



OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION

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

OFFICE USE ONLY

APPLICATION #: OPM-0250-13

OSHPD Preapproval of Manufacturer's Certification (OPM)

Type: ☐ New ☐ Renewal ☒ Update to Pre-CBC 2013 OPA Number: _____

Manufacturer Information

Manufacturer: Belimed

Manufacturer's Technical Representative: Nelson Garrido

Mailing Address: 2325 Charleston Regional Parkway, Charleston, SC 29492

Telephone: 843-216-7424 x372

Email: nelson.garrido@belimed.com

Product Information

Product Name: Single Chamber Washer-Disinfector

Product Type: Washers

OPM-0250-13

Product Model Number: WD200, WD200E and WD200ED

General Description: Belimed's WD200, WD200E and WD200ED washer-disinfector with manual hinged glass doors offers excellent cost-performance ratio. The smallest unit of this category with no lateral maintenance room needed, the low-consumption WD 200 processes 12 DIN trays.

Applicant Information

Applicant Company Name: ISAT Seismic Bracing


Contact Person: William V Joerger

Mailing Address: 1020 Crews Road, Suite Q, Matthews NC 28105

Telephone: 510-714-0216

Email: wvjoerger@isatsb.com

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: 

Date: July 10, 2015

Title: Principal Structural Engineer

Company Name: ISAT Seismic Bracing

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

STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY
OSH-FD-700 (REV 5/30/13)



osHPD

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FACILITIES DEVELOPMENT DIVISION**

Registered Design Professional Preparing Engineering Recommendations

Company Name: ISAT Seismic Bracing

Name: William V Joerger California License Number: S4545

Mailing Address: 1020 Crews Rd Suite Q, Matthews NC 28105

Telephone: 510-714-0216 Email: wvjoerger@isatsb.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): _____

Equipment is considered to be rugged. OPM is for anchorage to concrete slabs.

*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 bracing, 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: Jeffrey Kikumoto Date: 09/25/2015

Print Name: Jeffrey Kikumoto

Title: SSE

Condition of Approval (if applicable): _____

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STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY
OSH-FD-700 (REV 5/30/13)



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INTERNATIONAL SEISMIC APPLICATION TECHNOLOGY

A Division of Tomarco Contractor Specialties

Submittal Documents

OPM-0250-13

OSHDP OPM-0250-13

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

BELIMED

ISAT
1020 Crews Road Suite Q
Matthews, N.C. 28105
704-841-4080



FILE NO.: CLT-0715-102

"Empowered by Experience"

REV 1

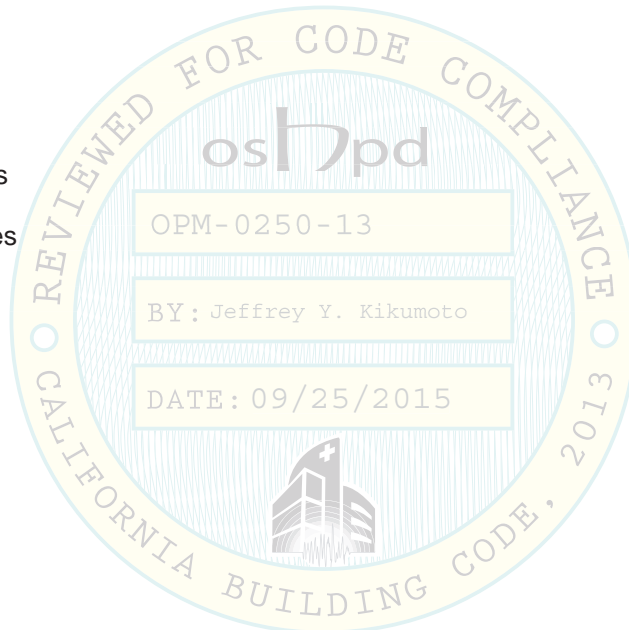
OSHDP OPM-0250-13 DWG - i

OSHPD OPM-0250-13

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

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OSHPD OPM-0250-13 DWG - ii

OSHPD OPM-0250-13

MANUFACTURE: BELIMED

EQUIPMENT TYPE: WASHER-DISINFECTOR

GENERAL NOTES

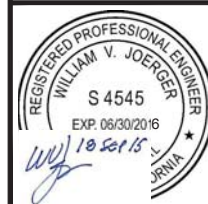
1. THIS OSHPD PREAPPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE CBC 2013. THE DEMAND (DESIGN FORCES) FOR USE WITH THIS OPM SHALL BE BASED ON THE CBC 2013.
2. SEISMIC CRITERIA USED: $S_{DS} = 2.5$ $I_p = 1.5$ $a_p = 1.0$ $R_p = 1.5$ (OTHER MECHANICAL COMPONENT) $z/h = 0.0$ WITH $F_pH = 1.13$ 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 7-10 CHAPTER 13 "SEISMIC DESIGN REQUIREMENTS FOR NONSTRUCTURAL COMPONENTS". AN OVERSTRENGTH FACTOR $\Omega_0 = 1.5$ IS USED FOR CONCRETE ANCHORAGE FORCES PER ASCE 7-10 SUPPLEMENT 1 TABLE 13.6-1. LOADS SHOWN ARE STRENGTH DESIGN LOADS PER CBC 2013 SECTION 1909A.
4. THIS PREAPPROVAL COVERS ONLY THE SUPPORTS AND ATTACHMENTS OF THE EQUIPMENT TO THE
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
8. RETROFIT CONCRETE ANCHORS: HILTI KWIK BOLTS TZ (ESR-1917) STAINLESS STEEL 0.50" DIAMETER x 4" MINIMUM HOLE DEPTH (3.25" EFFECTIVE EMBEDMENT) AND 40 FT-LBS INSTALATION TORQUE.
9. THROUGH BOLTS: AISI 304 STAINLESS STEEL, 0.50" DIAMETER BOLT OR ALL THREAD RODS WITH MATCHING NUTS AND WASHERS.

DATE: 09/25/2015

OPM-0250-13 BELIMED WD200, WD200E AND WD200ED
WASHER/DISINFECTOR GENERAL NOTES



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OSHPD OPM-0250-13

MANUFACTURE: BELIMED

EQUIPMENT TYPE: WASHER-DISINFECTOR

ATTACHMENT NOTES:

1. SEE "GENERAL NOTES" FOR SEISMIC CRITERIA USED.
2. REFER TO OPM-0250-13 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 THIGHTNEE REQUIRED TO BRING THE CONNECTED PLIES INTO FIRM
 - 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 2013 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 2013 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.

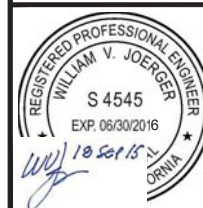
RESPONSIBILITIES OF THE STRUCTURAL ENGINEER OF RECORD (SEOR)

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 ADDTION TO ALL OTHER LOADS.
4. VERIFY THAT THE INSTALLATION IS IN CONFORMANCE WITH CBC 2013 AND WITH THE OPM-0250-13 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-0250-13 BELIMED WD200, WD200E AND WD200ED
WASHER/DISINFECTOR ATTACHMENT NOTES



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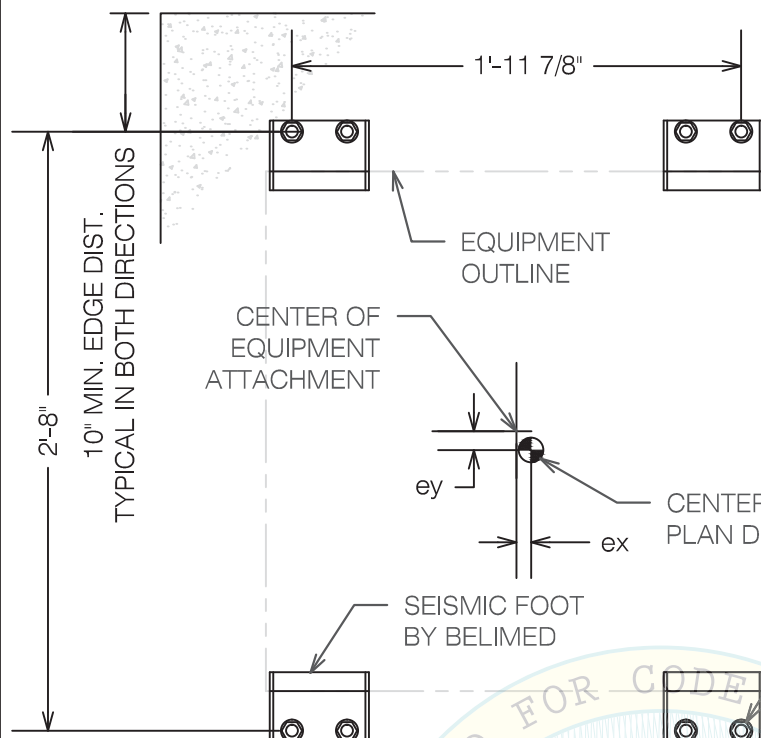


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PAGE
ATTACH NOTES



EQUIPMENT ATTACHMENT

1. SLAB ON GRADE HILTI TZ 1/2" STAINLESS STEEL WITH 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

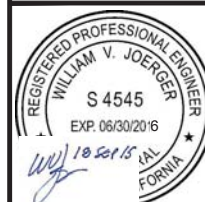
Model	Weight Pounds	ex in	ey in	Vertical Ecc in	Max Anchor Forces at Grade		Max Anchor Forces at Elevated	
					Tu - Lbs	Vu - Lbs	Tu - Lbs	Vu - Lbs
WD200	675	0.0625	0.25	41.625	1083	191	2030	509
WD200E	675	0.0625	0.25	41.625	1083	191	2030	509
WD200ED	785	0.0625	0.25	47.5	1453	222	2705	592

1. Tu AND Vu VALUES INCLUDE AN OVERSTRENGTH FACTOR OF 1.5 IN ACCORDANCE WITH ASCE 7-10 SUPPLEMENT No. 1.
2. FOR INTERACTION CHECKS THE CALCULATED ANCHOR CAPACITY HAS BEEN MULTIPLIED BY 0.75 TO ACCOUNT FOR THE CONCRETE ANCHORAGE CAPACITY REDUCTION FROM ACI 318-11 SECTION D3.3.4.4.

OPM-0250-13 BELIMED WD200, WD200E AND WD200ED ANCHOR LAYOUT AND FORCES



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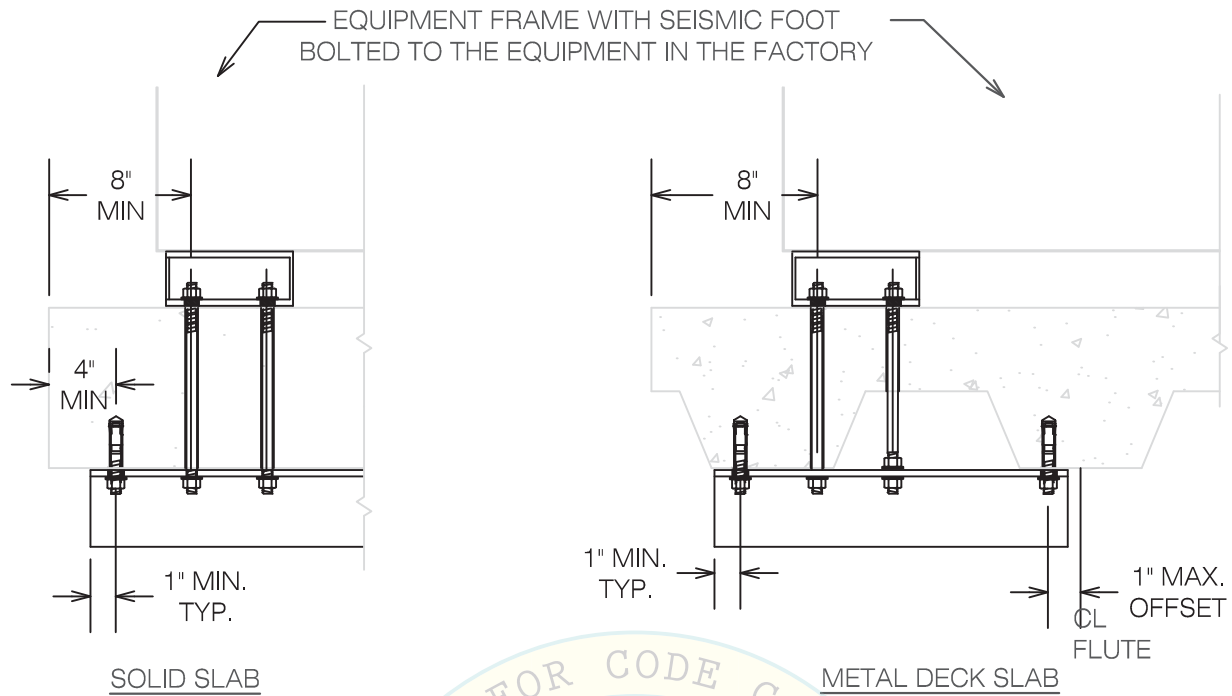


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NOTES:

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 TZ (ESR-1917) 1/2" x 3" 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-0250-13 BELIMED WD200, WD200E AND WD200ED
MISCELLANEOUS STEEL DETAILS AT ELEVATED SLABS**



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