



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-0250

HCAI Preapproval of Manufacturer's Certification (OPM)

Type:  New  Renewal/Update

Manufacturer Information

Manufacturer: Belimed, Inc

Manufacturer's Technical Representative: Jay Upchurch

Mailing Address: 8351 Palmetto Commerce Parkway, Suite 10, Ladson, SC 29456

Telephone: (843) 216-7424

Email: jay.upchurch@belimed.com

Product Information

Product Name: SINGLE CHAMBER WASHER/DISINFECTOR-0250

Product Type: Washer/Disinfector

Product Model Number: WD 200, WD 200E, and WD 200ED

General Description: Washer/Disinfector for the cleaning and disinfection of medical devices and accessories.

Applicant Information

Applicant Company Name: Belimed, Inc

Contact Person: Jay Upchurch

Mailing Address: 8351 Palmetto Commerce Parkway, Suite 10, Ladson, SC 29456

Telephone: (843) 216-7424

Email: jay.upchurch@belimed.com

Title: Product Manager

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STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY





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

**Registered Design Professional Preparing Engineering Recommendations**

Company Name: ISAT SEISMIC BRACING  
Name: Deep Shah California License Number: S5867  
Mailing Address: 14848 Northam Street, La Mirada, CA 90638  
Telephone: (714) 523-1771 Email: dshah@isatsb.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, 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 HCAI prior to testing.

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

**HCAI Approval**

Date: 5/17/2024  
Name: Timothy Piland Title: Senior Structural Engineer  
Condition of Approval (if applicable): \_\_\_\_\_

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**STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY**





## Submittal Documents

### OSHPD OPM-0250

OPM-0250

# CONSTRUCTION DRAWINGS FOR BELIMED WD200, WD200E AND WD200ED WASHERS/DISINFECTORS

## BELIMED



04/29/2024

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La Mirada, CA 90638  
877-999-4728

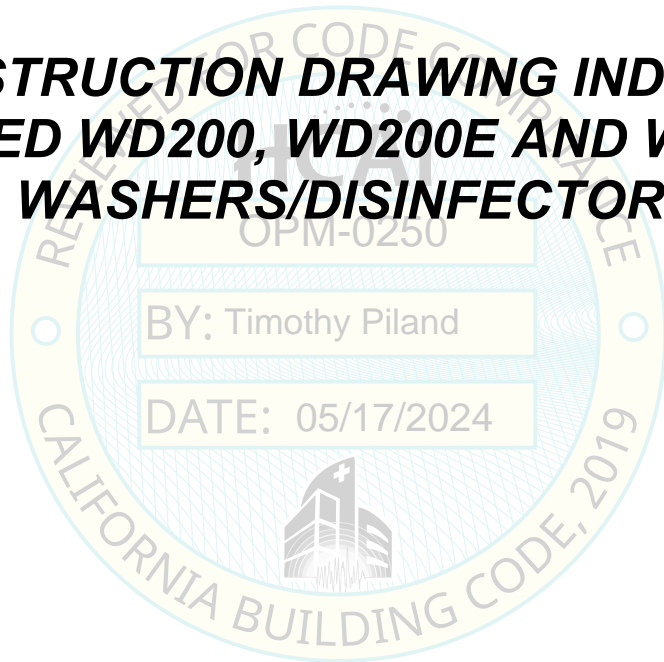
FILE NO.: CLT-0715-102

REV 2

#230861 OSHPD OPM-0250 DWG - i



**OSHPD OPM-0250**  
**CONSTRUCTION DRAWING INDEX FOR**  
**BELIMED WD200, WD200E AND WD200ED**  
**WASHERS/DISINFECTORS**



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FILE NO.: CLT-0715-102

***“Empowered by Experience”***

Index Rev 2

#230861 OSHPD OPM-0250 DWG - ii

# OSHPD OPM-0250

MANUFACTURE: BELIMED

EQUIPMENT TYPE: WASHER-DISINFECTOR

## GENERAL NOTES

1. THIS OSHPD PREAPPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE CBC 2019. THE DEMAND (DESIGN FORCES) FOR USE WITH THIS OPM SHALL BE BASED ON THE CBC 2019.
2. SEISMIC CRITERIA USED:  $S_{DS} = 2.5$   $I_p = 1.5$   $a_p = 1.0$   $R_p = 1.5$  (OTHER MECHANICAL COMPONENT)  $z/h = 0.0$  WITH  $F_{pH} = 1.13$  AT GRADE OR  $z/h = 1.0$  WITH  $F_{pH} = 3.00$  FOR ELEVATED FLOORS.  $F_{pV} = 0.50$ .
3. SUPPORT AND ATTACHMENT FORCES ARE DETERMINED USING ASCE 7-16 CHAPTER 13 "SEISMIC DESIGN REQUIREMENTS FOR NONSTRUCTURAL COMPONENTS". AN OVERSTRENGTH FACTOR  $\Omega_0 = 1.5$  IS USED FOR CONCRETE ANCHORAGE FORCES PER CBC 2019 SECTION 1617A.1.23. LOADS SHOWN ARE STRENGTH DESIGN LOADS PER CBC 2019 SECTION 1605A.2.
4. THIS PREAPPROVAL COVERS ONLY THE SUPPORTS AND ATTACHMENTS OF THE EQUIPMENT TO THE STRUCTURE.
5. THIS PREAPPROVAL IS FOR CONCRETE SLAB AT GRADE OR ELEVATED SLABS FOR THE DEMAND LOADS SHOWN WHERE  $S_{DS} \leq 2.5$ .
6. STEEL MATERIALS: ANGLES ASTM A36, THROUGH BOLTS 304 STAINLESS STEEL WITH MATCHING WASHERS AND NUTS, SEISMIC FOOT ATTACHMENT BY BELIMED IS 11 GAGE AISI 304 STAINLESS STEEL,  $F_y = 31.2$  KSI.
7. CONCRETE SLABS:
  - a. FOR SLAB ON GRADE OR ELEVATED SOLID CONCRETE SLABS: 6" THICKNESS OF NORMAL WEIGHT CONCRETE WITH 3000 PSI MINIMUM STRENGTH.
  - b. METAL DECK: 3" DEEP COMPOSITE STEEL DECK, 20 GAGE MINIMUM, 4.5 INCH MINIMUM BOTTOM FLUTE WIDTH WITH 3.25" FLUTE SPACING IS 12", SAND LIGHT WEIGHT CONCRETE CONCRETE COVER AT 3000 PSI MINIMUM STRENGTH.
8. POST-INSTALLED CONCRETE ANCHORS: HILTI KWIK BOLTS T22 (ESR-4266) STAINLESS STEEL 1/2" DIAMETER x 3 1/4" EFFECTIVE EMBEDMENT. DRILL 9/16" DIAMETER x 4 1/4" DEEP HOLE; INSTALLATION TORQUE SHALL BE 40 FT-LBS; CLEAN HOLE PER MANUFACTURER'S INSTRUCTIONS. FOR ANCHOR INTO THE SOFFIT OF THE METAL DECK USE (SAME) KWIK BOLT T22 (ESR-4266) 1/2" DIAMETER x 4-1/4" MIN HOLE DEPTH FOR 3 1/4" EFFECTIVE EMBEDMENT WITH 1" MAXIMUM OFFSET FROM THE CENTER OF THE METAL DECK FLUTE; INSTALLATION TORQUE SHALL BE 40 FT-LBS. BOTH ARE SUPPLIED BY THE INSTALLATION CONTRACTOR.
9. THROUGH BOLTS: AISI 304 STAINLESS STEEL, 0.50" DIAMETER BOLT OR ALL THREAD RODS WITH MATCHING NUTS AND WASHERS.

OPM-0250 BELIMED WD200, WD200E AND WD200ED  
WASHER/DISINFECTOR GENERAL NOTES

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# OSHPD OPM-0250

MANUFACTURE: BELIMED

EQUIPMENT TYPE: WASHER-DISINFECTOR

### ATTACHMENT NOTES:

1. SEE "GENERAL NOTES" FOR SEISMIC CRITERIA USED.
2. REFER TO OPM-0250 DETAILS FOR THE MATERIALS OF CONSTRUCTION AND FASTENER DIMENSIONS.
3. THROUGH BOLT INSTALLATION AND INSPECTION (DETAILS OF THE SUPPLEMENTAL STEEL AND CONNECTIONS TO STRUCTURE ARE SHOWN ON PAGE "MISC STEEL".)
  - a. THROUGH BOLTS ARE TO BE TORQUED BY 3/4 TURN OF THE NUT AFTER SNUG TIGHT CONDITION IS ACHIEVED. SNUG TIGHT CONDITION IS DEFINED AS THE TIGHTNESS REQUIRED TO BRING THE CONNECTED PLIES INTO FIRM CONTACT.
  - b. THROUGH BOLT HOLES SHALL BE 1/16" LARGER THAN THE BOLT SIZE (HOLE SIZE = BOLT SIZE + 1/16") FOR BOTH THE STEEL AND CONCRETE.
  - c. THROUGH BOLTS WITH STEEL-TO-STEEL CONNECTION IN TENSION DO NOT REQUIRE TESTING.
4. FOR POST INSTALLED CONCRETE ANCHORS PERIODIC SPECIAL INSPECTION SHALL BE IN ACCORDANCE WITH CBC 2019 SECTION 1705A AND TABLE 1705A.3 INCLUDING VERIFICATION OF ANCHOR TYPE, ANCHOR DIMENSIONS, CONCRETE TYPE, CONCRETE COMPRESSIVE STRENGTH, ANCHOR SPACING, EDGE DISTANCES, CONCRETE MEMBER THICKNESS, TIGHTENING TORQUE, HOLE DIMENSIONS, ANCHOR EMBEDMENT AND ADHERENCE TO THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS. IN ADDITION, FOLLOW THE PROVISIONS OF THE 2019 CALIFORNIA BUILDING CODE SECTION 1913A.7.2 BY CONFIRMING THE INSTALLATION TORQUE SPECIFIED BY THE MANUFACTURER. TESTING IS NOT TO OCCUR UNTIL A MINIMUM OF 24 HOURS HAS ELAPSED AFTER THE INSTALLATION OF THE SUBJECT ANCHORS. TESTING SHALL BE DONE IN THE PRESENCE OF THE SPECIAL INSPECTOR. TEST 50% OF THE ANCHORS FOR EACH PIECE OF EQUIPMENT. USING A CALIBRATED TORQUE WRENCH VERIFY THE INSTALLATION TORQUE IS OBTAINED WITHIN 1/2 TURN OF THE NUT. REPORT OF TEST RESULTS ARE TO BE SUBMITTED TO THE ENFORCEMENT AGENCY. THE SEOR SHALL PROVIDE REMEDIAL ANCHORAGE DETAILS IN THE EVENT THAT AN ANCHOR FAILS TO MEET THE TEST REQUIREMENTS.

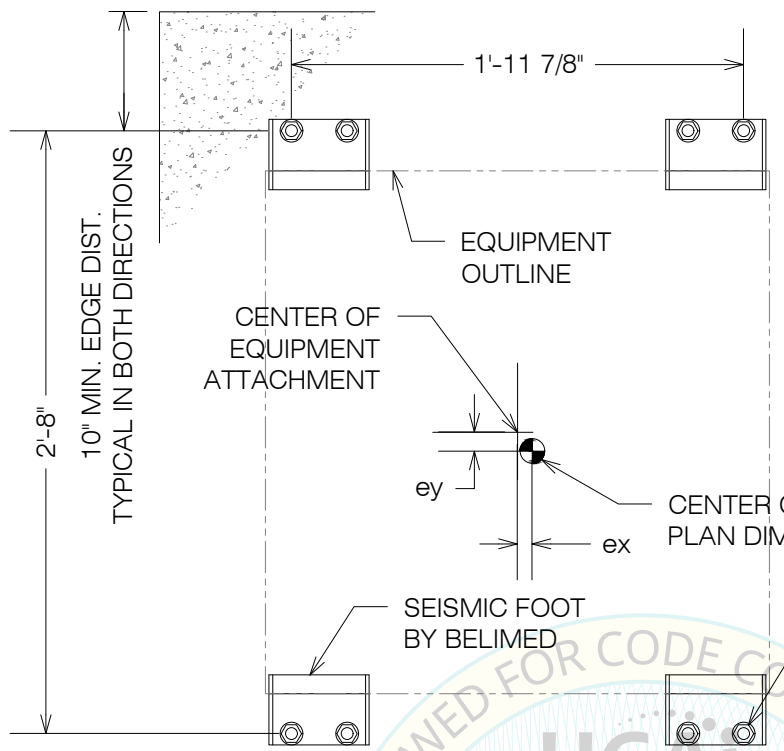
### RESPONSIBILITIES OF THE STRUCTURAL ENGINEER OF RECORD (SEOR)

1. CONFIRM THE MINIMUM REQUIREMENTS FOR THE CONCRETE SLAB ARE MET.
2. PROVIDE A PLAN FOR INSPECTION OF SUPPORTS AND ATTACHMENTS AND VERIFY ITS IMPLEMENTATION.
3. VERIFY THAT THE EXISTING STRUCTURE IS ADEQUATE FOR THE IMPOSED DEAD, LATERAL AND TENSION FORCES SHOWN IN ADDITION TO ALL OTHER LOADS.
4. VERIFY THAT THE INSTALLATION IS IN CONFORMANCE WITH CBC 2019 AND WITH THE OPM-0250 DETAILS.
5. VERIFY THAT THE PROJECT SPECIFIC  $S_{DS}$  AND  $z/h$  VALUES RESULT IN SEISMIC FORCES ( $E_h$  AND  $E_v$ ) DO NOT EXCEED THE VALUES SHOWN IN THESE DETAILS.

OPM-0250 BELIMED WD200, WD200E AND WD200ED  
WASHER/DISINFECTOR ATTACHMENT NOTES

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**EQUIPMENT ATTACHMENT**

1. SLAB ON GRADE HILT T22 1/2" STAINLESS STEEL WITH 4 1/4" HOLE DEPTH AND 40 FT-LBS INSTALLATION TORQUE, PAGE "GEN NOTES" NOTE 8 AND PAGE "ATTACH NOTES" NOTE 4.
2. ELEVATED SLABS 1/2" AISI 304 SS BOLT OR ALL THREAD ROD, PAGE "GEN NOTES" NOTE 9 AND PAGE "ATTACH NOTES" NOTE 3.
3. FOR CONCRETE SLAB REQUIREMENTS REFER TO PAGE "GEN NOTES" NOTE 7.

**WD200, WD200E AND WD200ED ATTACHMENT PLAN**

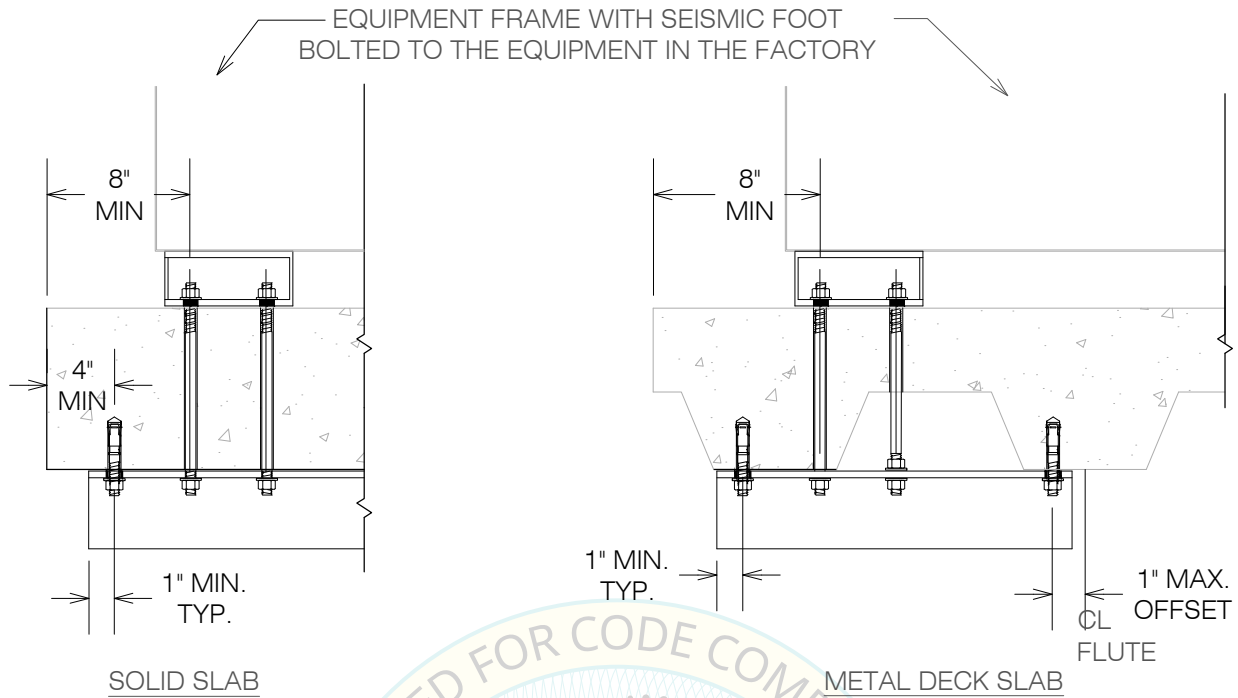
Model	Weight Pounds	ex in	ey in	Vertical Ecc in	Max Anchor Forces at Grade		Max Anchor Forces at Elevated	
					Tu - Lbs	Vu - Lbs	Tu - Lbs	Vu - Lbs
WD200	675	0.0625	0.25	41.625	1083	191	2030	509
WD200E	675	0.0625	0.25	41.625	1083	191	2030	509
WD200ED	785	0.0625	0.25	47.5	1453	222	2705	592

1. Tu AND Vu VALUES INCLUDE AN OVERSTRENGTH FACTOR OF 1.5 IN ACCORDANCE WITH NOTE 3 ON GENERAL NOTES.  
 2. VOIDED

**OPM-0250 BELIMED WD200, WD200E AND WD200ED ANCHOR LAYOUT AND FORCES**

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N.T.S.	WD200 LAYOUT	



**NOTES:**

1. DRILL 9/16" HOLE IN THE CONCRETE SLAB TO RECEIVE THE 1/2" AISI 304 STAINLESS STEEL ALL THREAD RODS OR BOLTS FOR EQUIPMENT ANCHORAGE WITH WASHERS AND HEX NUTS.
2. SUPPLEMENTAL ANGLE SHALL BE L3x3x1/4 ASTM A36. DRILL 9/16" HOLES IN ANGLE FOR BOLTS. FOR LOCATIONS WHERE A TOP NUT CANNOT BE INSTALLED, DRILL AND TAP THE ANGLE TO RECEIVE THE 1/2" EQUIPMENT ANCHORAGE BOLTS.
3. ANCHOR INTO BOTTOM OF SLAB SHALL BE HILTI KWIK BOLT (TZ2 (ESR-4266)) 1/2" x 2 3/4" MINIMUM HOLE DEPTH (2" EFFECTIVE EMBEDMENT) AND 40 FT-LBS INSTALLATION TORQUE.
4. SEE PAGE "GEN NOTES" NOTE 7 FOR CONCRETE SLAB AND METAL DECK REQUIREMENTS.

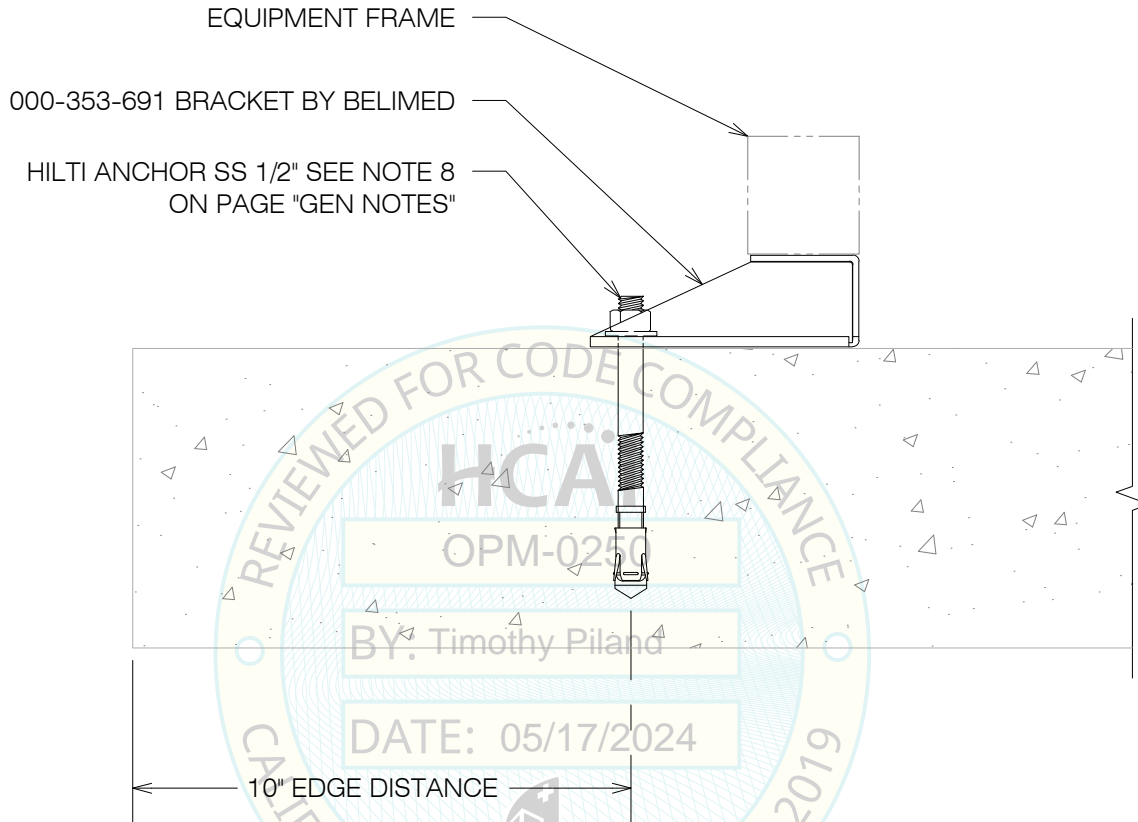
OPM-0250 BELIMED WD200, WD200E AND WD200ED  
 MISCELLANEOUS STEEL DETAILS AT ELEVATED SLABS



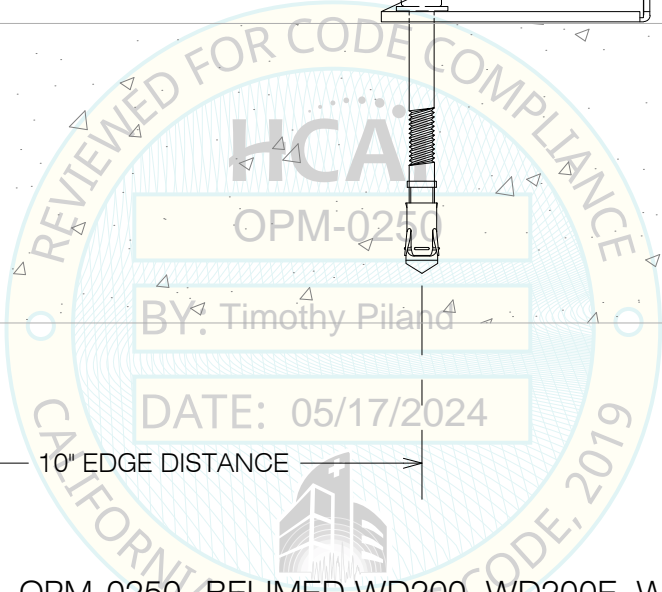
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OPM-0250 BELIMED WD200, WD200E, WD200ED  
 STERILIZER EQUIPMENT ANCHORAGE AT SLAB-ON-GRADE



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