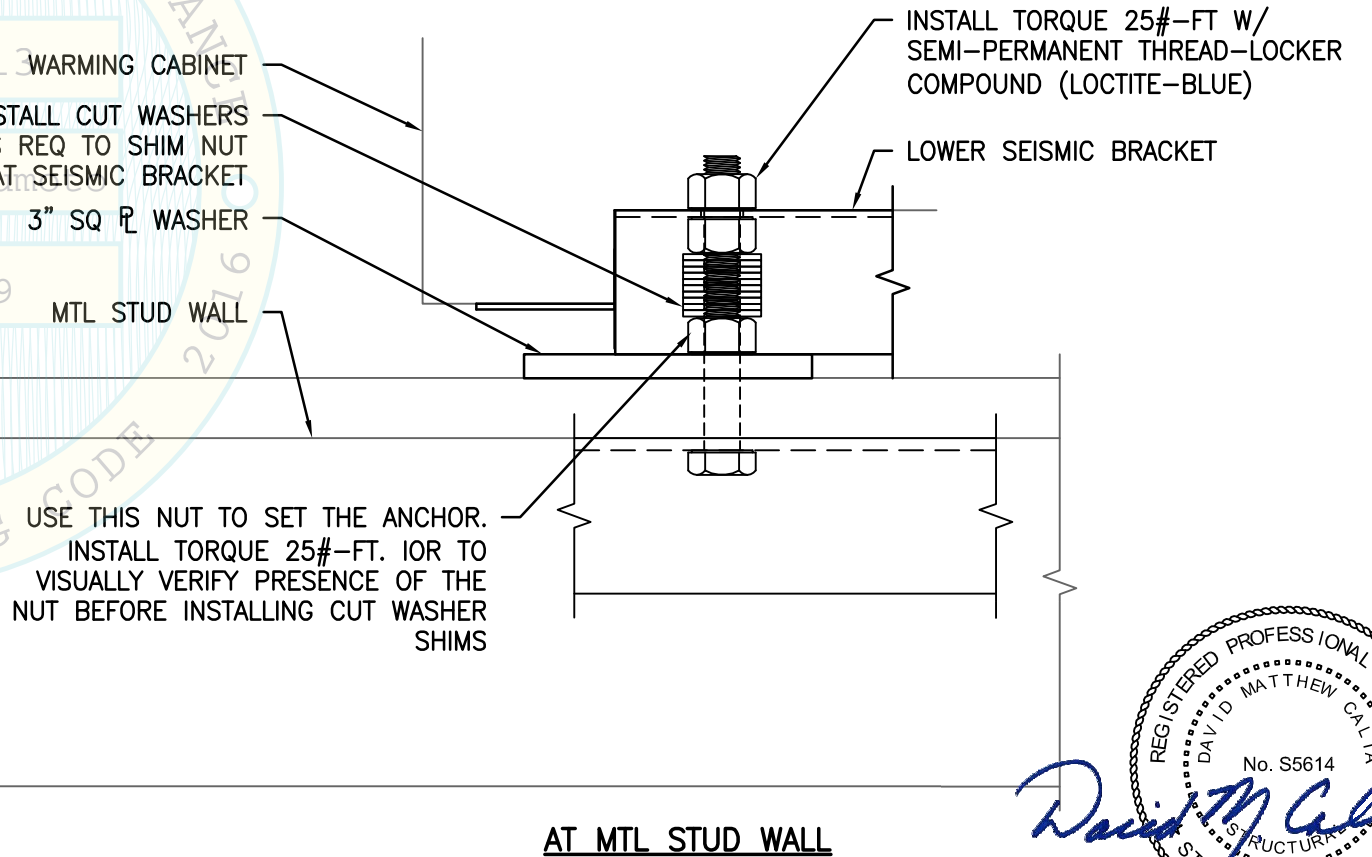


AT MTL STUD WALL

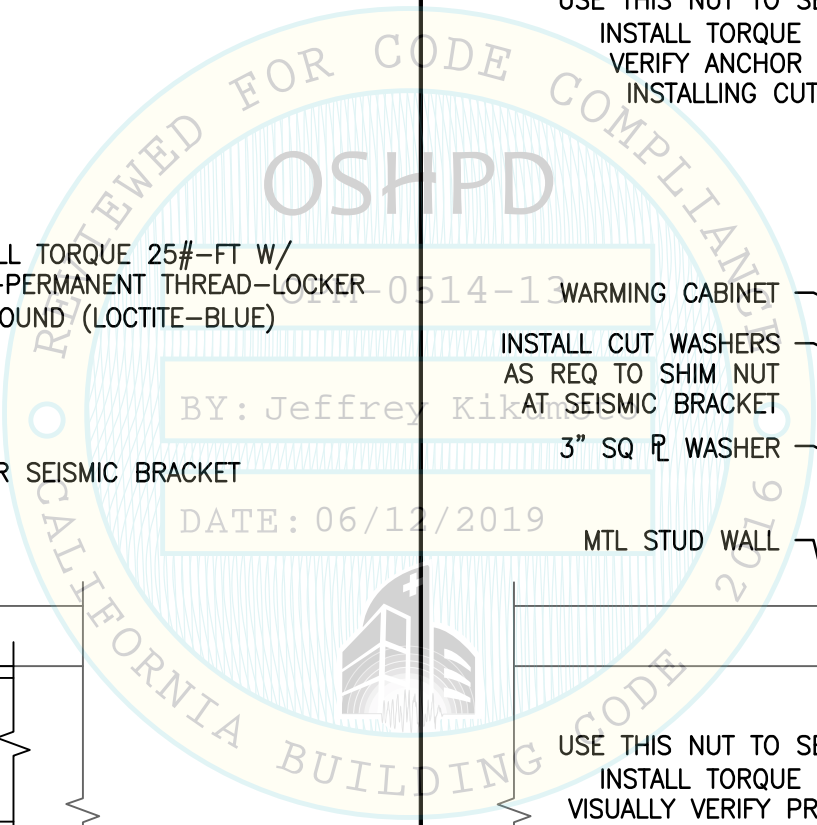
LOWER SEISMIC BRACKET:



AT CONC WALL



AT MTL STUD WALL



2019-06-10 NOT SEOR

SHEET TITLE: SEISMIC BRACKET DETAILS

COORDINATION SET

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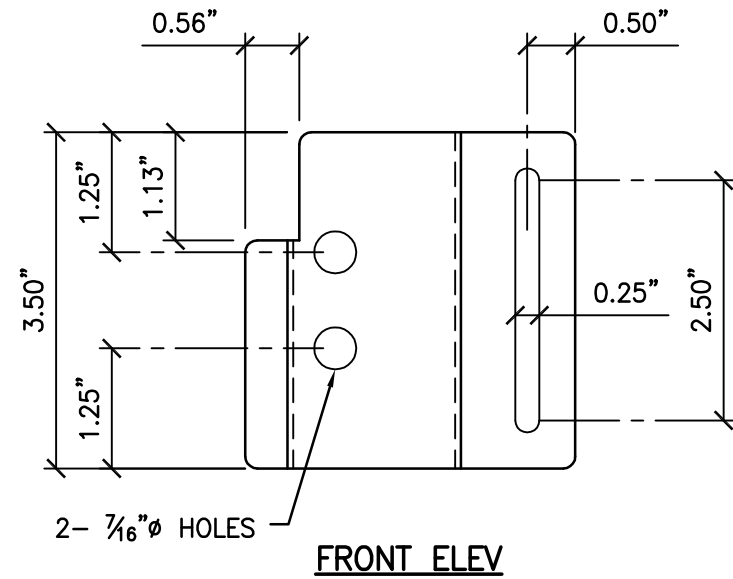
MAC MEDICAL
WARMING CABINETS



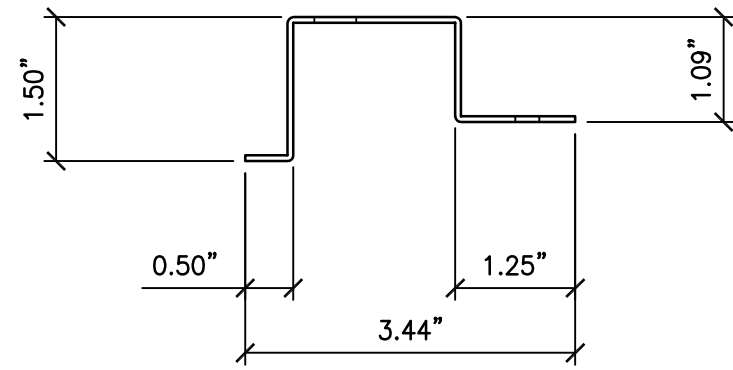
CYS STRUCTURAL ENGINEERS, INC.
2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833
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L:\Jobs\16023 MAC Med OPA to OPM's\ACAD\STRU\S1.dwg Time:Jun 11, 2019 - 02:59pm Login:camachom DimScale:1 LTScale:6

UPPER SEISMIC BRACKET DETAIL:



FRONT ELEV



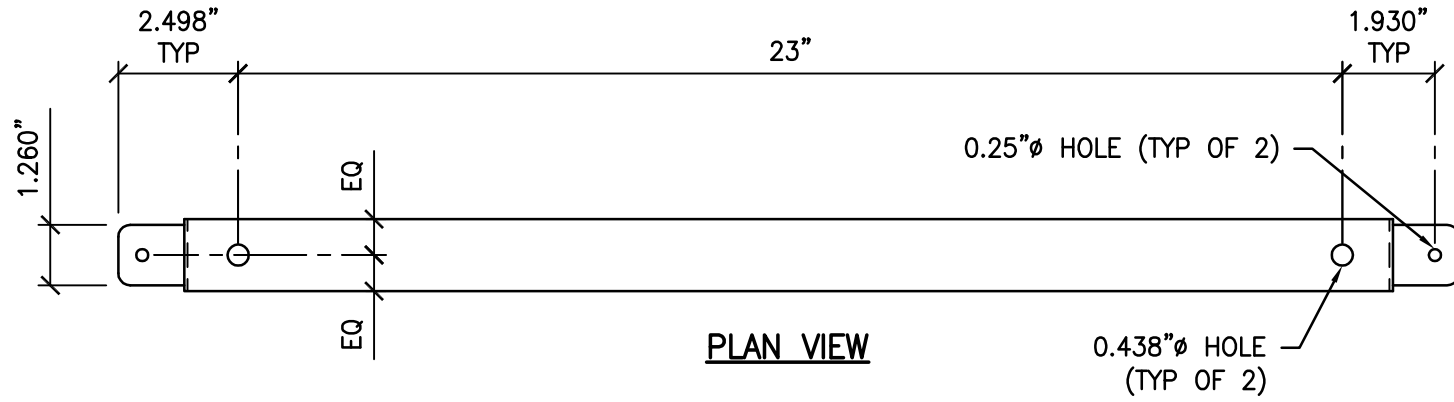
PLAN VIEW

SEISMIC BRACKET NOTE:

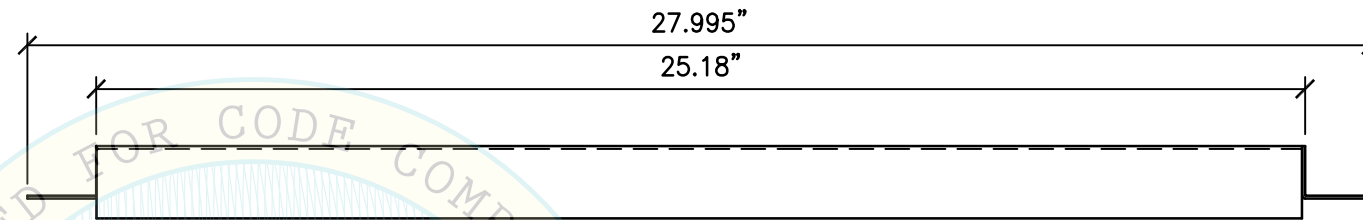
BRACKETS ARE MANUFACTURED & FURNISHED BY WARMER MANUFACTURER FROM SS304 SHEET STL (ASTM A666, TYPE 304, ANNEALED) (Fy= 30 KSI MIN, Fu= 75 KSI MIN)

28" LOWER SEISMIC BRACKET DETAIL:

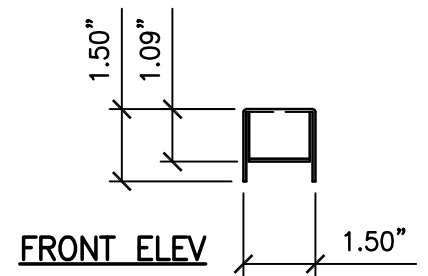
FOR WARMING CABINETS W: $W_1 = W_2 = 11.5"$ PER PG 5.



PLAN VIEW



SIDE ELEV



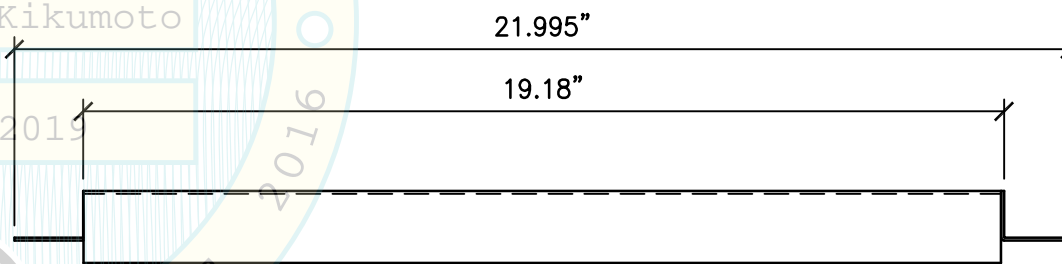
FRONT ELEV

22" LOWER SEISMIC BRACKET DETAIL:

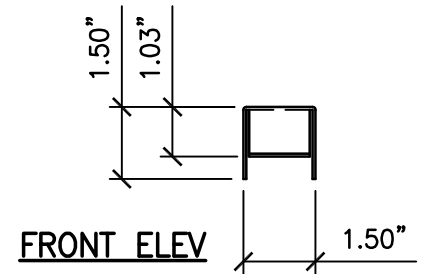
FOR WARMING CABINETS W: $W_1 = W_2 = 8.5"$ PER PG 5.

BY: Jeffrey Kikumoto

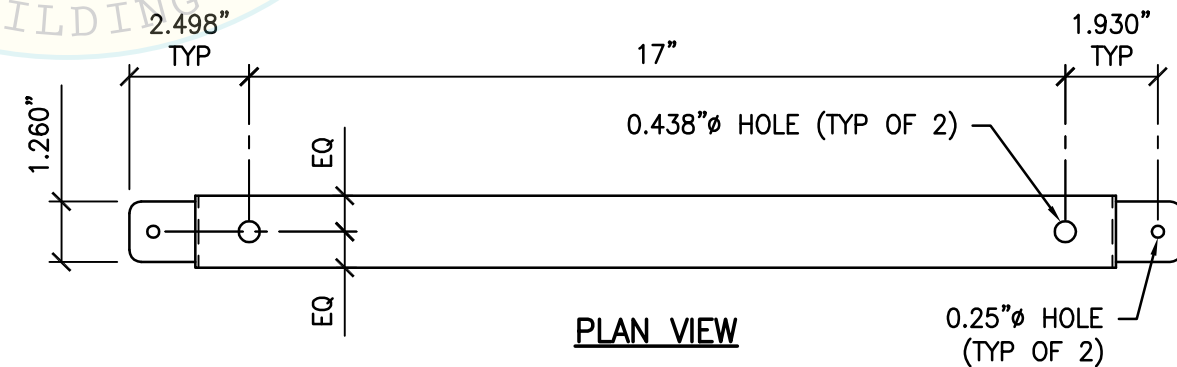
DATE: 06/12/2019



SIDE ELEV



FRONT ELEV



PLAN VIEW

2019-06-10 NOT SEOR
 REGISTERED PROFESSIONAL ENGINEER
 DAVID MATTHEW CALIA
 No. S5614
 CIVIL STRUCTURAL
 STATE OF CALIFORNIA
David M. Calia

SHEET TITLE: SEISMIC BRACKET DETAILS

COORDINATION SET

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			Date:	6/10/2019
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MAC MEDICAL
WARMING CABINETS



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