



DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
OFFICE OF STATEWIDE HOSPITAL PLANNING AND DEVELOPMENT

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

OFFICE USE ONLY

APPLICATION #: OPM-0739

HCAI Preapproval of Manufacturer's Certification (OPM)

Type: New Renewal/Update

Manufacturer Information

Manufacturer: Nanosonics Limited

Manufacturer's Technical Representative: Brett Montague

Mailing Address: 7-11 Talavera Road, Macquarie Park, Sydney, NSW 2113 Australia

Telephone: +61 2 8063 1600

Email: info@nanosonics.com

Product Information

Product Name: Coris

Product Type: Automated Endoscope Channel Cleaner

Product Model Number: N/A

General Description: Sink or Wall mounted endoscope sterilizing device and associated power supply.

Applicant Information

Applicant Company Name: Pre Compliance

Contact Person: Andrew Coughlin

Mailing Address: 36 SW Wall Street, Bend, OR 97702

Telephone: (541) 241-2310

Email: Andy@go-pre.com

Title: Principal Engineer

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STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY





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Registered Design Professional Preparing Engineering Recommendations

Company Name: PRE COMPLIANCE
Name: Andrew Coughlin California License Number: S6082
Mailing Address: 36 SW Wall Street, Bend, OR 97702
Telephone: (415) 635-8461 Email: Andy@go-pre.com

HCAI 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, 2022 (CBSC 2022) 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 2022 may be used when approved by HCAI prior to testing.

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

HCAI Approval

Date: 12/1/2024
Name: William Staehlin Title: Senior Structural Engineer
Condition of Approval (if applicable): _____

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STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY



GENERAL NOTES:

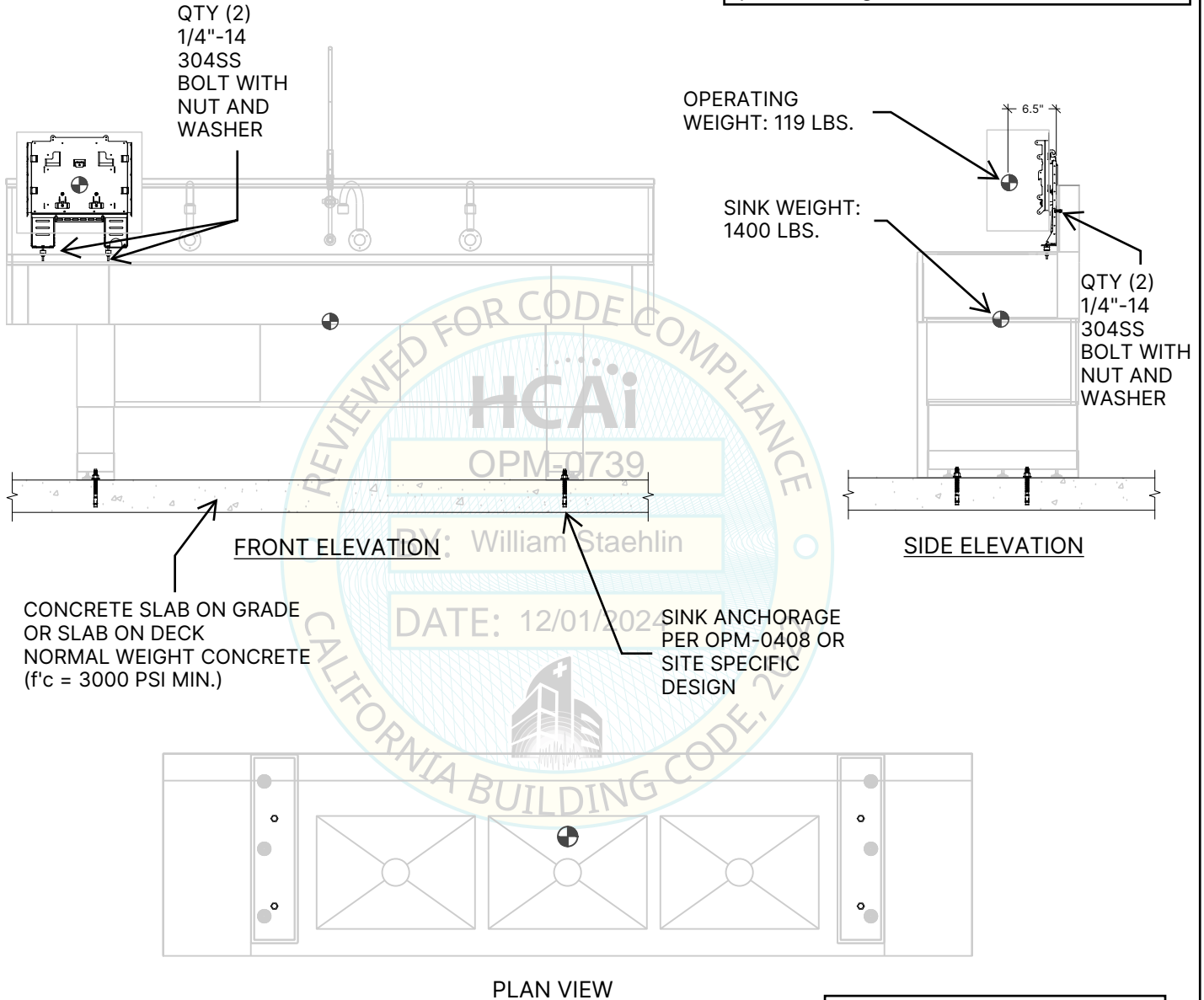
1. THIS HCAI PREAPPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE 2022 CBC. THE DEMAND (DESIGN FORCES) FOR USE WITH THIS OPM SHALL BE BASED ON THE CBC 2022.
2. THIS DOCUMENT MAY ONLY BE USED WITH THE EXPRESS WRITTEN CONSENT OF THE MANUFACTURER FOR THE SPECIFIC PROJECT SITE AND INSTALLATION LOCATION. THIS DOCUMENT IS INVALID WITHOUT SUCH CONSENT.
3. THIS PREAPPROVAL CONFORMS TO THE 2022 CALIFORNIA BUILDING CODE.
4. THIS PREAPPROVAL COVERS ONLY THE SUPPORTS AND ATTACHMENTS OF THE EQUIPMENT TO THE HOSPITAL STRUCTURE.
5. FORCES PER ASCE 7-16, SECTION 13.3.1, EQUATIONS 1.3.1, 1.3.2, AND 1.3.3
WHERE $S_{DS} = 1.8$, $a_p = 1.0$, $I_p = 1.5$, $R_p = 2.5$, $z/h = 1$
WHERE $S_{DS} = 2.3$, $a_p = 1.0$, $I_p = 1.5$, $R_p = 2.5$, $z/h = 0$
6. THE DETAILS IN THIS APPROVAL MAY BE USED AT ANY LOCATION WHERE THE S_{DS} DOES NOT EXCEED THE VALUES LISTED ABOVE.
7. 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 2022 CBC AND WITH THE DETAILS, MATERIAL, AND GAUGE 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 RESULTS IN SEISMIC FORCES (E_h , E_v) THAT DO NOT EXCEED THE VALUES ON THE DETAILS.
 - D. VERIFY THAT THE CONCRETE SLAB 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 SLAB EDGES OR OPENINGS.
8. ALL WORK SHOULD BE COMPLETED ACCORDING TO ACI 318-19.
9. POST INSTALLED ANCHORS SHALL BE USED ONLY WHERE SPECIFIED ON STRUCTURAL DRAWINGS
10. EXISTING REINFORCING BARS IN THE CONCRETE STRUCTURE SHALL NOT BE CUT UNLESS APPROVED BY THE STRUCTURAL ENGINEER OF RECORD
11. SUBMITTAL OF ALL PROPOSED PRODUCTS, WITH TECHNICAL DATA AND CURRENT ICC-ESR REPORTS IS REQUIRED FOR REVIEW AND APPROVAL BY EOR. ADDITIONAL APPLICATION CALCULATIONS MAY BE REQUIRED BY THE EOR
12. ALL ANCHORS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII) IN CONJUNCTION WITH EDGE DISTANCE, SPACING AND EMBEDMENT DEPTH AS INDICATED ON THE DRAWINGS
13. THE CONTRACTOR SHALL ARRANGE FOR A MANUFACTURER'S FIELD REPRESENTATIVE TO PROVIDE INSTALLATION TRAINING FOR ALL PRODUCTS TO BE USED, PRIOR TO COMMENCEMENT OF WORK. ONLY TRAINED INSTALLERS SHALL PERFORM POST INSTALLED ANCHOR INSTALLATION. A RECORD OF TRAINING SHALL BE KEPT ON SITE AND BE MADE AVAILABLE TO THE EOR/ IOR AS REQUESTED.
14. THE REMOVAL AND RESETING OF POST INSTALLED ANCHORS IS PROHIBITED (ACI 318-19 17.1.3)
15. DRILLED HOLES FOR POST-INSTALLED ANCHORS IN CONCRETE AND MASONRY SHALL BE COMPLETED PER OSHA 29 CFR 1926.1153 – RESPIRABLE CRYSTALLINE SILICA USING A TESTED SYSTEM SUCH AS DEWALT DUSTX+ EXTRACTOR AND DRILL BIT SYSTEM



**DEVICE MOUNTED TO SINK BACKSPLASH
ANCHOR COMBINATION 1 (A+B)**

Sink Anchorage Requirements:

Sink (by others) shall be anchored to concrete slab-on-grade or concrete slab on metal deck according to OPM-0408 (for Steris® AMSCO series sinks) or site specific design.



SEISMIC DESIGN PARAMTERS

$S_{DS} = 2.3, z/h = 0, I_p = 1.5$

$S_{DS} = 1.8, z/h = 1, I_p = 1.5$

$a_p = 1.0, R_p = 2.5, \Omega_0 = 2.0$

ANCHORS IN CONCRETE AND MASONRY

1. ALL WORK SHOULD BE COMPLETED ACCORDING TO ACI 318-19.
2. POST INSTALLED ANCHORS SHALL BE USED ONLY WHERE SPECIFIED ON STRUCTURAL DRAWINGS
3. EXISTING REINFORCING BARS IN THE CONCRETE STRUCTURE SHALL NOT BE CUT UNLESS APPROVED BY THE STRUCTURAL ENGINEER OF RECORD.
4. ALL ANCHORS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH OPM-0408 OR SITE SPECIFIC DESIGN.
5. THE REMOVAL AND RESETING OF POST-INSTALLED ANCHORS IS PROHIBITED (ACI 318-19 17.1.3).
6. PROVIDE SPECIAL INSPECTION FOR ALL MECHANICAL AND ADHESIVE ANCHORS PER THE APPLICABLE BUILDING CODE AND PER THE CURRENT ICC-ES REPORT (IBC 2012 TABLE 1705.3 TYPE 4, NOTE B).
7. DRILLED HOLES FOR POST-INSTALLED ANCHORS IN CONCRETE AND MASONRY SHALL BE COMPLETED PER OSHA 29 CFR 1926.1153 - RESPIRABLE CRYSTALLINE SILICA USING A TESTED SYSTEM SUCH AS DEWALT DUSTX+ EXTRACTOR AND DRILL BIT SYSTEM.

12/1/2024

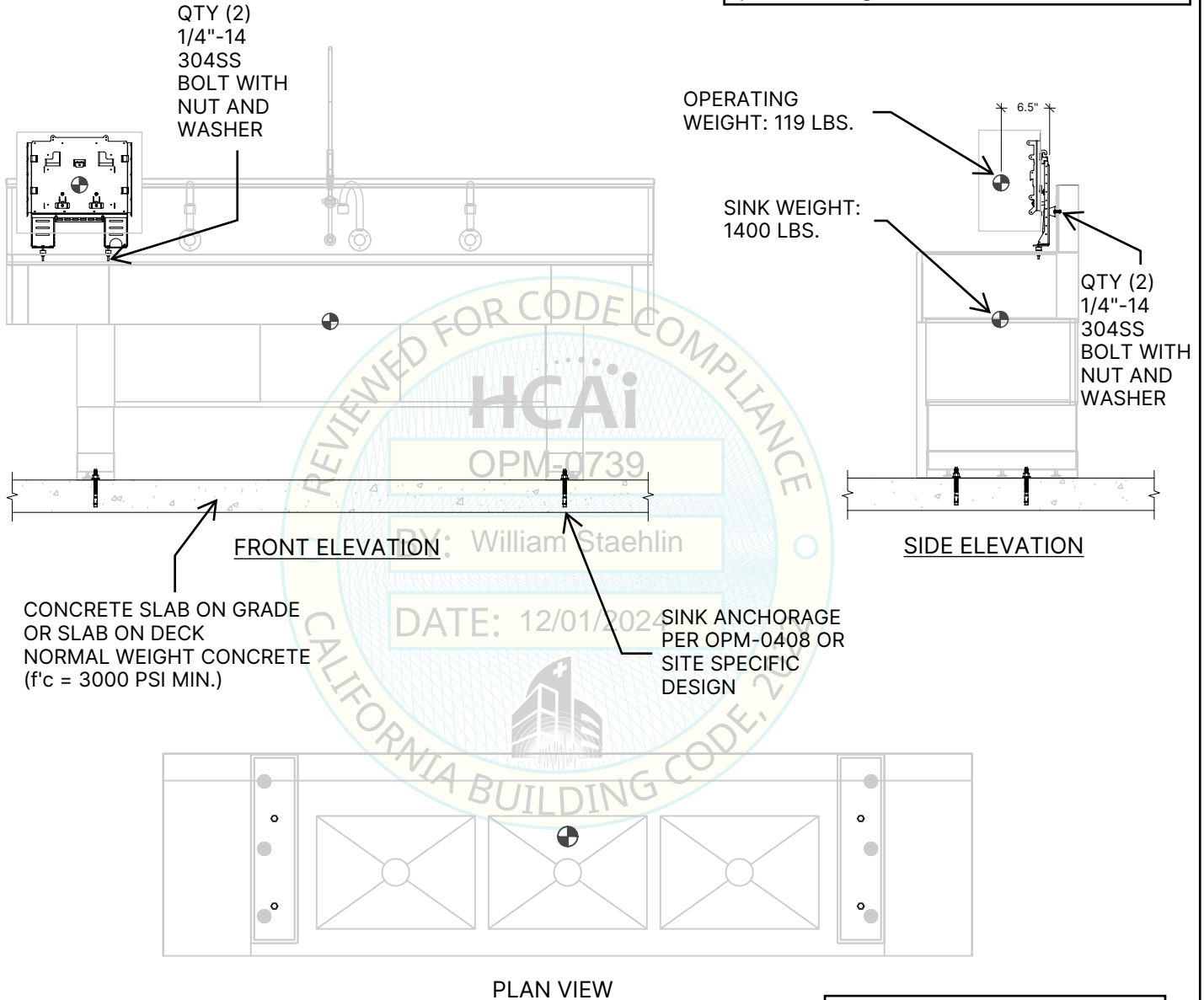
OPM-0739: Reviewed for Code Compliance by William E Staehlin



**DEVICE MOUNTED TO SINK BACKSPLASH
ANCHOR COMBINATION 2 (A+C)**

Sink Anchorage Requirements:

Sink (by others) shall be anchored to concrete slab-on-grade or concrete slab on metal deck according to OPM-0408 (for Steris® AMSCO series sinks) or site specific design.



SEISMIC DESIGN PARAMTERS

$S_{DS} = 2.3, z/h = 0, I_p = 1.5$

$S_{DS} = 1.8, z/h = 1, I_p = 1.5$

$a_p = 1.0, R_p = 2.5, \Omega_0 = 2.0$

ANCHORS IN CONCRETE AND MASONRY

1. ALL WORK SHOULD BE COMPLETED ACCORDING TO ACI 318-19.
2. POST INSTALLED ANCHORS SHALL BE USED ONLY WHERE SPECIFIED ON STRUCTURAL DRAWINGS
3. EXISTING REINFORCING BARS IN THE CONCRETE STRUCTURE SHALL NOT BE CUT UNLESS APPROVED BY THE STRUCTURAL ENGINEER OF RECORD.
4. ALL ANCHORS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH OPM-0408 OR SITE SPECIFIC DESIGN.
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12/1/2024

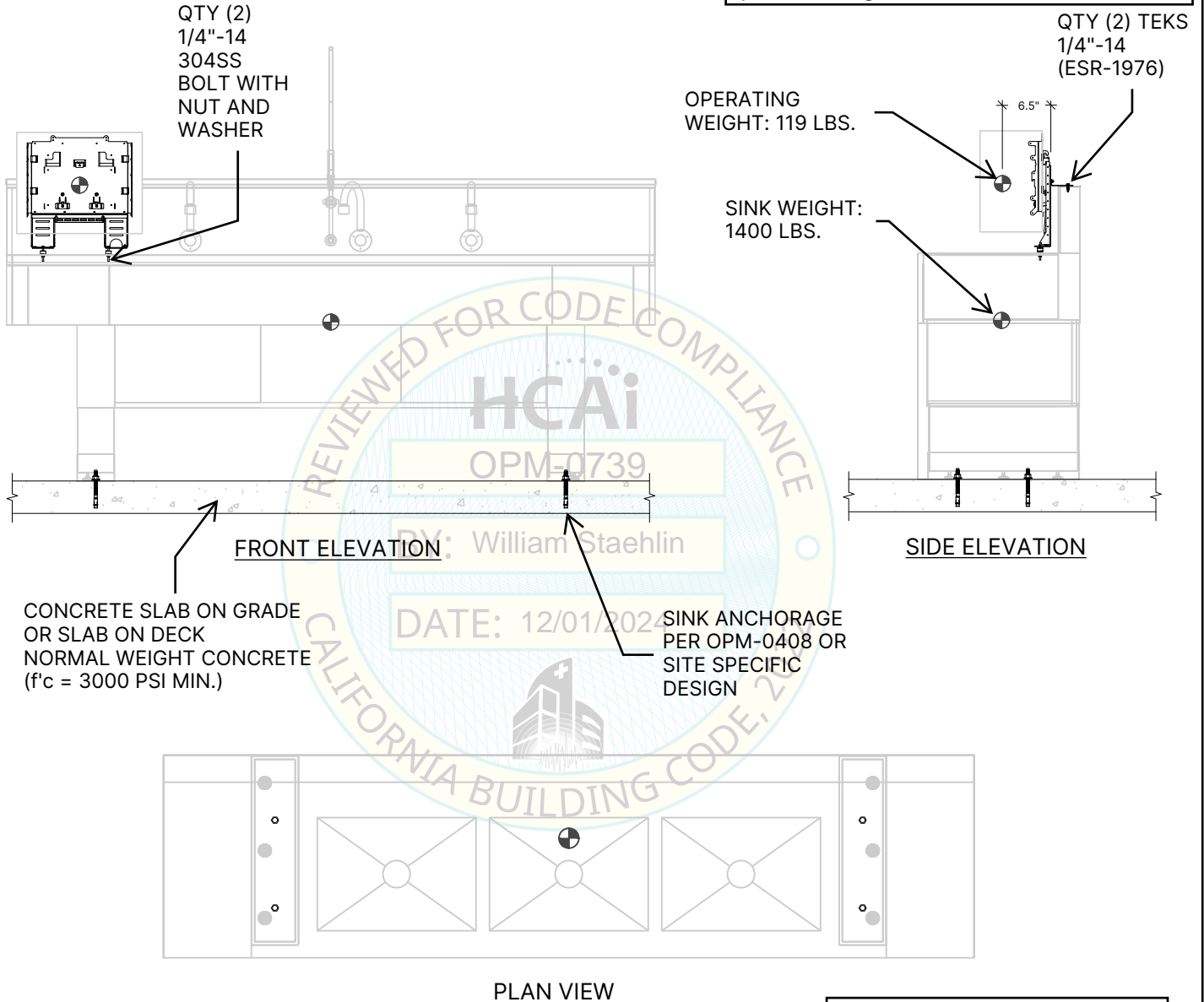
OPM-0739: Reviewed for Code Compliance by William E Staehlin



**DEVICE MOUNTED TO SINK BACKSPLASH
ANCHOR COMBINATION 3 (A+D)**

Sink Anchorage Requirements:

Sink (by others) shall be anchored to concrete slab-on-grade or concrete slab on metal deck according to OPM-0408 (for Steris® AMSCO series sinks) or site specific design.



SEISMIC DESIGN PARAMTERS

$S_{DS} = 2.3, z/h = 0, I_p = 1.5$

$S_{DS} = 1.8, z/h = 1, I_p = 1.5$

$a_p = 1.0, R_p = 2.5, \Omega_0 = 2.0$

ANCHORS IN CONCRETE AND MASONRY

1. ALL WORK SHOULD BE COMPLETED ACCORDING TO ACI 318-19.
2. POST INSTALLED ANCHORS SHALL BE USED ONLY WHERE SPECIFIED ON STRUCTURAL DRAWINGS
3. EXISTING REINFORCING BARS IN THE CONCRETE STRUCTURE SHALL NOT BE CUT UNLESS APPROVED BY THE STRUCTURAL ENGINEER OF RECORD.
4. ALL ANCHORS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH OPM-0408 OR SITE SPECIFIC DESIGN.
5. THE REMOVAL AND RESETING OF POST-INSTALLED ANCHORS IS PROHIBITED (ACI 318-19 17.1.3).
6. PROVIDE SPECIAL INSPECTION FOR ALL MECHANICAL AND ADHESIVE ANCHORS PER THE APPLICABLE BUILDING CODE AND PER THE CURRENT ICC-ES REPORT (IBC 2012 TABLE 1705.3 TYPE 4, NOTE B).
7. DRILLED HOLES FOR POST-INSTALLED ANCHORS IN CONCRETE AND MASONRY SHALL BE COMPLETED PER OSHA 29 CFR 1926.1153 - RESPIRABLE CRYSTALLINE SILICA USING A TESTED SYSTEM SUCH AS DEWALT DUSTX+ EXTRACTOR AND DRILL BIT SYSTEM.

12/1/2024

OPM-0739: Reviewed for Code Compliance by William E Staehlin



**DEVICE MOUNTED TO SINK BACKSPLASH
ANCHOR COMBINATION 4 (B+D)**

Sink Anchorage Requirements:

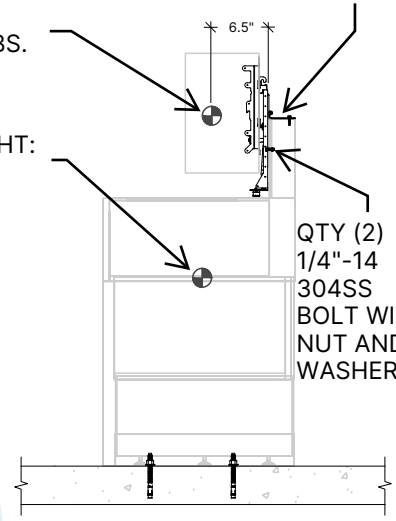
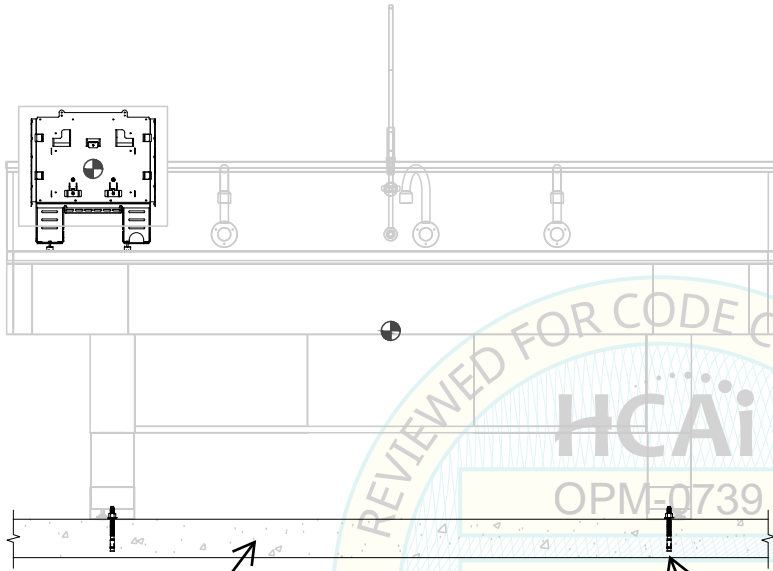
Sink (by others) shall be anchored to concrete slab-on-grade or concrete slab on metal deck according to OPM-0408 (for Steris® AMSCO series sinks) or site specific design.

QTY (2) TEKS
1/4"-14
(ESR-1976)

OPERATING
WEIGHT: 119 LBS.

SINK WEIGHT:
1400 LBS.

QTY (2)
1/4"-14
304SS
BOLT WITH
NUT AND
WASHER

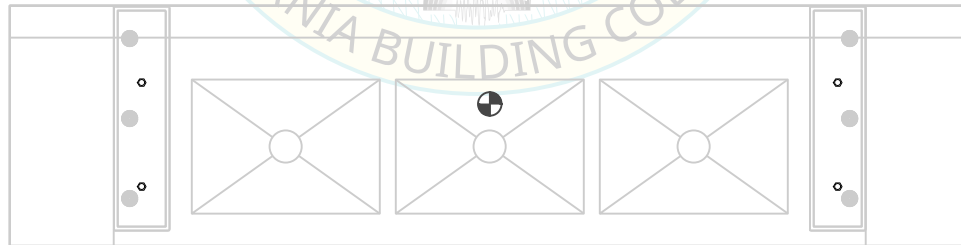
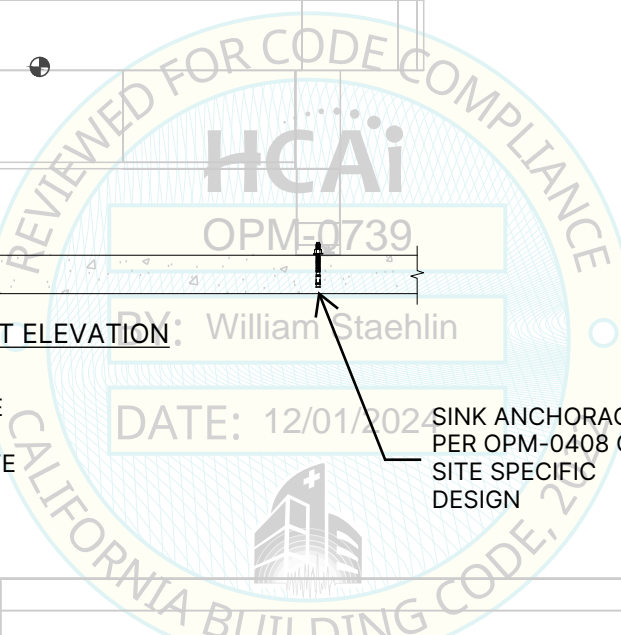


FRONT ELEVATION: William Staehlin

SIDE ELEVATION

CONCRETE SLAB ON GRADE
OR SLAB ON DECK
NORMAL WEIGHT CONCRETE
(f'c = 3000 PSI MIN.)

SINK ANCHORAGE
PER OPM-0408 OR
SITE SPECIFIC
DESIGN



PLAN VIEW

SEISMIC DESIGN PARAMTERS

$S_{DS} = 2.3, z/h = 0, I_p = 1.5$

$S_{DS} = 1.8, z/h = 1, I_p = 1.5$

$a_p = 1.0, R_p = 2.5, \Omega_0 = 2.0$

ANCHORS IN CONCRETE AND MASONRY

1. ALL WORK SHOULD BE COMPLETED ACCORDING TO ACI 318-19.
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12/1/2024

OPM-0739: Reviewed for Code Compliance by William E Staehlin



**DEVICE MOUNTED TO SINK BACKSPLASH
ANCHOR COMBINATION 5 (C+D)**

Sink Anchorage Requirements:

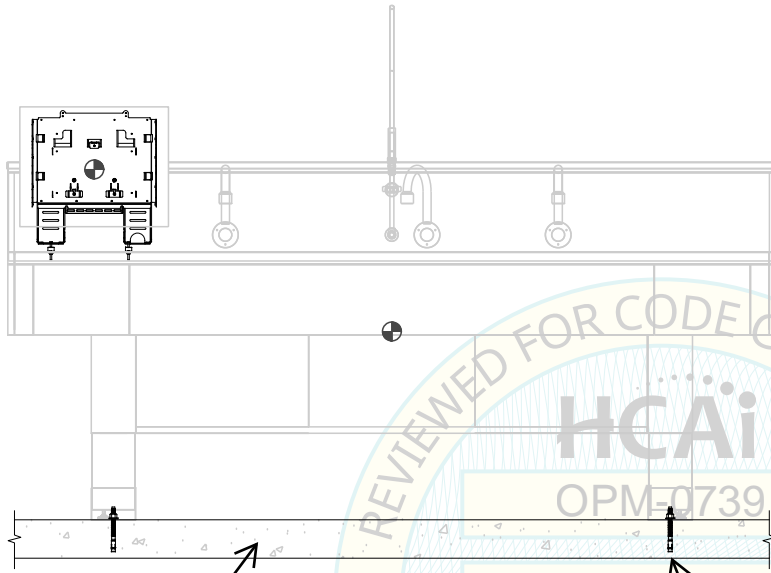
Sink (by others) shall be anchored to concrete slab-on-grade or concrete slab on metal deck according to OPM-0408 (for Steris® AMSCO series sinks) or site specific design.

QTY (2) TEKS
1/4"-14
(ESR-1976)

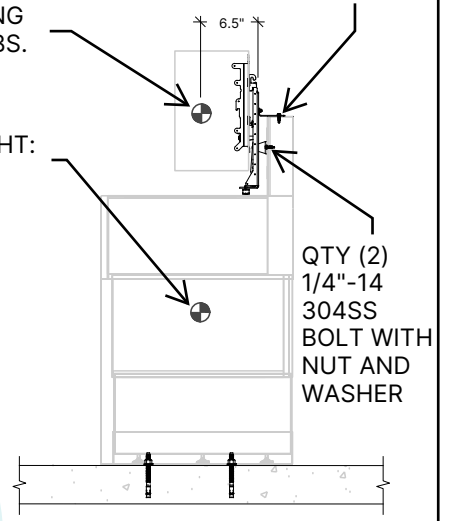
SINK OPERATING
WEIGHT: 119 LBS.

SINK WEIGHT:
1400 LBS.

QTY (2)
1/4"-14
304SS
BOLT WITH
NUT AND
WASHER



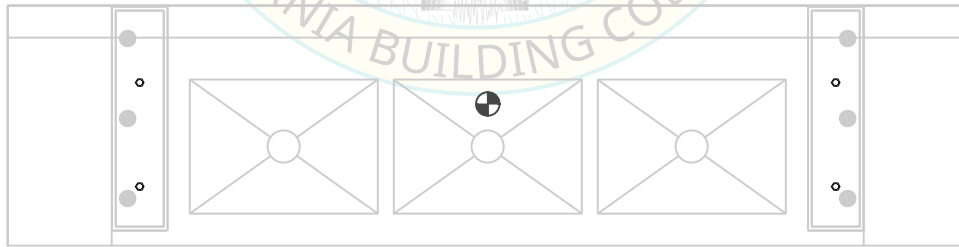
FRONT ELEVATION: William Staehlin



SIDE ELEVATION

CONCRETE SLAB ON GRADE
OR SLAB ON DECK
NORMAL WEIGHT CONCRETE
(f'c = 3000 PSI MIN.)

SINK ANCHORAGE
PER OPM-0408 OR
SITE SPECIFIC
DESIGN



PLAN VIEW

SEISMIC DESIGN PARAMTERS

$S_{DS} = 2.3, z/h = 0, I_p = 1.5$

$S_{DS} = 1.8, z/h = 1, I_p = 1.5$

$a_p = 1.0, R_p = 2.5, \Omega_0 = 2.0$

ANCHORS IN CONCRETE AND MASONRY

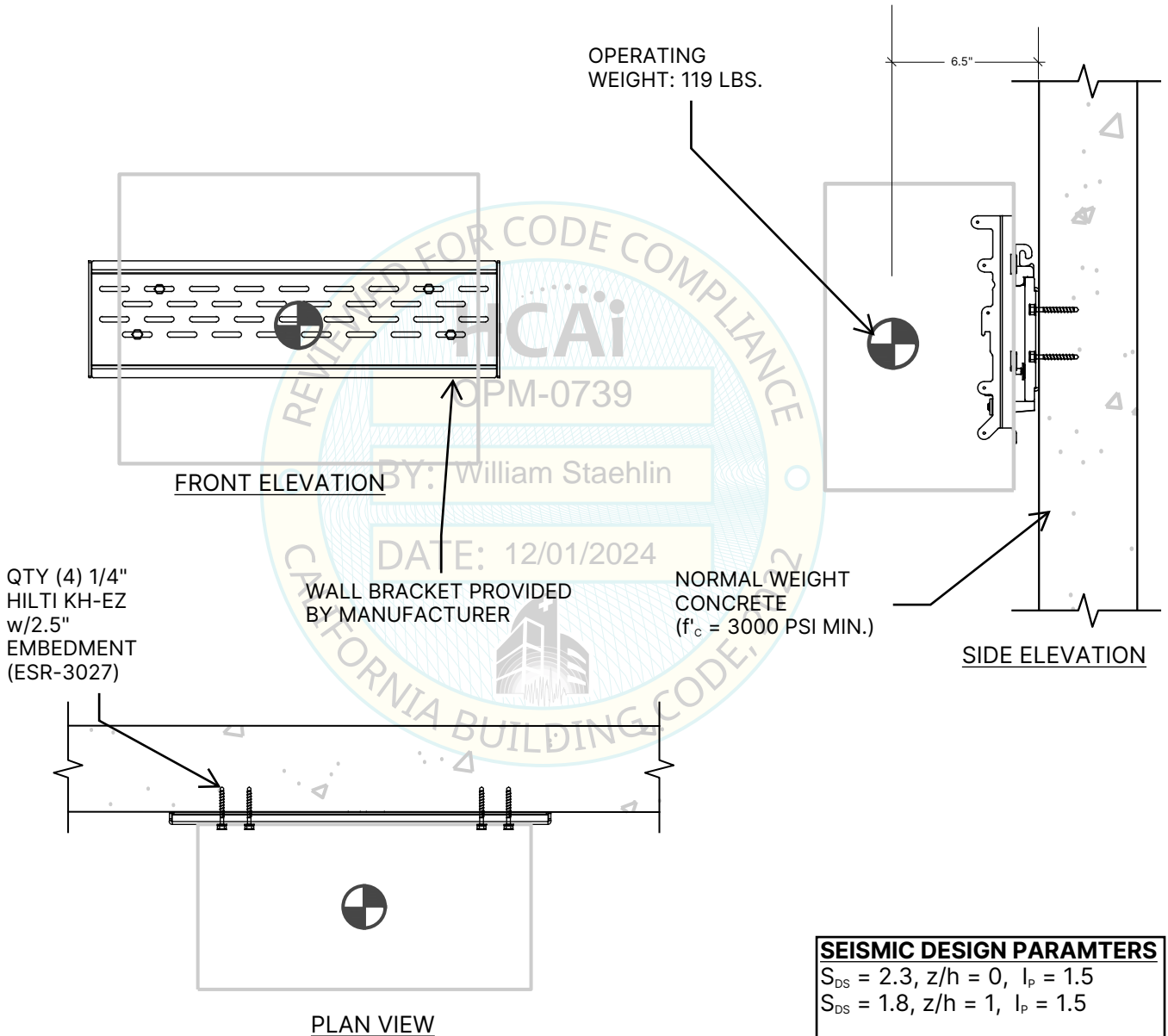
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12/1/2024

OPM-0739: Reviewed for Code Compliance by William E Staehlin



DEVICE MOUNTED TO CONCRETE WALL



SEISMIC DESIGN PARAMTERS	
$S_{DS} = 2.3$	$z/h = 0, I_p = 1.5$
$S_{DS} = 1.8$	$z/h = 1, I_p = 1.5$
$a_p = 1.0, R_p = 2.5, \Omega_0 = 2.0$	

ANCHORS IN CONCRETE AND MASONRY

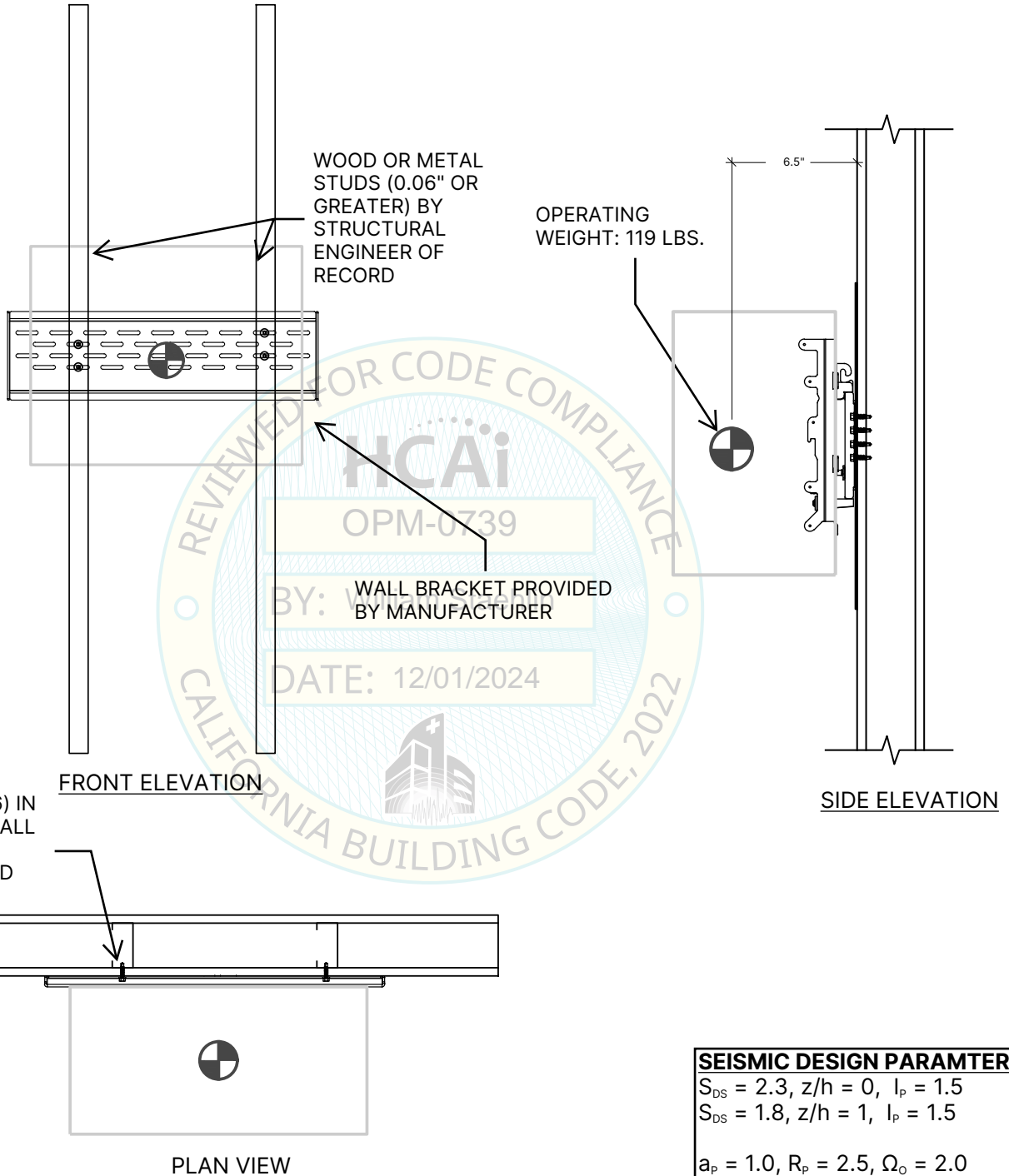
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4. ALL ANCHORS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ESR-3027.
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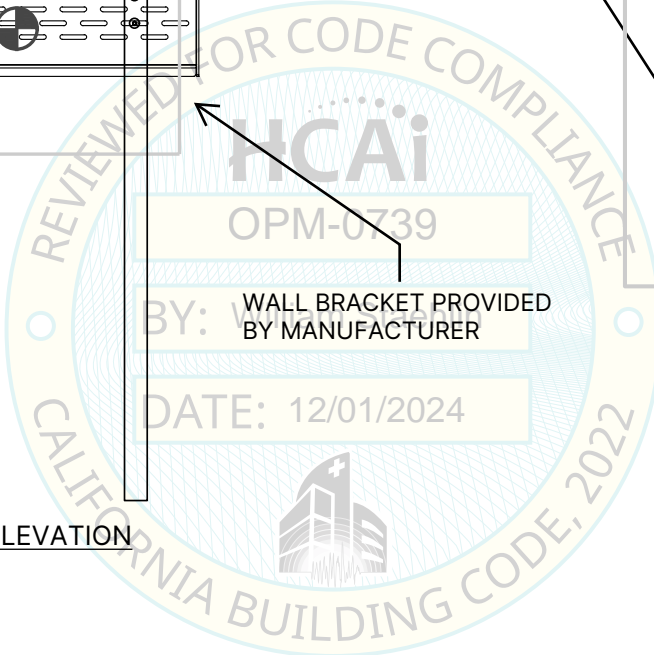


DEVICE MOUNTED TO STUD WALL

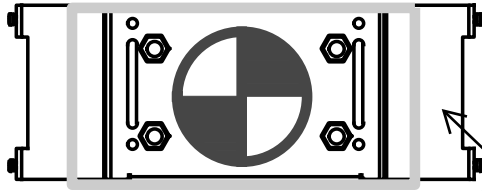


NOTES

1. ALL WORK TO BE PROVIDED ACCORDING TO CBC 2022 AND ESR-1976.



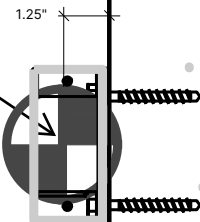
POWER SUPPLY MOUNTED TO CONCRETE WALL



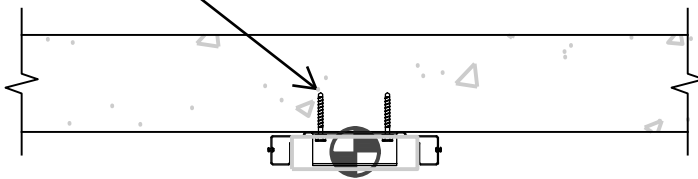
FRONT ELEVATION

OPERATING
WEIGHT: 4.7 LBS.

WALL BRACKET PROVIDED
BY MANUFACTURER



QTY (4) 1/4"
HILTI KH-EZ
w/2.5"
EMBEDMENT
(ESR-3027)



PLAN VIEW

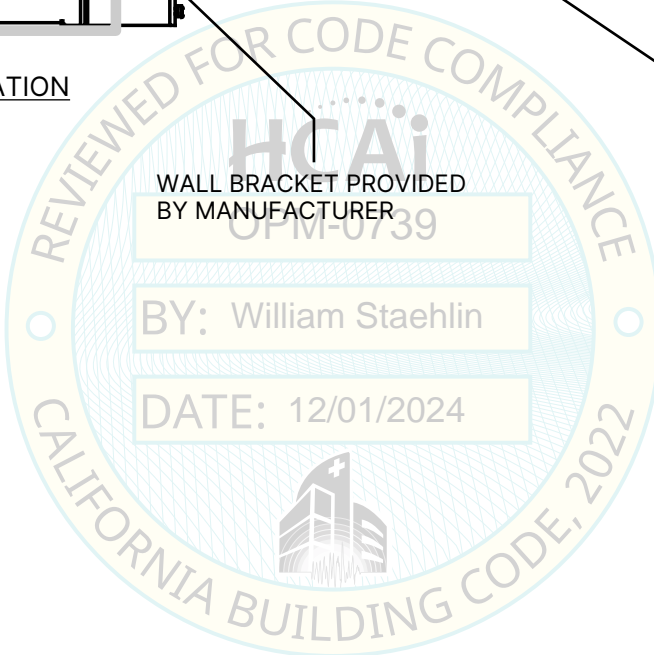
NORMAL WEIGHT
CONCRETE
(f_c = 3000 PSI MIN.)

SEISMIC DESIGN PARAMTERS

S_{DS} = 2.3, z/h = 0, I_p = 1.5

S_{DS} = 1.8, z/h = 1, I_p = 1.5

a_p = 1.0, R_p = 2.5, Ω₀ = 2.0



ANCHORS IN CONCRETE AND MASONRY

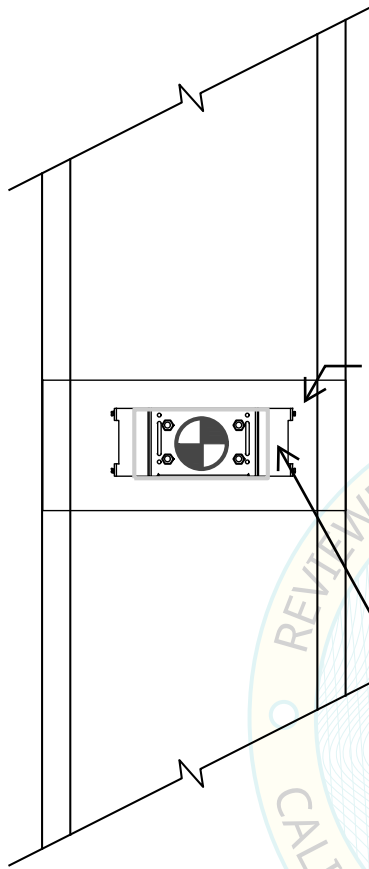
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12/1/2024

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POWER SUPPLY MOUNTED TO STUD WALL

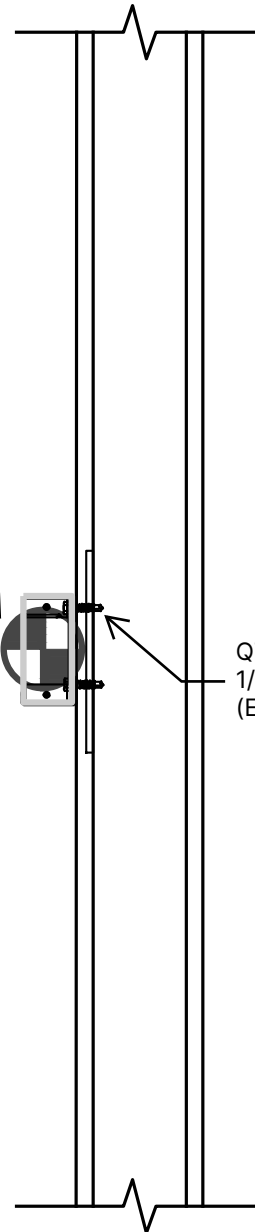


FRONT ELEVATION

WOOD OR METAL STUDS
& BACKING PLATE (0.06"
OR GREATER) BY
STRUCTURAL ENGINEER
OF RECORD

OPERATING
WEIGHT: 4.7 LBS.

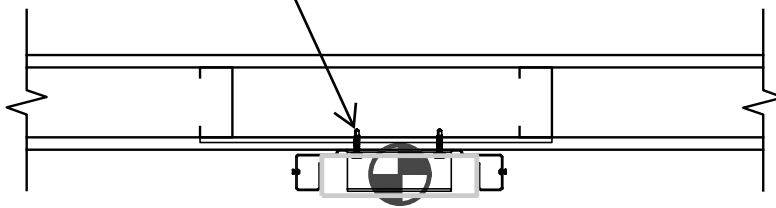
WALL BRACKET PROVIDED
BY MANUFACTURER



SIDE ELEVATION

QTY (4) TEKS
1/4"-14
(ESR-1976)

QTY (4) TEKS
1/4"-14 (ESR-1976)



PLAN VIEW

NOTES

1. ALL WORK TO BE PROVIDED ACCORDING TO CBC 2022 AND ESR-1976.

