



OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION

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

OFFICE USE ONLY

APPLICATION #: OPM-0491

OSHPD Preapproval of Manufacturer's Certification (OPM)

Type: [] New [X] Renewal/Update

Manufacturer Information

Manufacturer: Getinge USA

Manufacturer's Technical Representative: Anthony Powell

Mailing Address: 1777 E. Henrietta Road, Rochester, NY 14623

Telephone: (585) 272-5243

Email: Anthony.powell@getinge.com

Product Information

Product Name: 56 SERIES WARMING CABINETS (WALL MOUNTED)

Product Type: Other Mechanical and Electrical Components

Product Model Number: 5618 and 5624

General Description: Warm storage of the solutions and blankets used for patient care in surgery, recovery etc.

Applicant Information

Applicant Company Name: EASE LLC.

Contact Person: Tiffany Tonn

Mailing Address: 1515 FAIRVIEW AVE, STE 205, MISSOULA, MT 59801

Telephone: (406) 541-3273

Email: tiffany@easeco.com

Title:

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

STATE OF CALIFORNIA - HEALTH AND HUMAN SERVICES AGENCY





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

Registered Design Professional Preparing Engineering Recommendations

Company Name: EASE
Name: Jonathan Roberson California License Number: S4197
Mailing Address: 5877 Pine Ave., Suite 210, Chino Hills, CA 91709
Telephone: (909) 606-7622 Email: jon@EASECo.com

OSHPD Special Seismic Certification Preapproval (OSP)

Special Seismic Certification is preapproved under OSP OSP Number: _____

Certification Method

Testing in accordance with: ICC-ES AC156 FM 1950-16
 Other(s) (Please Specify): _____

*Use of criteria other than those adopted by the California Building Standards Code, 2019 (CBSC 2019) 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 2019 may be used when approved by OSHPD prior to testing.

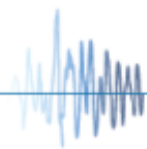
- Analysis
- Experience Data
- Combination of Testing, Analysis, and/or Experience Data (Please Specify): _____

OSHPD Approval

Date: 11/23/2021
Name: Jeffrey Kikumoto Title: Senior Structural Engineer
Condition of Approval (if applicable): _____

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

STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY





**EQUIPMENT ANCHORAGE
& SEISMIC ENGINEERING**

5877 Pine Ave, Ste. 210
Chino Hills, CA. 91709
Phn: (909) 606-7622

Office of Statewide Health Planning and Development
PREAPPROVAL OF MANUFACTURER'S CERTIFICATION
OPM-0491-19

THIS PREAPPROVAL CONFORMS TO THE 2019 CALIFORNIA BUILDING CODE

MANUFACTURER: **GETINGE USA, INC.**
EQUIPMENT NAME: **5618 & 5624 WARMING CABINETS (WALL MOUNTED)**

Sheet: 1 of 5
Date: 11/18/21

GENERAL NOTES

1. THIS OSHPD PREAPPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE 2019 CBC. THE DEMANDS (DESIGN FORCES) FOR USE WITH THIS OPM SHALL BE BASED ON THE 2019 CBC
2. 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.
3. THIS PREAPPROVAL CONFORMS TO THE 2019 CALIFORNIA BUILDING CODE WHERE S_{ds} IS NOT GREATER THAN 1.60 & 2.20.
4. FORCES PER ASCE 7-16 SECTION 13.3.1, EQUATIONS 13.3-1, 13.3-2 & 13.3-3,
WHERE $S_{ds} = 1.60$ $a_p = 1.0$, $I_p = 1.5$, $R_p = 1.5$, $z/h \leq 1$ STEEL STUD WALL AND CONCRETE WALL. SEE FOLLOWING SHEETS FOR Ω .
WHERE $S_{ds} = 2.20$ $a_p = 1.0$, $I_p = 1.5$, $R_p = 1.5$, $z/h \leq 1$ STEEL STUD WALL: *kumoto*
5. THIS PREAPPROVAL COVERS ONLY THE SUPPORTS AND ATTACHMENTS OF THE EQUIPMENT TO THE STRUCTURE.
6. ALL DESIGN FORCES SHOWN ON THE DRAWINGS ARE FACTORED LOADS THAT SHALL BE USED FOR STRENGTH DESIGN.
7. SHEET METAL SCREWS SHALL BE TEKS SCREWS BY ITW BUILDEX (ICC ESR-1976).
8. STEEL STUD WALL AND CONCRETE WALL DETAIL VALID FOR DEMANDS SHOWN AT ANY ELEVATION. (i.e. $z/h \leq 1$)
9. **RESPONSIBILITIES OF THE STRUCTURAL ENGINEER OF RECORD OF THE BUILDING**
 - A. PROVIDE SUPPORTING STRUCTURE TO SUPPORT WEIGHTS AND FORCES SHOWN IN ADDITION TO ALL OTHER LOADS.
 - B. VERIFY THAT THE INSTALLATION IS IN CONFORMANCE WITH THE 2019 CBC AND WITH THE DETAILS, MATERIAL AND GAGE OF THE UNIT WHERE ATTACHMENTS ARE MADE AGREE WITH THE INFORMATION SHOWN ON THE PREAPPROVAL DOCUMENTS.
 - C. VERIFY THAT PROJECT SPECIFIC VALUES OF S_{ds} & z/h RESULT IN SEISMIC FORCES (E_h , E_v) THAT DO NOT EXCEED THE VALUES ON THE DETAILS.
 - D. VERIFY THAT THE CONCRETE WALL TO WHICH THE EQUIPMENT IS ANCHORED MEETS THE REQUIREMENTS OF THE APPLICABLE ICC ESR REPORT AND THIS OPM.
 - E. VERIFY THAT THE ANCHORS ARE AN ADEQUATE DISTANCE FROM ANY CONCRETE WALL EDGES OR OPENINGS (SEE TYPICAL DETAIL ON SHEET 2).
 - F. VERIFY THAT ALL NEW OR EXISTING ANCHORS ARE AN ADEQUATE DISTANCE FROM THE UNIT ATTACHMENTS AND CHECK FOR INTERACTION WHERE OTHER ANCHORS ARE WITHIN 18" OR $6h_{ef}$ FROM THIS UNIT'S ANCHORS.
 - G. DESIGN BACKING BARS, STUDS, ETC. WHICH THE UNITS ARE ATTACHED TO AS NOTED ON THE DRAWINGS.



GETINGE USA, INC.

 DES. **J. ROBERSON**

SHEET

2
**5618 & 5624 WARMING CABINETS
(WALL MOUNTED)**

 JOB NO. **36-1801**

 DATE **11/18/21**

 OF **5** SHEETS

9. SCREW ANCHORS:

A. ATTACHMENT IS TO BE MADE WITH THE ANCHORS LISTED BELOW AND INSTALLED AS DESCRIBED IN THE CORRESPONDING ICC REPORT.

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
3/8"	Normal Weight	3000	Hilti Kwik HUS (CARBON STEEL)	ESR-3027	1.86"	6"	12"	6"	N/A	1440

B. TESTING AND SPECIAL INSPECTION OF EXPANSION ANCHORS SHALL BE PERFORMED BY AN APPROVED INDEPENDENT AGENCY EMPLOYED BY THE FACILITY OWNER PER CBC 1704A & 1910A.5 AND CAC 7-149. ALL REPORTS SHALL BE SENT TO THE INSPECTOR OF RECORD, OWNER AND THE ARCHITECT OR ENGINEER IN RESPONSIBLE CHARGE.

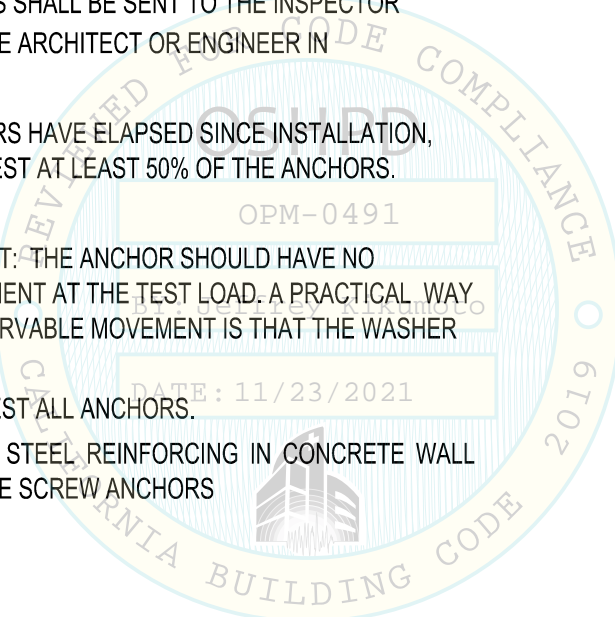
(i) AFTER AT LEAST 24 HOURS HAVE ELAPSED SINCE INSTALLATION, DIRECT PULL TENSION TEST AT LEAST 50% OF THE ANCHORS.

(ii) ACCEPTANCE CRITERIA:

- DIRECT TENSION TEST: THE ANCHOR SHOULD HAVE NO OBSERVABLE MOVEMENT AT THE TEST LOAD. A PRACTICAL WAY TO DETERMINE OBSERVABLE MOVEMENT IS THAT THE WASHER BECOMES LOOSE.

(iii) IF ANY ANCHOR FAILS, TEST ALL ANCHORS.

D. AVOID DAMAGING EXISTING STEEL REINFORCING IN CONCRETE WALL WHEN INSTALLING CONCRETE SCREW ANCHORS



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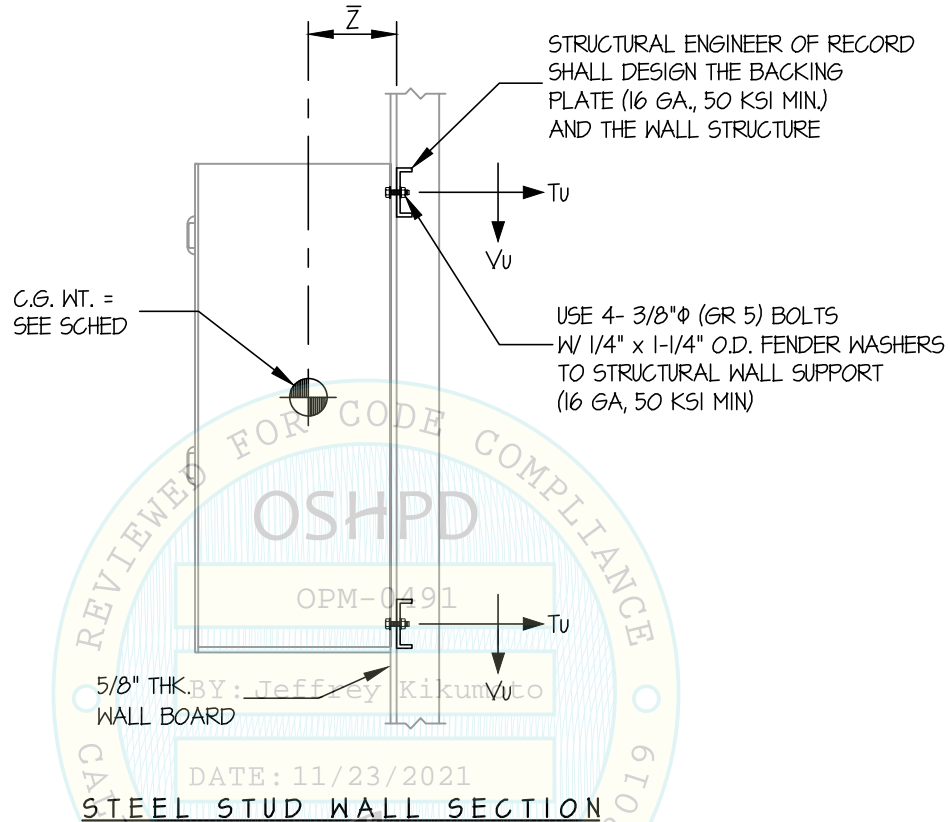
SHEET

3

OF **5** SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

WALL MOUNTED



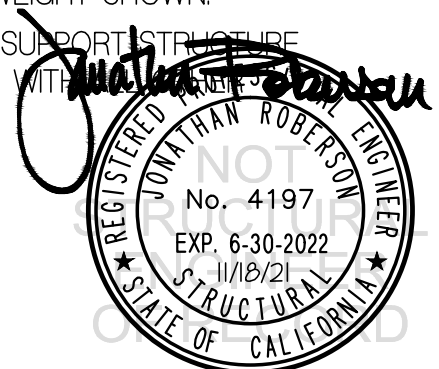
NOTES:

- FORCES ARE DETERMINED PER 2019 CALIFORNIA BUILDING CODE AND ASCE 7-16. STRENGTH DESIGN IS USED. ($a_p = 1.0$, $I_p = 1.5$, $R_p = 1.5$, $\Omega_o = 1.5$, $z/h \leq 1$)

Sds	1.60	2.20
HORIZONTAL FORCE (Eh)	1.92 Wp	2.64 Wp
HORIZONTAL FORCE (Emh)	2.88 Wp	3.96 Wp
VERTICAL FORCE (Ev)	0.32 Wp	0.44 Wp

(Emh = Eh x Ω_o ; FOR CONCRETE ANCHORAGE)

- CENTER OF GRAVITY (C.G.) AND WEIGHT ARE THE GOVERNING PARAMETERS FOR DESIGN. THIS PREAPPROVAL ENCOMPASSES ALL WEIGHTS UP TO THE MAXIMUM WEIGHT SHOWN.
- STRUCTURAL ENGINEER OF RECORD FOR THE BUILDING SHALL PROVIDE SUPPORT STRUCTURE DESIGNED TO SUPPORT WEIGHTS AND FORCES SHOWN IN COMBINATION WITH OTHER LOADS THAT MAY BE PRESENT.
- SEE GENERAL NOTES: SHEET 1.



GETINGE USA, INC.

**5618 & 5624 WARMING CABINETS
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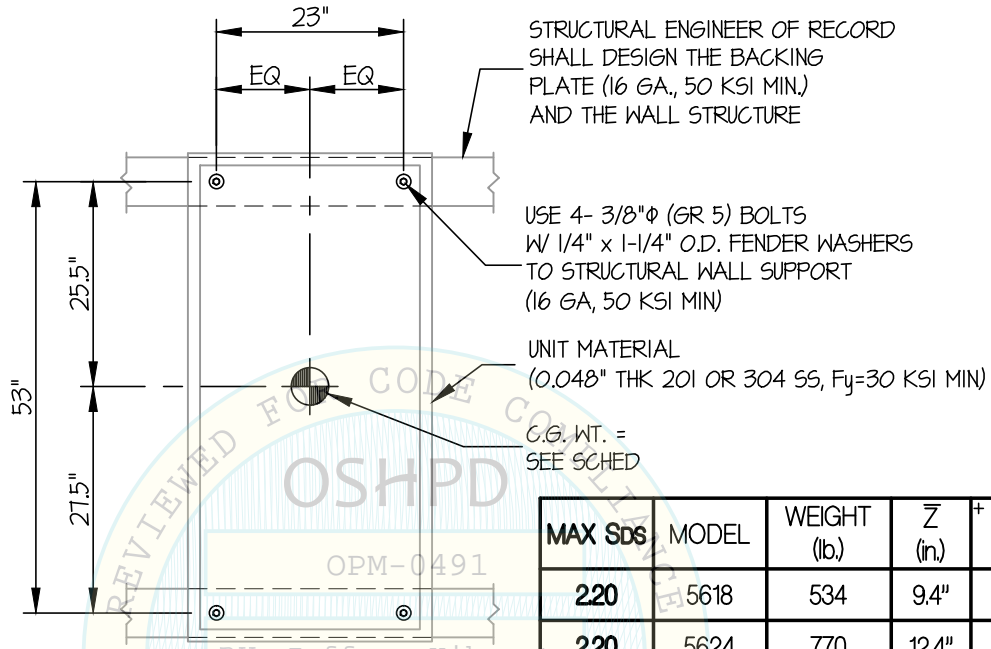
SHEET

4

OF **5** SHEETS

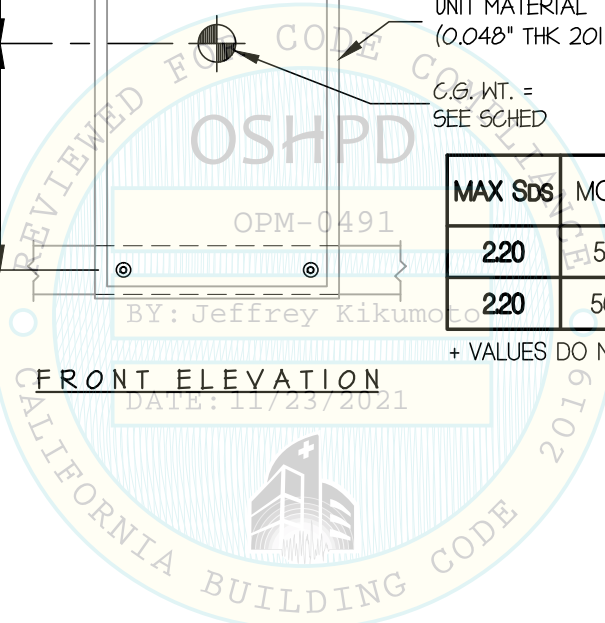
SEISMIC SUPPORTS & ATTACHMENTS

WALL MOUNTED



MAX Sds	MODEL	WEIGHT (lb.)	Z (in.)	+ Tu (lb.)	+ Vu (lb.)
220	5618	534	9.4"	533	426
220	5624	770	12.4"	875	615

FRONT ELEVATION
DATE: 11/23/2021



+ VALUES DO NOT INCLUDE Ω_s

GETINGE USA, INC.

DES. **J. ROBERSON**

SHEET

5

**5618 & 5624 WARMING CABINETS
(WALL MOUNTED)**

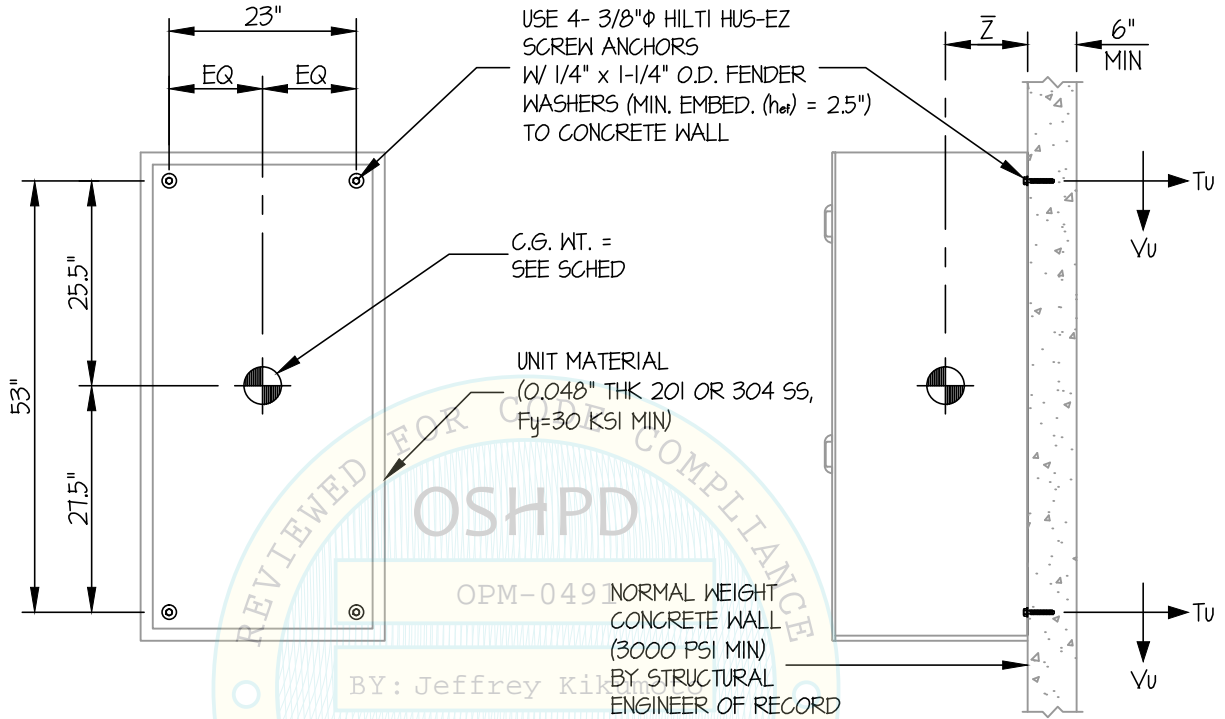
JOB NO. **36-1801**

DATE **11/18/21**

OF **5** SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

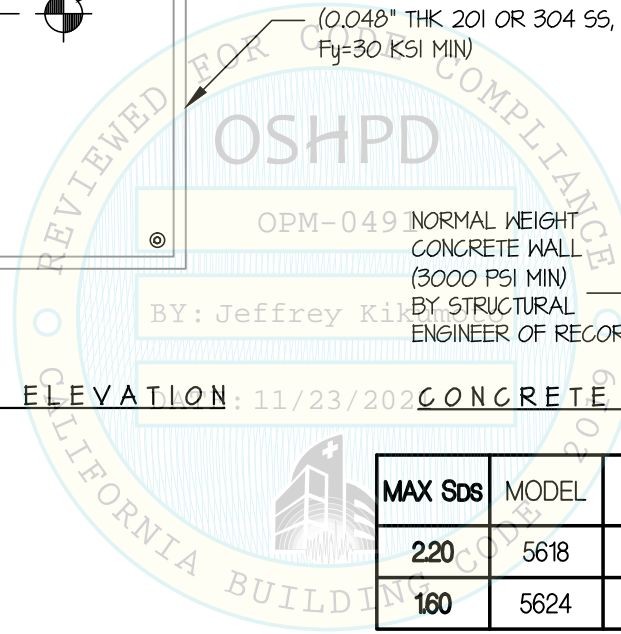
WALL MOUNTED



FRONT ELEVATION: 11/23/2021 CONCRETE WALL SECTION

MAX Sds	MODEL	WEIGHT (lb.)	Z̄ (in.)	* Tu (lb.)	* Vu (lb.)
220	5618	534	8.75"	746	591
160	5624	770	11.75"	890	645

* VALUES INCLUDE Ω_0 FOR CONCRETE ANCHORAGE ONLY



Jonathan Roberson
 REGISTERED PROFESSIONAL ENGINEER
 JONATHAN ROBERSON
 No. 4197
 EXP. 6-30-2022
 11/18/21
 STRUCTURAL
 STATE OF CALIFORNIA