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

OFFICE USE ONLY
APPLICATION #: OPM-0443-13

OSHPD Preapproval of Manufacturer's Certification (OPM)

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

Manufacturer Information

Manufacturer: Roche Diagnostics Corporation

Manufacturer's Technical Representative: Robert A. Jones

Mailing Address: PO Box 50457, Indianapolis, IN 46250-457

Telephone: 317-521-3244 Email: Robert.jones@roche.com

Product Information

Product Name: cobas c513 Modular Analyzer

Product Type: Blood Analyzer

Product Model Number: Cobas c513

General Description: General Chemistry Tests

REVIEWED FOR CODE COMPLIANCE
OSHPD
OPM-0443-13
BY: Jeffrey Kikumoto
DATE: 02/27/2019
CALIFORNIA BUILDING CODE 2016

Applicant Information

Applicant Company Name: Roche Diagnostics Corporation

Contact Person: Robert A. Jones

Mailing Address: PO Box 50457, Indianapolis, IN 46250-457

Telephone: 317-521-3244 Email: Robert.jones@roche.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: Robert A Jones Date: 08/23/2017

Title: Manager–Field Engineering Support Company Name: Roche Diagnostics Corporation

Registered Design Professional Preparing Engineering Recommendations

Company Name: CYS Structural Engineers, Inc.

Name: Dieter T. Siebald California License Number: S 4346

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

Telephone: 916-920-2020 Email: dieters@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):

*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): Manufacturer's Equipment Drawings and Documents (attached to Calculations)

REVIEWED FOR CODE COMPLIANCE OSHPD OPM-0443-13 BY: Jeffrey Kikumoto DATE: 02/27/2019 CALIFORNIA BUILDING CODE 2016

OFFICE USE ONLY – OSHPD APPROVAL VALID FOR CBC 2016 & ALL PRE-2016 CODE BASED PROJECTS

Signature: Date: 2/27/2019

Print Name: Jeffrey Kikumoto

Title: SE

Condition of Approval (if applicable):

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OPM–0443–13

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OSHPD
OPM-0443-13
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DATE: 02/27/2019

NOTES: 1. THESE DRAWINGS ARE PREPARED FOR ROCHE DIAGNOSTICS CORPORATION, INDIANAPOLIS, INDIANA.

2. THE CONTRACTOR & INSPECTOR OF RECORD SHALL OBTAIN A COPY OF THIS PRE–APPROVAL FROM THE OFFICE OF STATEWIDE HEALTH PLANNING & DEVELOPMENT (OSHPD) PRE–APPROVAL PROGRAMS WEBSITE.

3. THIS PRE–APPROVAL COVERS THE SUPPORTS & ATTACHMENTS OF THE UNIT TO THE SUPPORTING STRUCTURE. THE EQUIPMENT UNITS INCLUDING LEVELING LEGS ARE SUPPLIED BY ROCHE. THE SEISMIC BRACKETS, THRU–BOLTS & EXPANSION ANCHORS SHOWN ON PAGES 9–14 SHALL BE SUPPLIED & INSTALLED BY THE CONTRACTOR.

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: TABLE OF CONTENTS

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

Job No:	17034
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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. IT IS THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER OF RECORD (SEOR) FOR A SITE SPECIFIC PROJECT TO VERIFY:
   - A. THE ADEQUACY OF THE (N) OR (E) STRUCTURE TO RESIST THE FORCES & WT SPECIFIED FOR EA EQUIP IN ADDITION TO ALL OTHER LOADS. PROVIDE & DESIGN SUPPLEMENTARY MEMBERS AS REQ.
   - B. THAT THE FLR ANCHORS ARE LOCATED AT AN ADEQUATE DISTANCE FROM ANY SLAB EDGES OR OPGS.
   - C. THAT THE FLR ANCHORS ARE LOCATED AT AN ADEQUATE DISTANCE FROM ANY (N) OR (E) ANCHORS. THE SPACING SHOWN IN THE TEST LOADS TABLE ON PG 3 IS THE REQ MIN SPACING OF THE ½" DIA AB'S. THE REQ SPACING FROM ANCHORS OF OTHER DIAMETERS & EMBEDMENTS MAY VARY & SHALL BE EVALUATED BY THE SEOR.
   - D. THAT THE INSTALLATION IS IN CONFORMANCE W/ THE CBC 2016 & W/ THE DETAILS SHOWN IN THIS PRE-APPROVAL.
   - E. THAT THE ACTUAL EQUIPMENT'S WT, CENTER OF GRAVITY (CG) LOCATION, ANCHOR LOCATIONS, ANCHOR DETAILS, & THE MATERIAL & GA OF THE EQUIP WHERE ATTACHMENTS ARE MADE, AGREE W/ THE INFO SHOWN ON THE PRE-APPROVAL DOCUMENTS. PROVIDE FULL THRD ENGAGEMENT OF NUT & WASHER.
3. EXPANSION ANCHORS INSTALLED IN NWC OR SLWC SHALL BE CARBON STL HILTI KB-TZ EXPANSION ANCHORS COMPLYING W/ ESR-1917 REISSUED MAY 2017.
   - A. INSTALLATION: INSTALL THE EXPANSION ANCHORS IN ACCORDANCE W/ THE REQUIREMENTS GIVEN IN THE ICC EVALUATION REPORT FOR THE SPECIFIC ANCHOR & THE PARAMETERS GIVEN IN THE TABLE ON PG 3.
   - B. 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. THE TEST LOAD MAY BE APPLIED BY ANY METHOD THAT WILL EFFECTIVELY MEASURE THE TENSION OR TORQUE IN THE ANCHOR SUCH AS DIRECT PULL W/ A HYDRAULIC JACK OR CALIBRATED SPRING LOADING DEVICES OR CALIBRATED TORQUE WRENCH METHOD. ALL TESTS SHALL BE CONDUCTED IN THE PRESENCE OF THE SPECIAL INSPECTOR & A REPORT OF THE 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 1910A.5 "FIELD TESTS FOR POST-INSTALLED ANCHORS IN CONCRETE".
   - C. 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. FOR WEDGE TYPE ANCHORS, SUCH AS HILTI KB-TZ, A PRACTICAL WAY TO DETERMINE OBSERVABLE MOVEMENT IS THAT THE WASHER UNDER THE NUT BECOMES LOOSE.
     - TORQUE WRENCH METHOD: THE APPLICABLE TEST TORQUE MUST BE REACHED WITHIN THE FOLLOWING LIMITS: WEDGE TYPE: ONE-HALF (½) TURN OF THE NUT.

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SHEET TITLE: GENERAL NOTES

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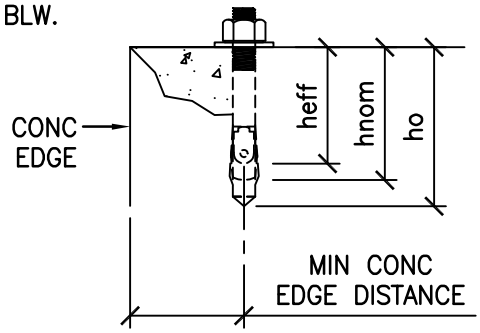
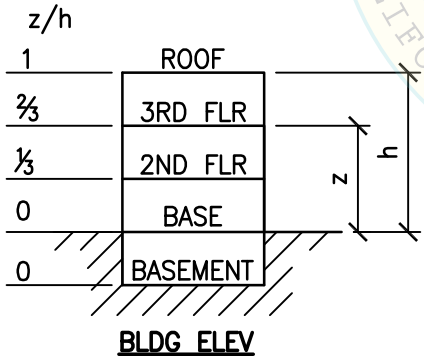
GENERAL NOTES CONTINUED:

3D. TEST VALUES: APPLY TEST LOADS TO ANCHORS W/O REMOVING THE NUT IF POSSIBLE, SEE TABLE BLW.



ANCHOR DIA (INCH) da	INSTALLATION EMBED (INCH) hnom	EFFECTIVE EMBED (INCH) hef	HOLE DEPTH (INCH) ho	MIN CONC THICKNESS (INCH) h_{min}	MIN CONC EDGE DISTANCE (INCH)	MIN AB SPACING (INCH)	TEST LOAD		CONDITION OF ANCHORAGE
							TENSION LOAD (LBS)	TORQUE (FT-LBS)	
½	2⅜	2	2⅝	4	12	2.5	1595	40	CASE 2

4. BOLTS THRU CONC ON MTL DECK:
   A. BOLTS SHALL BE TORQUED BY ¾ TURN OF THE NUTS AFTER SNUG TIGHT (THE SNUG TIGHT CONDITION IS DEFINED AS THE TIGHTNESS REQ TO BRING THE CONNECTED PLIES INTO FIRM CONTACT) CONDITION IS ACHIEVED, UNO.
   B. THRU-BOLT HOLES SHALL BE 1/16" LARGER THAN BOLT SIZE (HOLE SIZE = BOLT SIZE + 1/16").
   C. THRU-BOLTS IN CONC SHALL RECEIVE SPECIAL INSPECTION & TESTING (THRU-BOLTS W/ STL-TO-STL CONN IN TENSION DO NOT REQUIRE TESTING) IN ACCORDANCE W/ REQUIREMENTS FOR POST-INSTALLED ANCHORS.
5. TWO (2) CASES OF ATTACHMENT ARE SPECIFIED & PRESENTED IN THIS PRE-APPROVAL:



BLDG ELEV

CASE 1: ATTACHMENT DETAILS LOCATED AT UPPER FLRS ABV THE BASE OF A BLDG ($z/h \leq 1.0$), THE FLRS ARE ASSUMED TO BE BUILT OF A MIN 3¼" SLWC TOPPING OVER 20 GA MTL DECK ($f'c$ = 3000 PSI, MIN).

CASE 2: ATTACHMENT DETAILS LOCATED AT OR BLW THE BASE OF A BLDG ($z/h=0$). THE FLRS ARE ASSUMED TO BE BUILT OF A MIN 4" NWC SLAB ($f'c$ = 3000 PSI, MIN).

6. THIS PRE-APPROVAL MAY BE USED AT ANY GEOGRAPHICAL LOCATION IN THE STATE OF CALIFORNIA WHERE S_{DS} IS LESS THAN OR EQ TO 2.50.

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SHEET TITLE: GENERAL NOTES (CONTINUED)

CYS STRUCTURAL ENGINEERS, INC.
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SYSTEM OVERVIEW & DESIGN CRITERIA

1. THE cobas c513 IS A FLR-MOUNTED MODULE CONSISTING OF A MODULAR ANALYZER & SAMPLER UNIT.

2. ATTACHMENT DESIGN IS PER 2016 CBC AT LRFD LEVEL FORCES.

FLR MOUNTED MECH EQUIP PER ASCE 7-10 TABLE 13.6-1.
a_p = 1.0 R_p = 1.5 I_p = 1.5 Ω_0 = 1.5 (CONC ANCHORS)
W_p AS NOTED ON COMPONENT DRAWINGS SHOWN ON PGS 7&8

FOR CASE 1 – UPPER FLRS ABV THE BASE, z/h ≤ 1.0
S_{DS} = 2.50 F_p = 3.00 W_p F_v = 0.50 W_p

FOR CASE 2 – SLAB AT OR BLW BASE, z/h = 0
S_{DS} = 2.50 F_p = 1.125 W_p F_v = 0.50 W_p

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SHEET TITLE: SYSTEM OVERVIEW & DESIGN CRITERIA

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ABBREVIATIONS:

@	AT
AB	ANCHOR BOLT
ABV	ABOVE
ADJ	ADJACENT
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASTM	AMERICAN SOCIETY FOR TESTING & MATERIALS
BLDG	BUILDING
BLW	BELOW
BOTT	BOTTOM
CBC	CALIFORNIA BUILDING CODE
CG	CENTER OF GRAVITY
℄	CENTERLINE
CONC	CONCRETE
CONN	CONNECTION
COORD	COORDINATE
DBL	DOUBLE
DIA (ø)	DIAMETE
DIM	DIMENSION
(E)	EXISTING CONDITION
EA	EACH
EE	EACH END
ELEV	ELEVATION
EQ	EQUAL
EQUIP	EQUIPMENT
f'c	MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE
FLR	FLOOR
FT (')	FOOT/FEET
F_p	HORIZONTAL SEISMIC FORCE PER ASCE 7-10 SEISMIC FORCE REQUIREMENTS
F_v	VERTICAL SEISMIC FORCE PER ASCE 7-10 SEISMIC FORCE REQUIREMENTS
F_y	SPECIFIED MINIMUM YIELD STRESS OF STEEL
GA	GAUGE
ICC	INTERNATIONAL CODE COUNCIL
IN (")	INCH
INFO	INFORMATION
IOR	INSPECTOR OF RECORD
KSI	KIPS PER SQUARE INCH
LBS	POUNDS
LRFD	LOAD AND RESISTANCE FACTOR DESIGN
MAX	MAXIMUM
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM
MTL	METAL
(N)	NEW
NO. (#)	NUMBER OR POUNDS
NWC	NORMAL WEIGHT CONCRETE
OPG	OPENING
OSHPD	OFFICE OF STATEWIDE HEALTH PLANNING & DEVELOPMENT
PERP	PERPENDICULAR
PG	PAGE
PL	PLATE
PSI	POUNDS PER SQUARE INCH
REQ	REQUIRED
SLWC	SAND-LIGHTWEIGHT CONCRETE
STL	STEEL
Tu	ANCHORAGE TENSION REACTION DUE TO SEISMIC FORCE
THK	THICK/THICKNESS
THRD	THREAD OR THREADED
TYP	TYPICAL
T&B	TOP & BOTTOM
UNO	UNLESS NOTED OTHERWISE
Vu	ANCHORAGE SHEAR REACTION DUE TO SEISMIC FORCE
W/	WITH
W/O	WITHOUT
Wp	OPERATING WEIGHT
WT	WEIGHT

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REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
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STATE OF CALIFORNIA

SHEET TITLE: ABBREVIATIONS

CYS STRUCTURAL ENGINEERS, INC.
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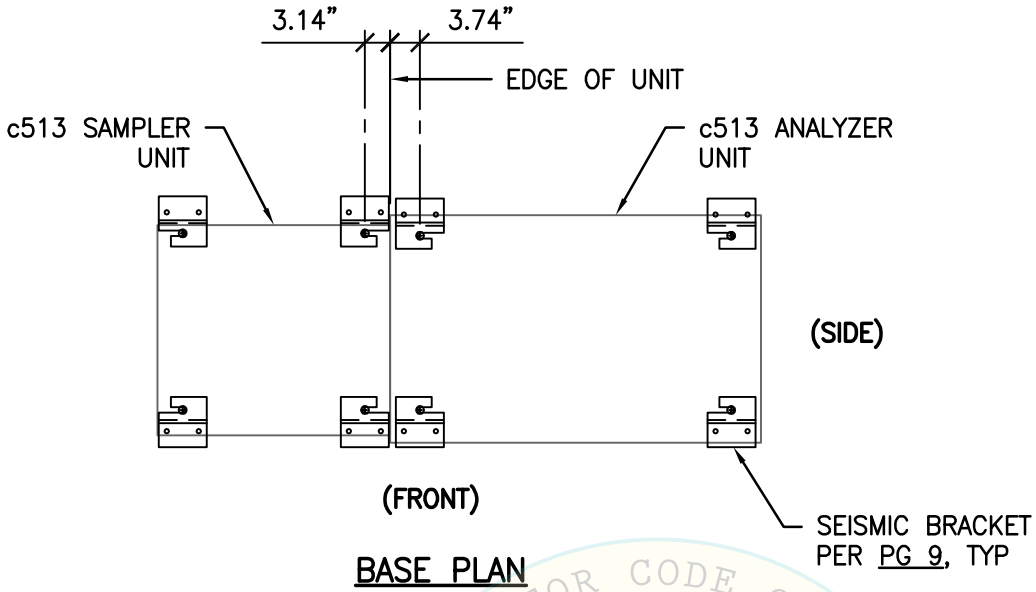
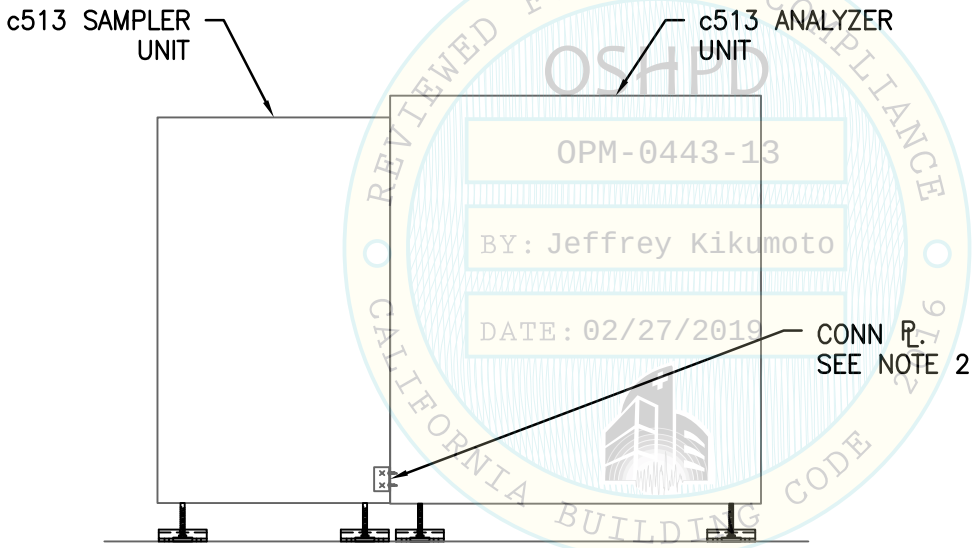


BASE PLAN



FRONT ELEV

NOTES:
1. SEE PG 7 & 8 FOR MODULES DIMS & CG'S.
2. CONN OF SAMPLER UNIT TO ANALYZER UNIT NOT SHOWN FOR CLARITY. USE CONN ℄ PER MFR W/ 2– M8x16 TO THE SAMPLER UNIT & 2– M8x25 TO THE ANALYZER.

REVIEWED FOR CODE COMPLIANCE OSHPD OPM-0443-13 BY: Jeffrey Kikumoto DATE: 02/27/2019 CALIFORNIA BUILDING CODE 2016

REGISTERED PROFESSIONAL ENGINEER
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No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: SYSTEM COMBINATION PLAN
SINGLE MODULE

CYS STRUCTURAL ENGINEERS, INC.
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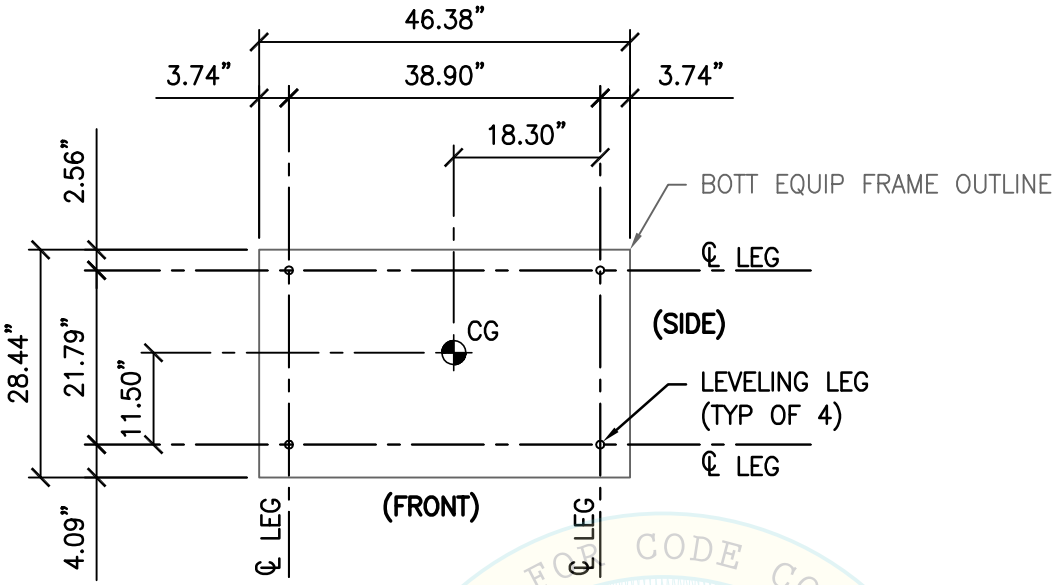
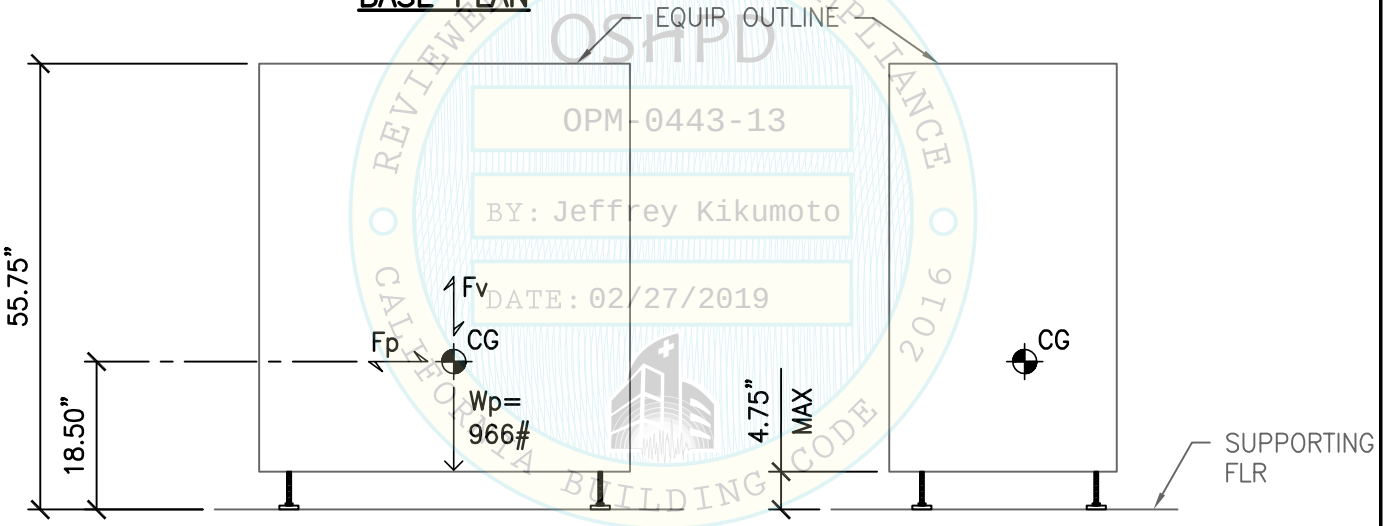
ROCHE DIAGNOSTICS CORPORATION
cobas® c513 MODULAR ANALYZER



BASE PLAN



FRONT ELEV

SIDE ELEV

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CALIFORNIA BUILDING CODE 2016
OSHPD
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DATE: 02/27/2019

NOTES:
1. FOR SEISMIC BRACKET LOCATIONS & ORIENTATION SEE SYSTEM COMBINATION PLANS.
2. WHEELS NOT SHOWN FOR CLARITY.
3. FRAME MATERIAL: SUS430 & JFE-CC-EZ-JN 20/20.
4. REFER TO PG 13 FOR FRAME MATERIAL PROPERTIES.

REGISTERED PROFESSIONAL ENGINEER
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STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: COMPONENT PLAN & ELEVATIONS
c513 ANALYZER UNIT

CYS STRUCTURAL ENGINEERS, INC.
2495 NATOMAS PARK DRIVE, SUITE 650
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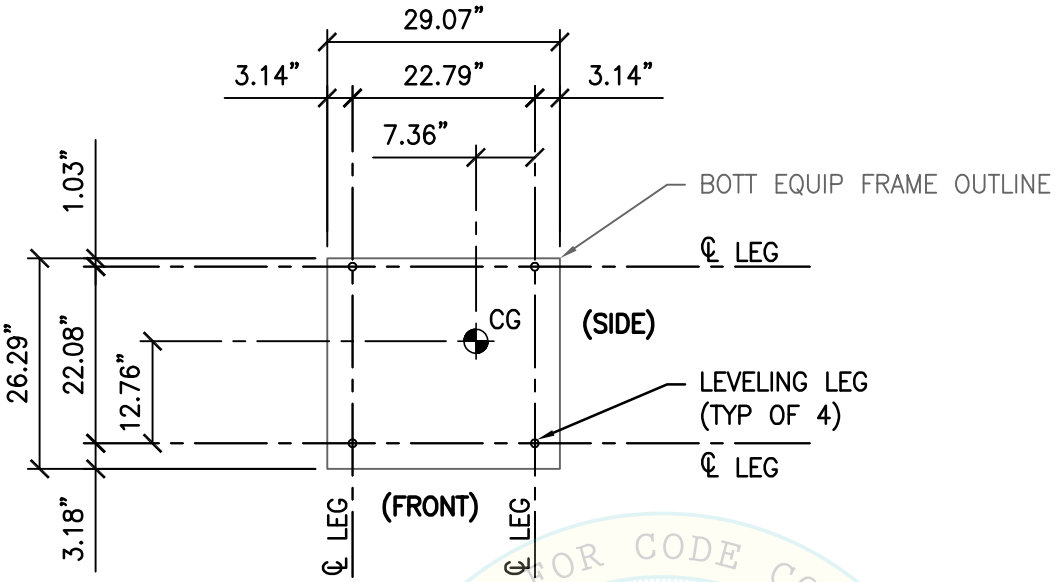
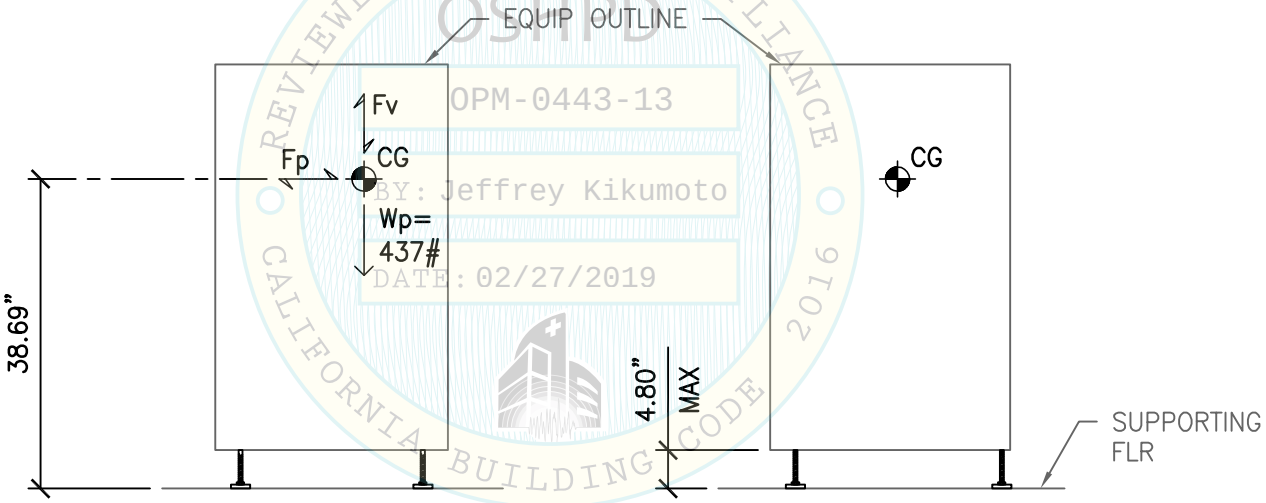
ROCHE DIAGNOSTICS CORPORATION
cobas® c513 MODULAR ANALYZER



BASE PLAN



FRONT ELEV

SIDE ELEV

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NOTES:
1. FOR SEISMIC BRACKET LOCATIONS & ORIENTATION SEE SYSTEM COMBINATION PLANS.
2. WHEELS NOT SHOWN FOR CLARITY.
3. FRAME MATERIAL: SUS430 & JFE-CC-EZ-JN 20/20.
4. REFER TO PG 14 FOR FRAME MATERIAL PROPERTIES.

REGISTERED PROFESSIONAL ENGINEER
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STATE OF CALIFORNIA

SHEET TITLE: COMPONENT PLAN & ELEVATIONS
c513 SAMPLER UNIT

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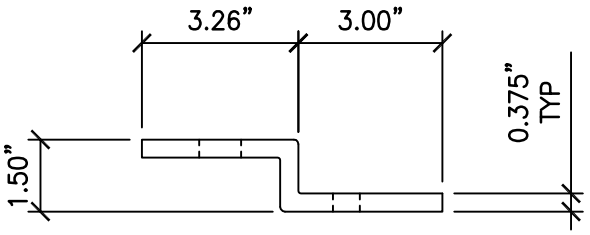
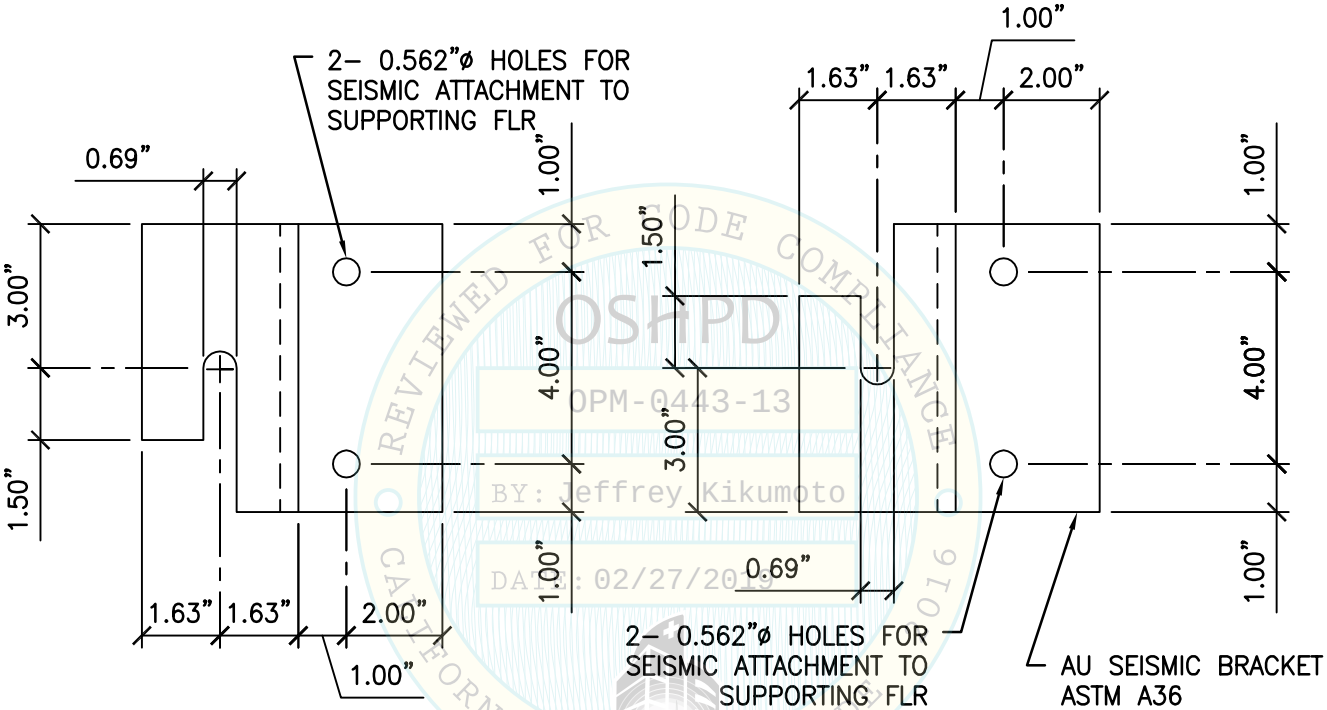


ELEV

NOTES:
1. FOR CASE 1 & CASE 2 ATTACHMENT TO FLR, SEE PGS 10 TO 14.
2. BRACKET & SLOT DIRECTIONS SHALL BE FOLLOWED AS SHOWN ON SYSTEM COMBINATION PLANS.



RIGHT–HAND

LEFT–HAND

PLANS

REVIEWED FOR CODE COMPLIANCE
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SHEET TITLE: SEISMIC BRACKET DETAIL
c513 ANALYZER UNIT & c513 SAMPLER UNIT

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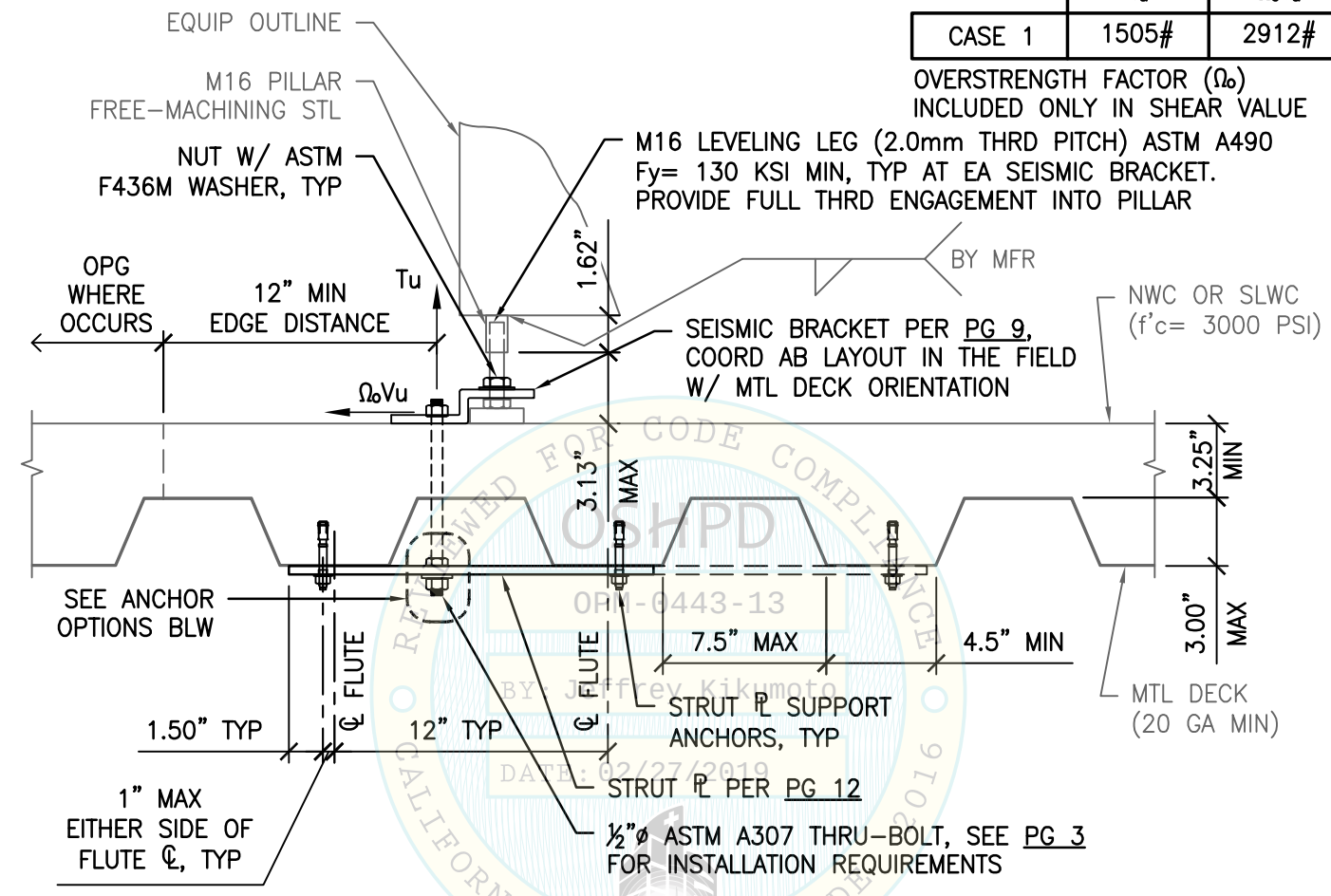
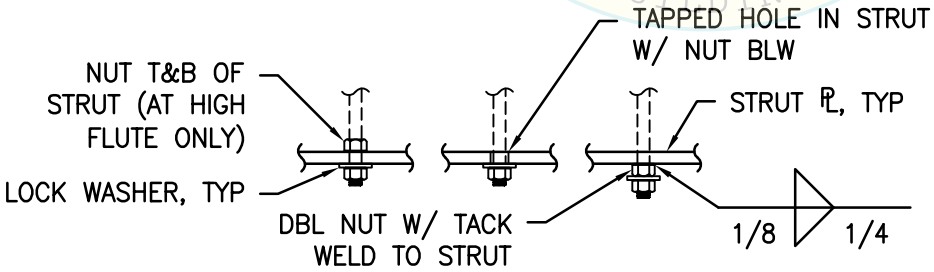
ROCHE DIAGNOSTICS CORPORATION
cobas® c513 MODULAR ANALYZER

	MAX LRFD FORCES AT EA ANCHOR	
	T_u	$\Omega_o V_u$
CASE 1	1505#	2912#

OVERSTRENGTH FACTOR (Ω_o) INCLUDED ONLY IN SHEAR VALUE



SUSPENDED FLOOR (CASE 1)



ANCHOR OPTIONS

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: ATTACHMENT DETAIL TO CONCRETE FILL OVER METAL DECK (CASE 1)
c513 ANALYZER UNIT

CYS STRUCTURAL ENGINEERS, INC.
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SACRAMENTO, CA 95833
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OSHPD
OPM-0443-13
BY: Jeffrey Kikumoto
DATE: 02/27/2019
REVIEWED FOR CODE COMPLIANCE
CALIFORNIA BUILDING CODE 2016

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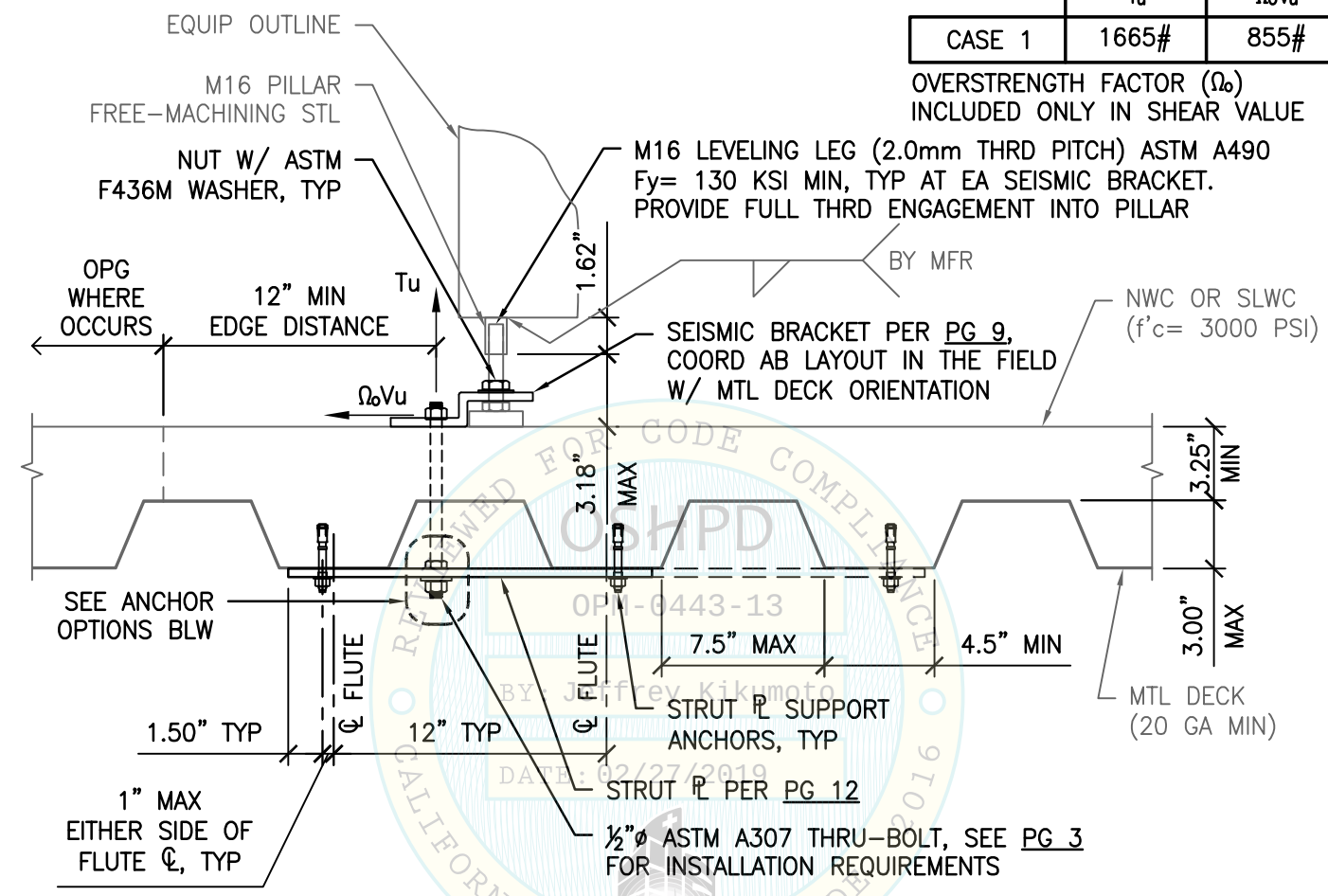
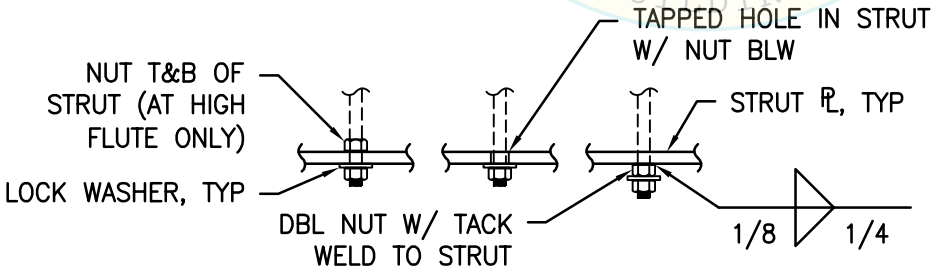
ROCHE DIAGNOSTICS CORPORATION
cobas® c513 MODULAR ANALYZER

	MAX LRFD FORCES AT EA ANCHOR	
	T_u	$\Omega_o V_u$
CASE 1	1665#	855#

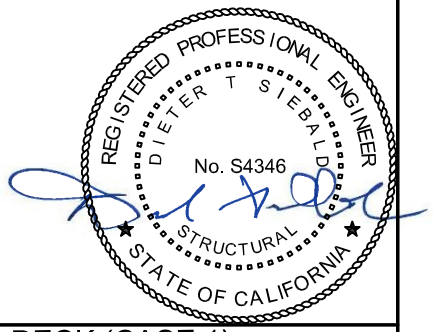
OVERSTRENGTH FACTOR (Ω_o) INCLUDED ONLY IN SHEAR VALUE



SUSPENDED FLOOR (CASE 1)



ANCHOR OPTIONS



SHEET TITLE: ATTACHMENT DETAIL TO CONCRETE FILL OVER METAL DECK (CASE 1)
c513 SAMPLER UNIT

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

Job No:	17034
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OSHPD REVIEWED FOR CODE COMPLIANCE CALIFORNIA BUILDING CODE 2016
OPM-0443-13
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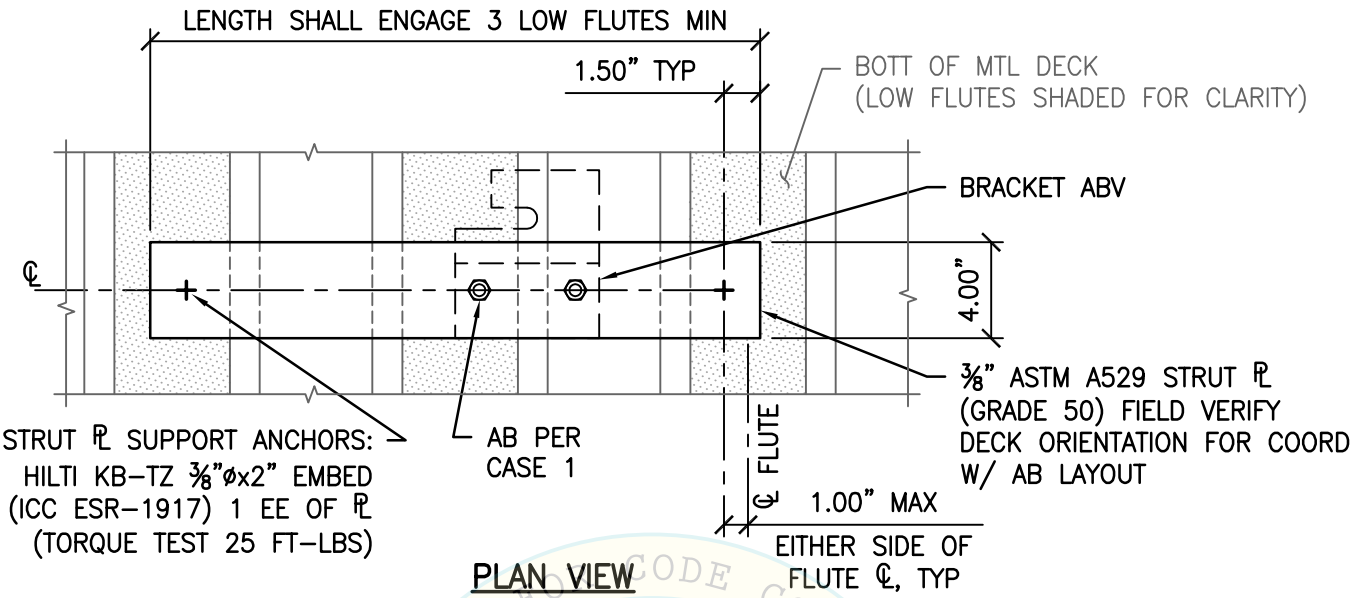
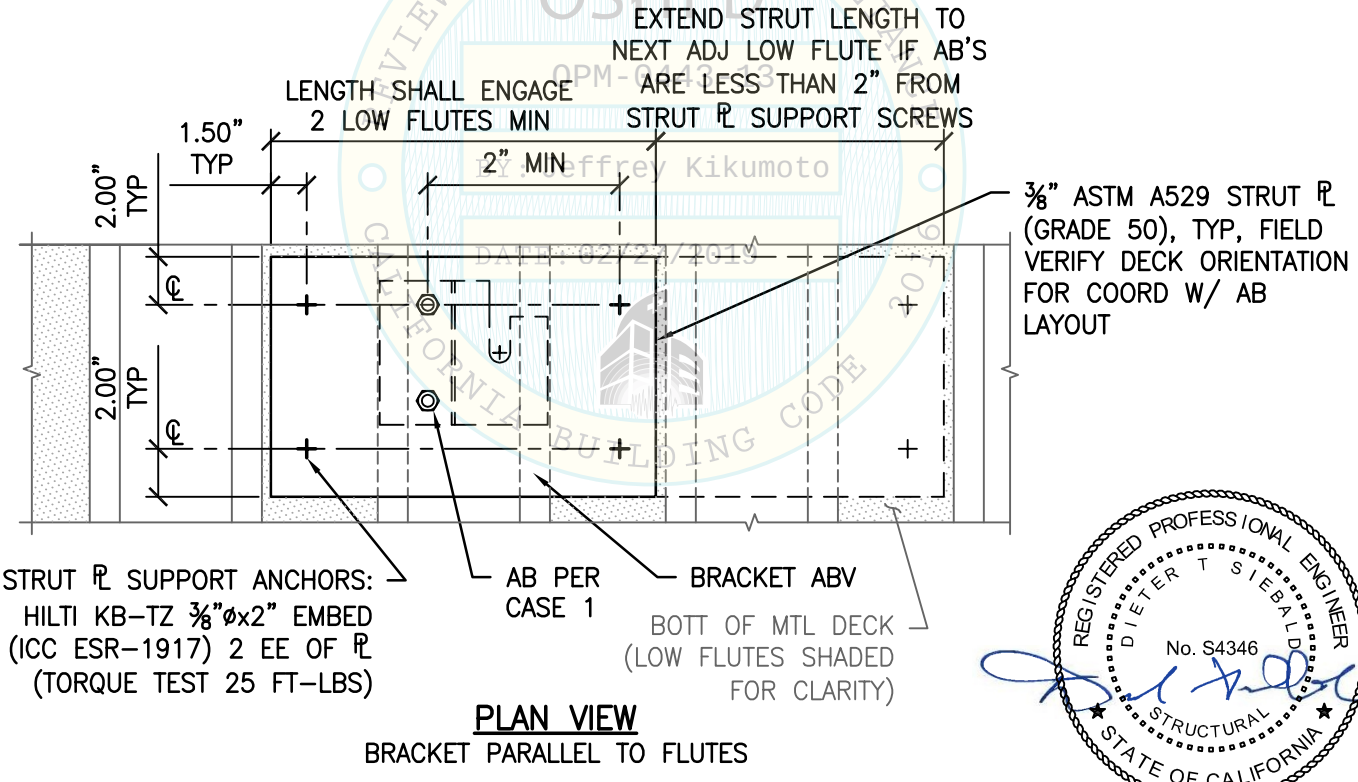
ROCHE DIAGNOSTICS CORPORATION
cobas® c513 MODULAR ANALYZER



PLAN VIEW
BRACKET PERP TO FLUTES



PLAN VIEW
BRACKET PARALLEL TO FLUTES

OSHPD
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OPM-0443-13
By Jeffrey Kikumoto
DATE 02/27/2019
CALIFORNIA BUILDING CODE 2016

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: ATTACHMENT DETAIL TO CONCRETE FILL OVER METAL DECK (CASE 1)
TYPICAL STRUT DETAIL

CYS STRUCTURAL ENGINEERS, INC.
2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833
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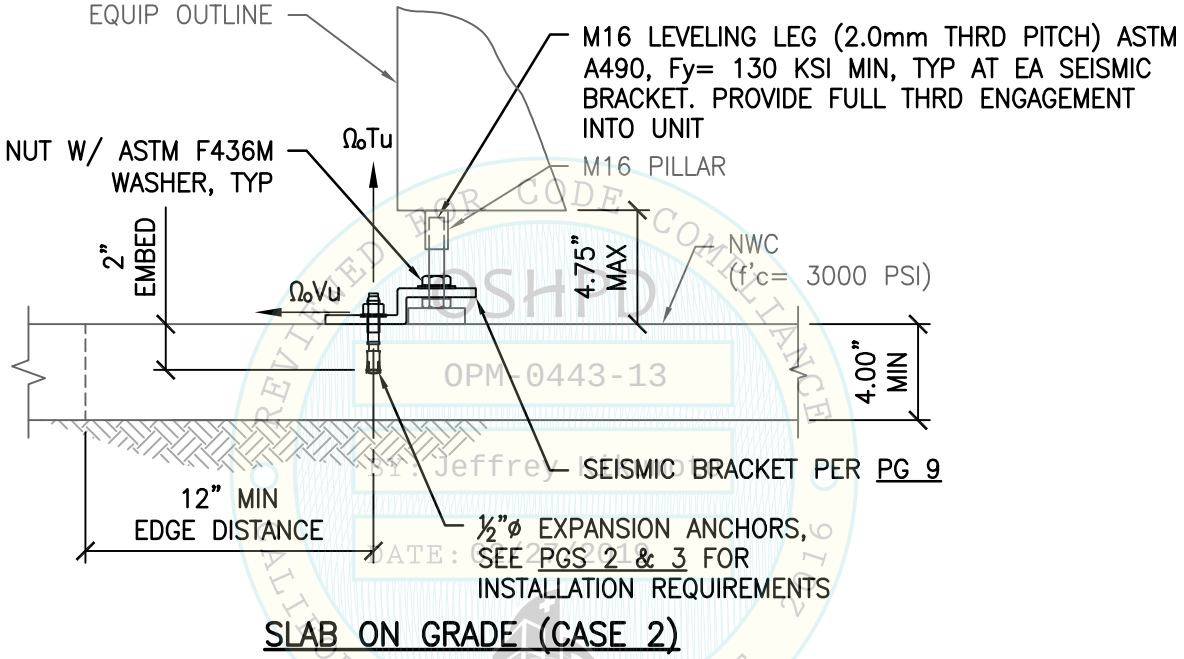
ROCHE DIAGNOSTICS CORPORATION
cobas® c513 MODULAR ANALYZER

	MAX LRFD FORCES AT EA ANCHOR	
	$\Omega_o T_u$	$\Omega_o V_u$
CASE 2A	693#	497#
CASE 2B	464#	986#

OVERSTRENGTH FACTOR (Ω_o) INCLUDED.



SLAB ON GRADE (CASE 2)

OSHPD
OPM-0443-13
Reviewed for Code Compliance
Jeffrey Kikumoto
DATE: 02/27/2019
CALIFORNIA BUILDING CODE 2016

EQUIP FRAME MATERIAL:
SUS430, GRADE 430SS, ASTM A240:
2.3mm THK (13 GA MIN)
Fy= 30 KSI MIN; Fu= 65 KSI MIN
OR
JFE-CC-EZ-JN 20/20
2.3mm THK (13 GA)
Fy= 18.1 KSI MIN; Fu= 39.1 KSI MIN

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: ATTACHMENT DETAIL TO SLAB ON GRADE (CASE 2)
c513 ANALYZER UNIT

CYS STRUCTURAL ENGINEERS, INC.
2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833
TEL (916) 920-2020
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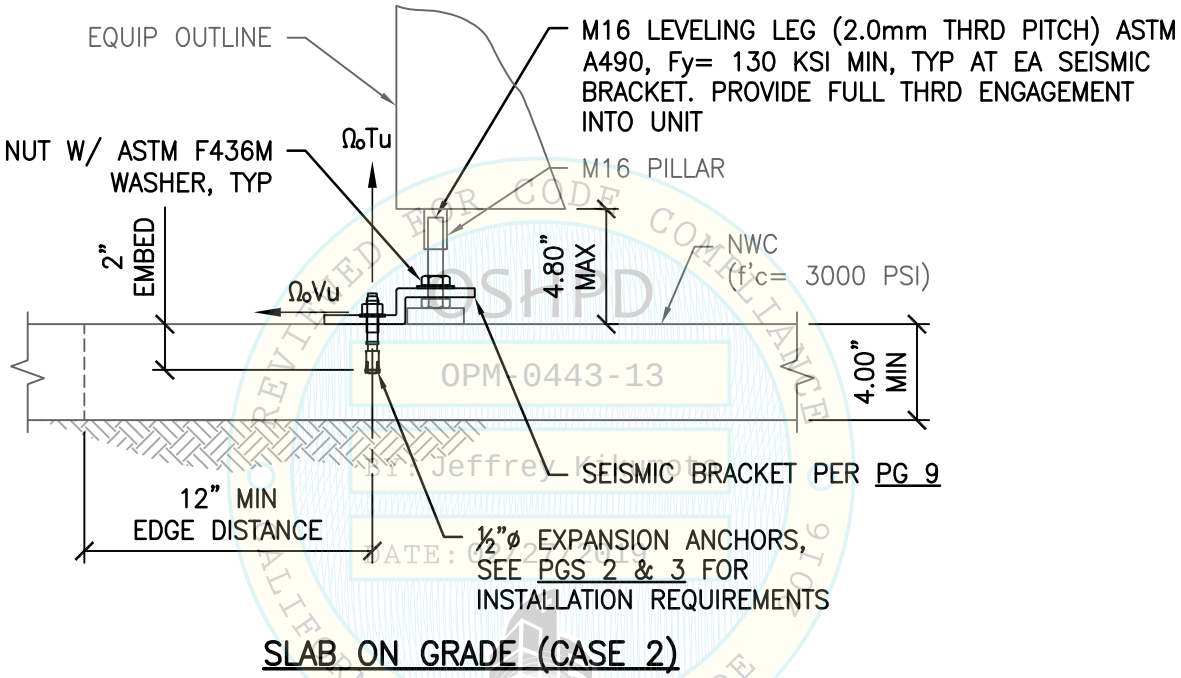
ROCHE DIAGNOSTICS CORPORATION
cobas® c513 MODULAR ANALYZER

	MAX LRFD FORCES AT EA ANCHOR	
	$\Omega_o T_u$	$\Omega_o V_u$
CASE 2A	809#	361#
CASE 2B	785#	467#

OVERSTRENGTH FACTOR (Ω_o) INCLUDED.



SLAB ON GRADE (CASE 2)

OSHPD
OPM-0443-13
Reviewed for Code Compliance by Jeffrey Kikumoto
DATE: 02/27/2019
CALIFORNIA BUILDING CODE

EQUIP FRAME MATERIAL:
SUS430, GRADE 430SS, ASTM A240:
2.3mm THK (13 GA MIN)
Fy= 30 KSI MIN; Fu= 70 KSI MIN
OR
JFE-CC-EZ-JN 20/20
2.3mm THK (13 GA)
Fy= 18.1 KSI MIN; Fu= 39.1 KSI MIN

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: ATTACHMENT DETAIL TO SLAB ON GRADE (CASE 2)
c513 SAMPLER UNIT

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