



**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-0716

HCAI Preapproval of Manufacturer's Certification (OPM)

Type: New Renewal/Update

Manufacturer Information

Manufacturer: Sysmex America, Inc.

Manufacturer's Technical Representative: Jill Crist

Mailing Address: 577 Aptakisic Road, Lincolnshire, IL 60069

Telephone: (215) 962-8236 Email: CristJ@Sysmex.com

Product Information

Product Name: Sysmex XN-2000 on Benchtop

Product Type: Automated Hematology Analyzer

Product Model Number: XN-2000

General Description: Blood Analyzer

Applicant Information

Applicant Company Name: Sysmex America, Inc.

Contact Person: Jill Crist

Mailing Address: 577 Aptakisic Road, Lincolnshire, IL 60069

Telephone: (215) 962-8236 Email: CristJ@Sysmex.com

Title: Senior Manager IVD Product Marketing

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STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY





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OFFICE OF STATEWIDE HOSPITAL PLANNING AND DEVELOPMENT**

Registered Design Professional Preparing Engineering Recommendations

Company Name: CYS STRUCTURAL ENGINEERS, INC.
Name: Dieter Siebald California License Number: S4346
Mailing Address: 2495 Natomas Park Drive, Suite 650, Sacramento, CA 95833
Telephone: (916) 920-2020 Email: dieters@cyseng.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: 11/25/2024
Name: William Staehlin Title: Senior Structural Engineer
Condition of Approval (if applicable): _____

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SYSMEX XN-2000 ON BENCHTOP

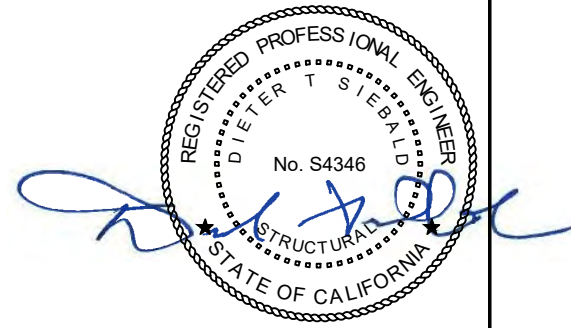
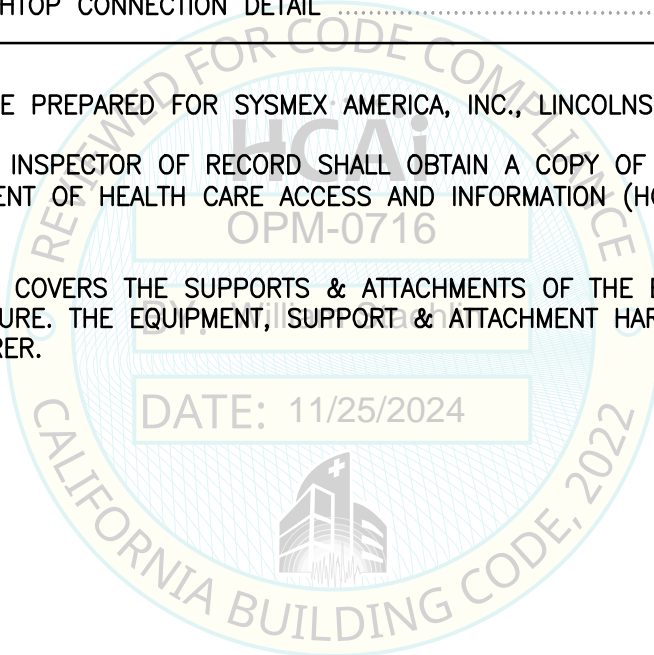


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NOTES:

1. THESE DRAWINGS ARE PREPARED FOR SYSMEX AMERICA, INC., LINCOLNSHIRE, ILLINOIS.
2. THE CONTRACTOR & INSPECTOR OF RECORD SHALL OBTAIN A COPY OF THIS PRE-APPROVAL FROM THE DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION (HCAI) PRE-APPROVAL PROGRAMS WEBSITE.
3. THIS PRE-APPROVAL COVERS THE SUPPORTS & ATTACHMENTS OF THE EQUIPMENT TO THE SUPPORTING STRUCTURE. THE EQUIPMENT, SUPPORT & ATTACHMENT HARDWARE ARE SUPPLIED BY THE MANUFACTURER.



SHEET TITLE: TABLE OF CONTENTS

<p>CYS STRUCTURAL ENGINEERS, INC. 2710 GATEWAY OAKS DRIVE, SUITE 190n SACRAMENTO, CA 95833</p>	TEL (916) 920-2020 www.cyseng.com	Job No: 23029.03 Date: 10-29-2024 Page: 1 of 11
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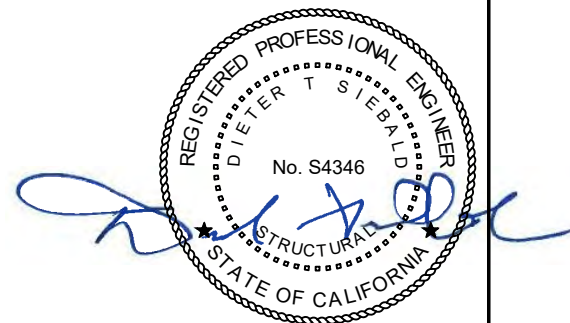
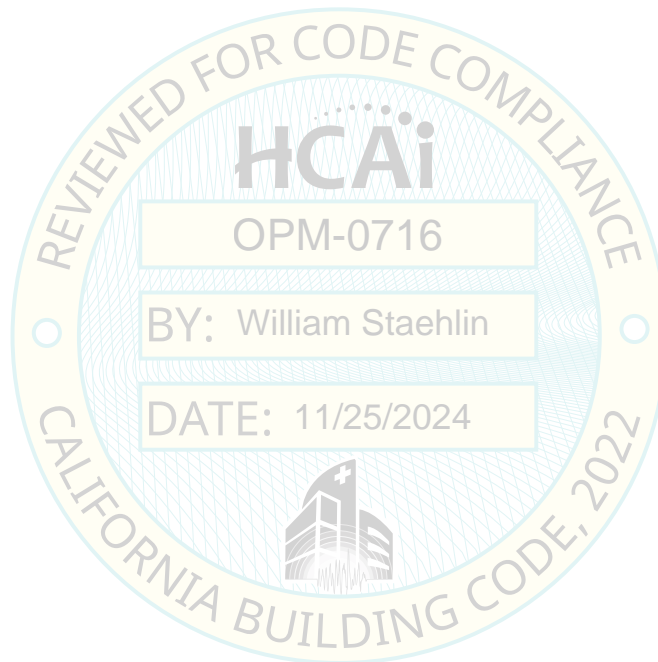
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SYSTEMEX XN-2000 ON BENCHTOP



GENERAL NOTES:

1. THIS HCAI PRE-APPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE CBC 2022. THE DEMAND (DESIGN FORCES) FOR USE W/ THIS OPM SHALL BE BASED ON THE CBC 2022.
2. IT IS THE RESPONSIBILITY OF THE SEOR FOR A SITE SPECIFIC PROJECT TO VERIFY:
 - A. THE ADEQUACY OF THE NEW OR EXISTING 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 INSTALLATION IS IN CONFORMANCE W/ THE CBC 2022 & W/ THE DETAILS SHOWN IN THIS PRE-APPROVAL.
 - C. THAT THE ACTUAL EQUIP'S WT, CENTER OF GRAVITY (CG) LOCATION, ATTACHMENT LOCATIONS, ATTACHMENT DETAILS, & THE MATERIAL & GAUGE OF THE EQUIP WHERE ATTACHMENTS ARE MADE, AGREE W/ THE INFO SHOWN ON THE PRE-APPROVAL DOCUMENTS.
 - D. THAT THE SURFACE TO WHICH THE EQUIP IS ANCHORED SHALL MEET THE REQUIREMENTS OF THIS OPM.



SHEET TITLE: GENERAL NOTES



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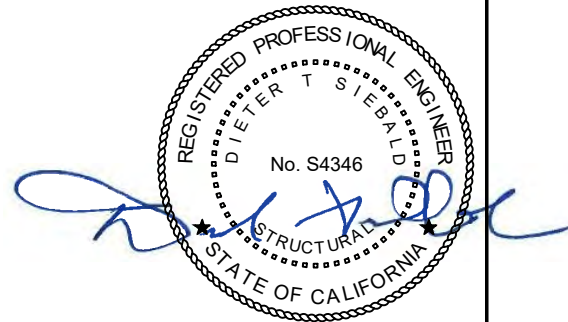
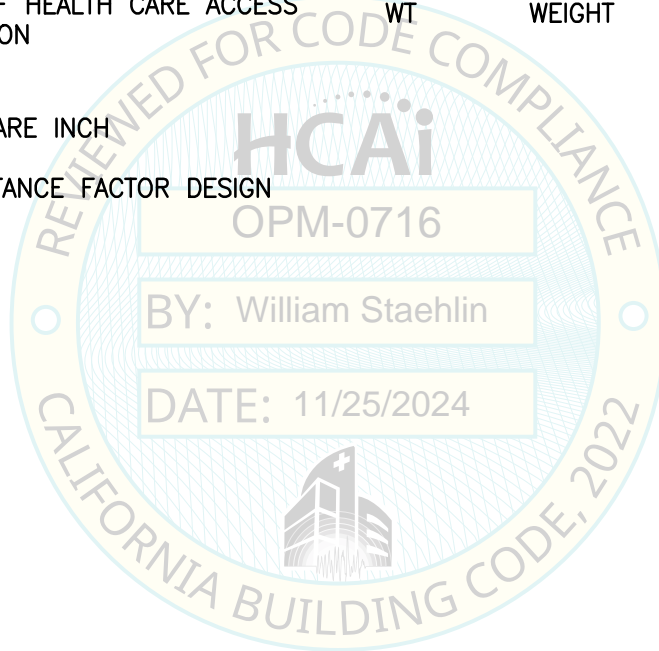
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SYSMEX XN-2000 ON BENCHTOP



ABBREVIATIONS:

ABV	ABOVE	NO. (#)	NUMBER OR POUNDS
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS	OD	OUTSIDE DIAMETER
CBC	CALIFORNIA BUILDING CODE	OP	OPERATING
CG	CENTER OF GRAVITY	OPM	HCAI PRE-APPROVAL OF MANUFACTURER'S CERTIFICATION
☉	CENTERLINE	PG	PAGE
CONN	CONNECTION	PL	PLATE
COORD	COORDINATE	REQ	REQUIRED
DTL(S)	DETAIL(S)	SEOR	STRUCTURAL ENGINEER OF RECORD
(E)	EXISTING CONDITION	SS	STAINLESS STEEL
EA	EACH	STL	STEEL
ELEV	ELEVATION	THK	THICK/THICKNESS
EQ	EQUAL	TYP	TYPICAL
EQUIP	EQUIPMENT	W/	WITH
Fy	SPECIFIED YIELD STRENGTH OF REINFORCING, PS OF STEEL, KSI	Wp	COMPONENT OPERATING WEIGHT
HCAI	DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION	WT	WEIGHT
IN (")	INCH		
INFO	INFORMATION		
KSI	KIPS PER SQUARE INCH		
LBS	POUNDS		
LRFD	LOAD & RESISTANCE FACTOR DESIGN		
MAX	MAXIMUM		
MIN	MINIMUM		
mm	MILLIMETER		
MTL	METAL		



SHEET TITLE: ABBREVIATIONS



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SYSMEX XN-2000 ON BENCHTOP



DESIGN CRITERIA:

1. SUPPORT & ATTACHMENT DESIGN IS PER 2022 CBC AT LRFD LEVEL FORCES.

OTHER MECHANICAL OR ELECTRICAL COMPONENTS PER TABLE 13.6-1 OF ASCE 7-16 INCL SUPPLEMENT #1 & ERRATA:

$$a_p = 1.0 \quad R_p = 1.5 \quad I_p = 1.5$$

ABOVE GRADE:

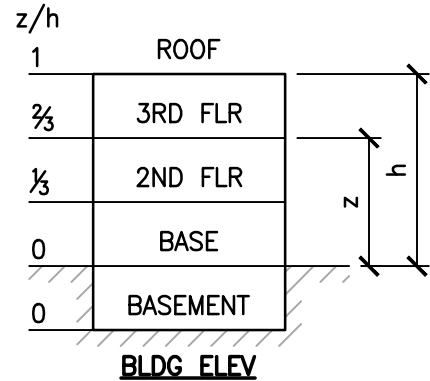
$$S_{DS} \leq 1.080 \quad F_p = 1.080 W_p \quad z/h \leq 0.75$$

$$S_{DS} \leq 1.350 \quad F_p = 1.080 W_p \quad z/h \leq 0.50$$

AT OR BELOW GRADE:

$$S_{DS} \leq 2.400 \quad F_p = 1.080 W_p \quad z/h \leq 0.0$$

W_p AS NOTED ON DRAWINGS



LOAD COMBINATIONS

$$(0.9 - 0.2 S_{DS}) D - F_p \text{ (FOR MAX TENSION)}$$

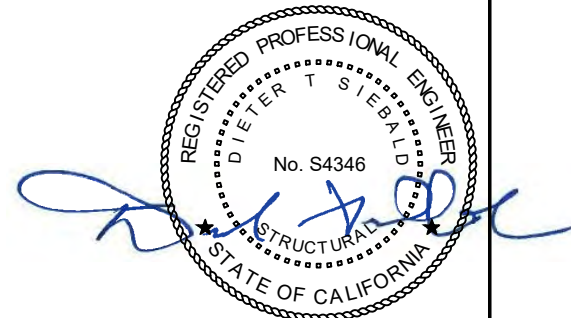
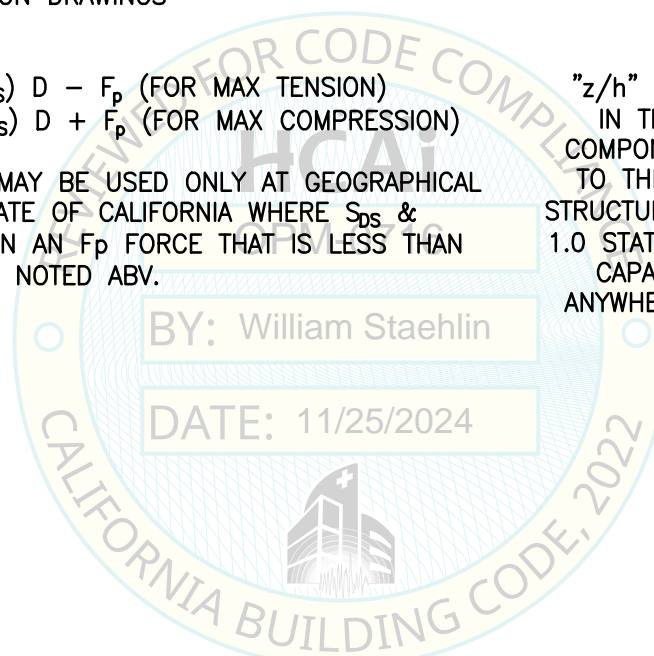
$$(1.2 + 0.2 S_{DS}) D + F_p \text{ (FOR MAX COMPRESSION)}$$

2. THIS PRE-APPROVAL MAY BE USED ONLY AT GEOGRAPHICAL LOCATIONS IN THE STATE OF CALIFORNIA WHERE S_{DS} & z/h VALUES RESULT IN AN F_p FORCE THAT IS LESS THAN OR EQ TO THE VALUE NOTED ABV.

"z/h" IS A RATIO OF THE HEIGHT IN THE STRUCTURE THAT THE COMPONENT HAS BEEN ANCHORED, TO THE OVERALL HEIGHT OF THE STRUCTURE. FOR EXAMPLE, A z/h OF 1.0 STATES THAT THE COMPONENT IS CAPABLE OF BEING INSTALLED ANYWHERE WITHIN THE STRUCTURE.

BY: William Staehlin

DATE: 11/25/2024



SHEET TITLE: DESIGN CRITERIA



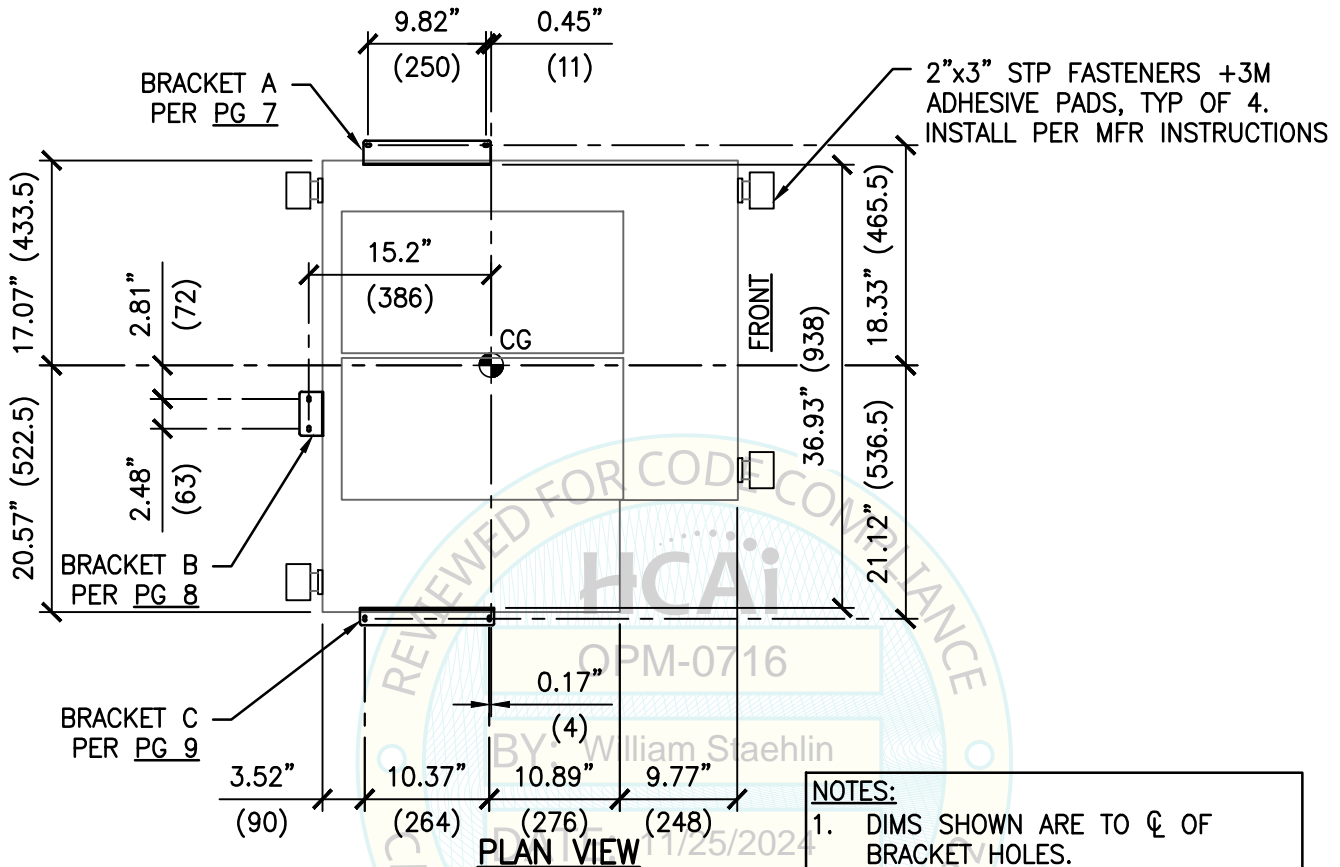
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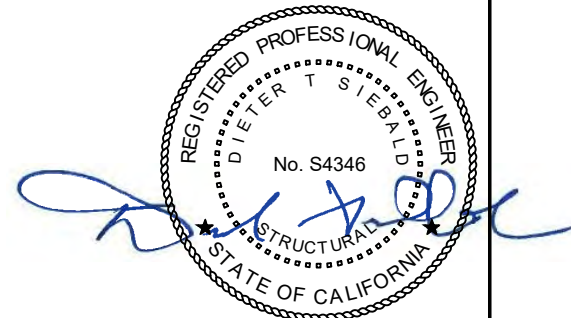
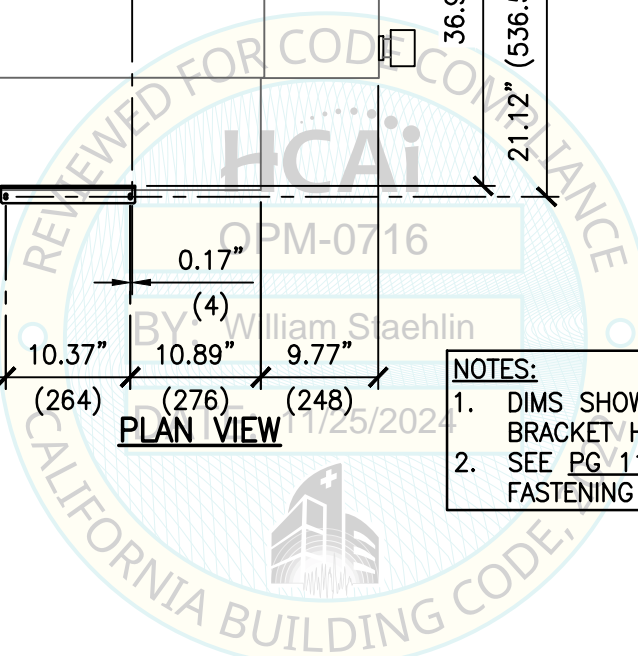
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SYSMEX XN-2000 ON BENCHTOP



NOTES:
 1. DIMS SHOWN ARE TO ϕ OF BRACKET HOLES.
 2. SEE PG 11 FOR ADHESIVE PAD FASTENING DETAIL.

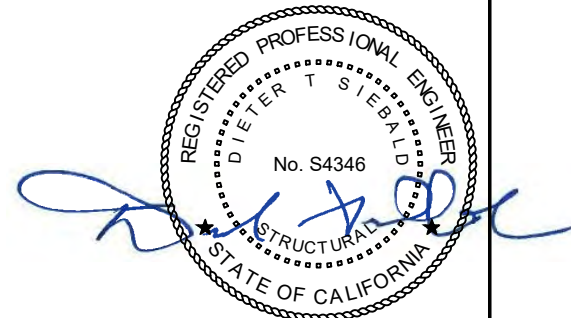
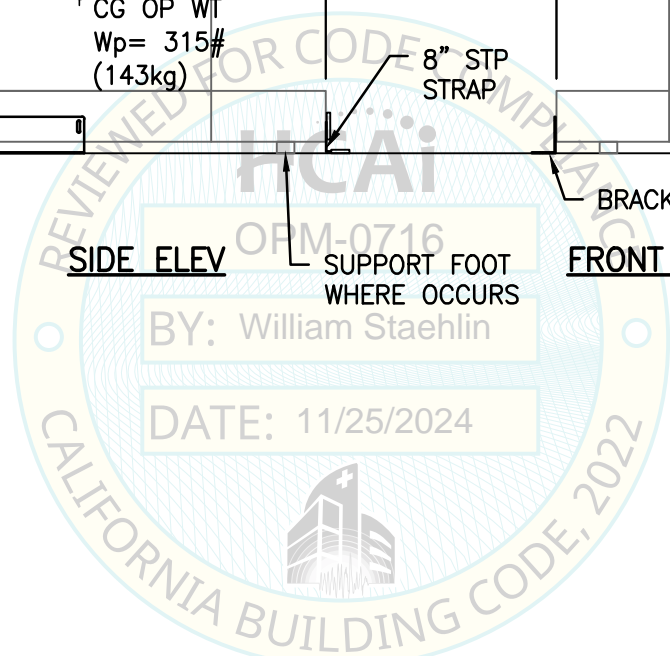
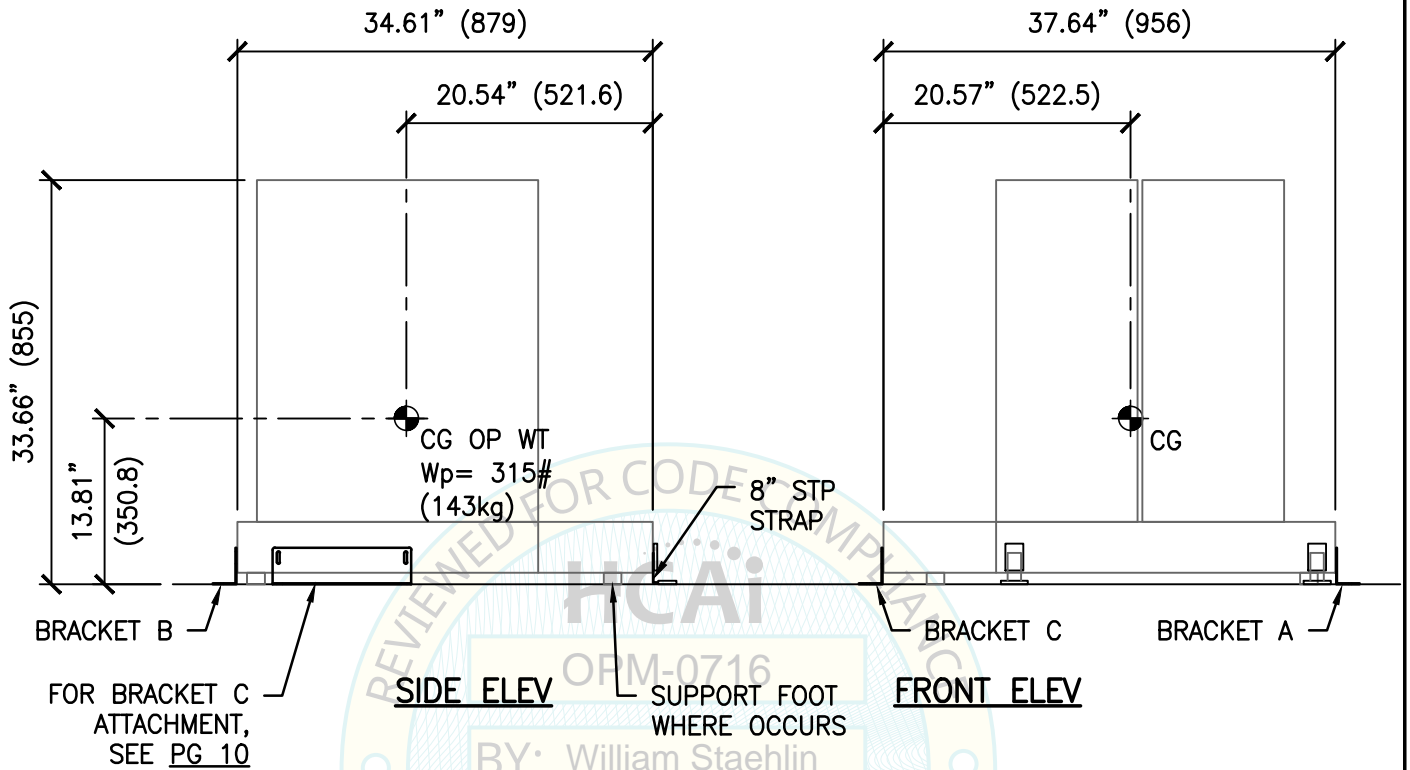


SHEET TITLE: SYSMEX XN-2000 INSTRUMENTS
 PLAN VIEW

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SYSMEX XN-2000 ON BENCHTOP

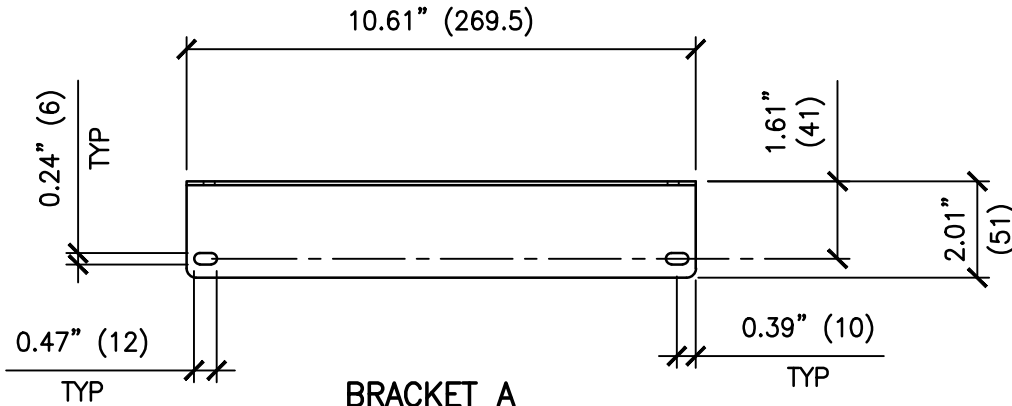


SHEET TITLE: SYSMEX XN-2000 INSTRUMENTS ELEVATIONS

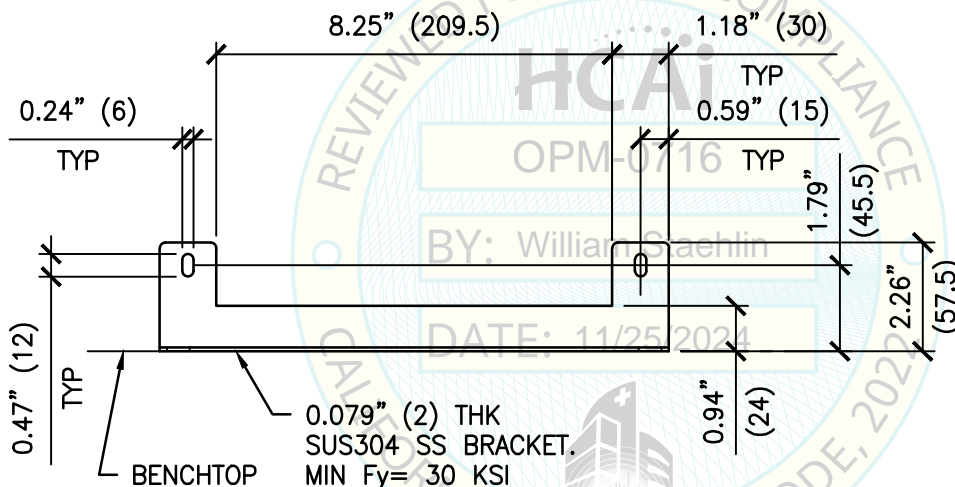
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SYSTEMEX XN-2000 ON BENCHTOP



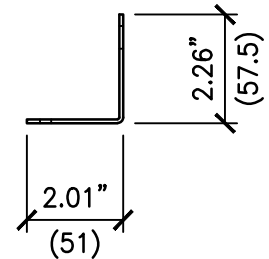
**BRACKET A
PLAN VIEW**



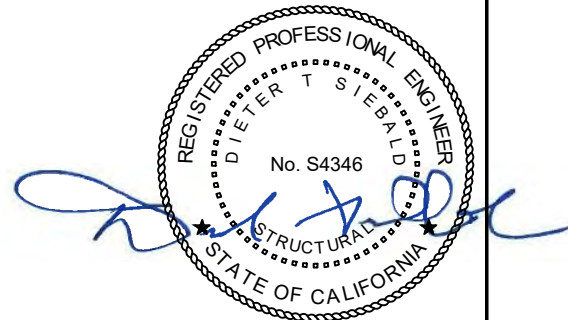
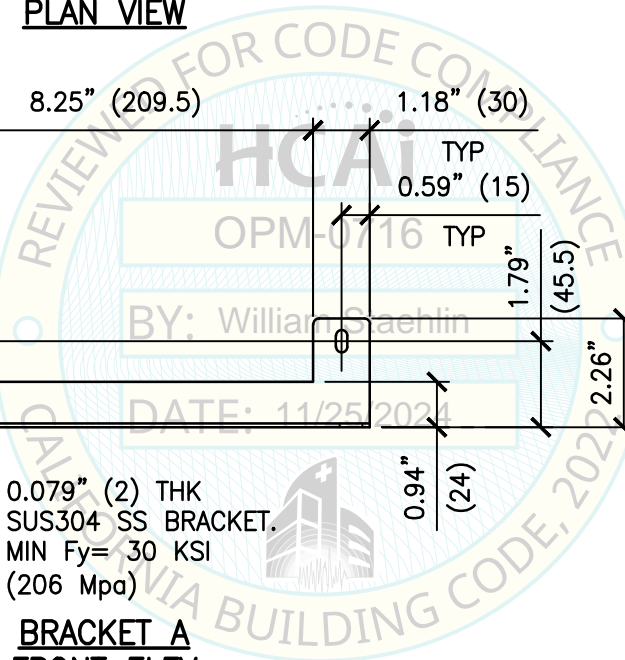
0.079" (2) THK
SUS304 SS BRACKET.
MIN Fy= 30 KSI
(206 Mpa)

BENCHTOP

**BRACKET A
FRONT ELEV**



**BRACKET A
SIDE ELEV**



SHEET TITLE: BRACKET DETAILS



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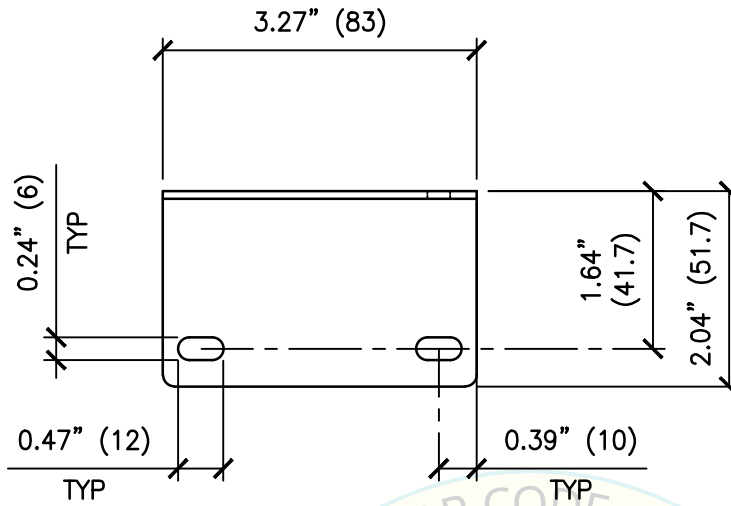
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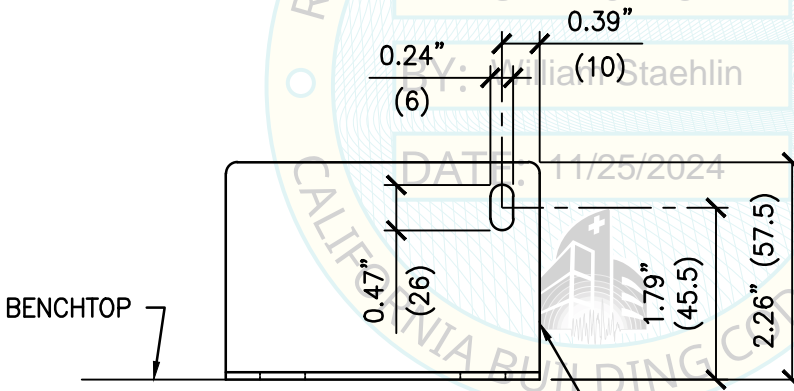
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SYSMEX XN-2000 ON BENCHTOP

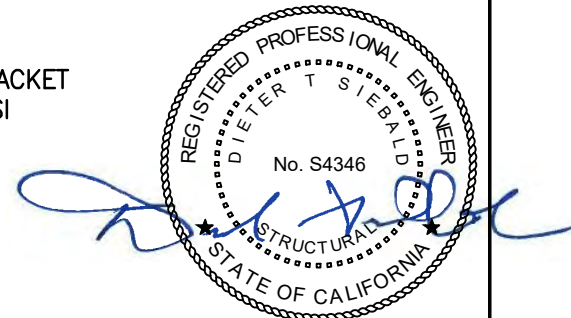
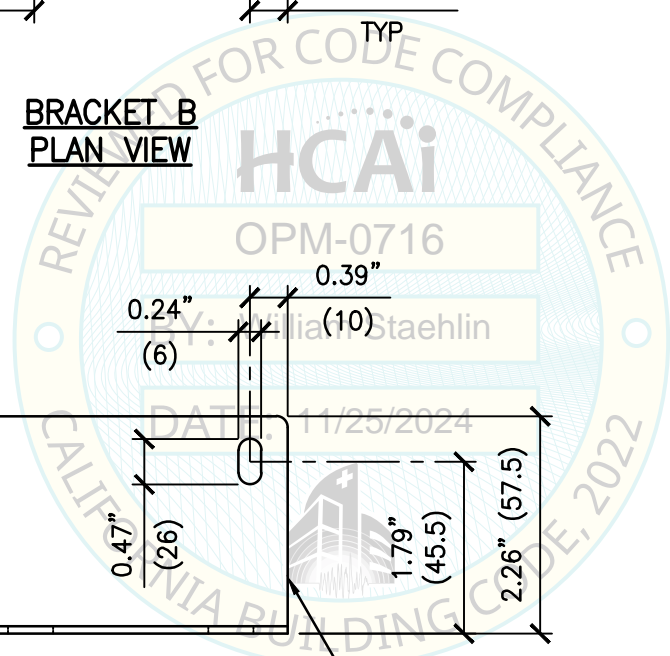


**BRACKET B
PLAN VIEW**



**BRACKET B
FRONT ELEV**

0.08" (2) THK
SUS304 SS BRACKET
MIN Fy= 30 KSI
(206Mpa)



SHEET TITLE: BRACKET DETAILS



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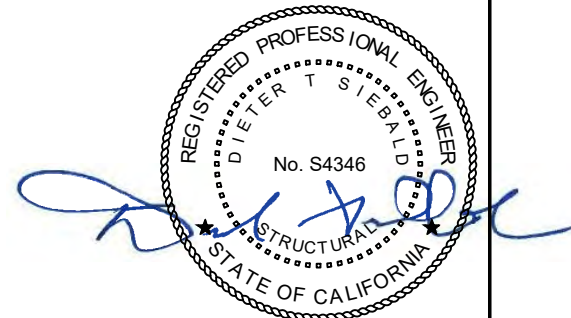
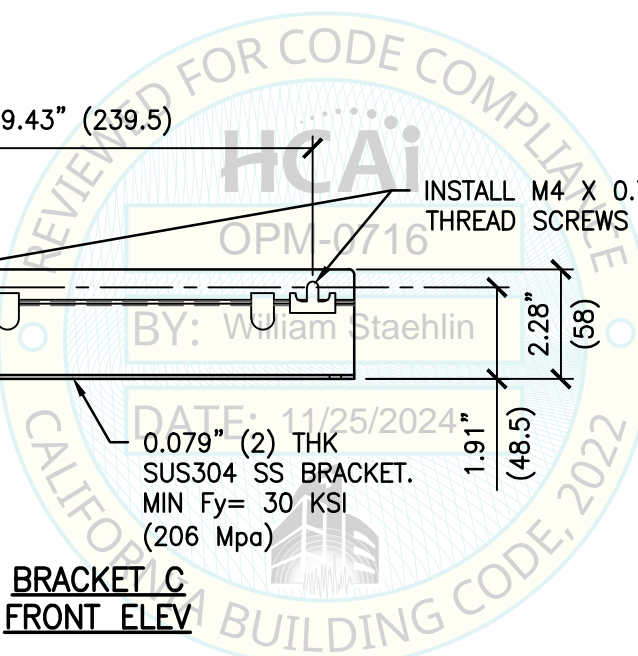
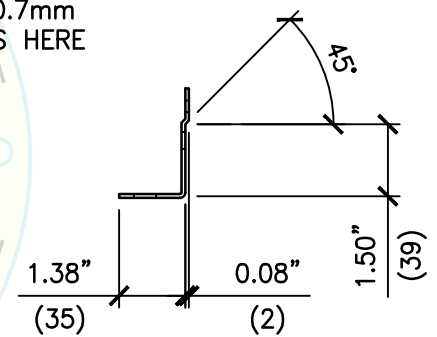
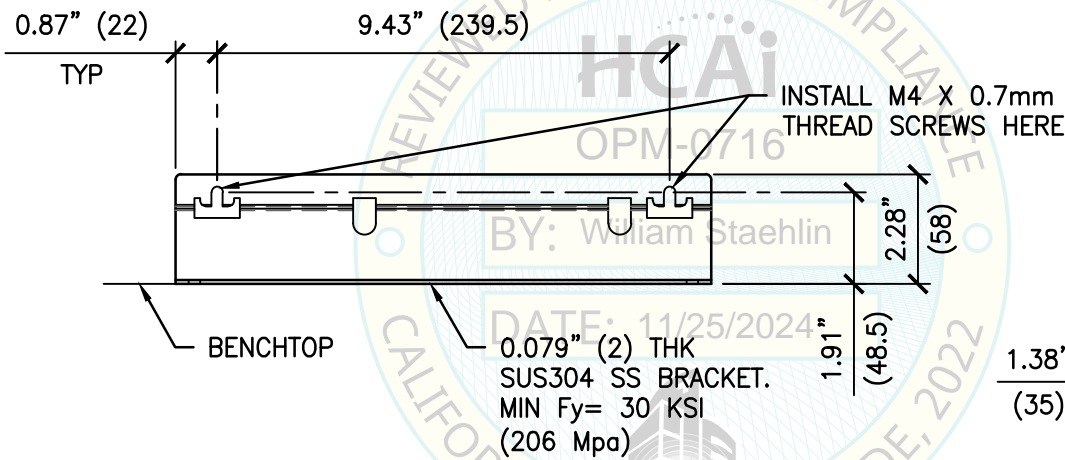
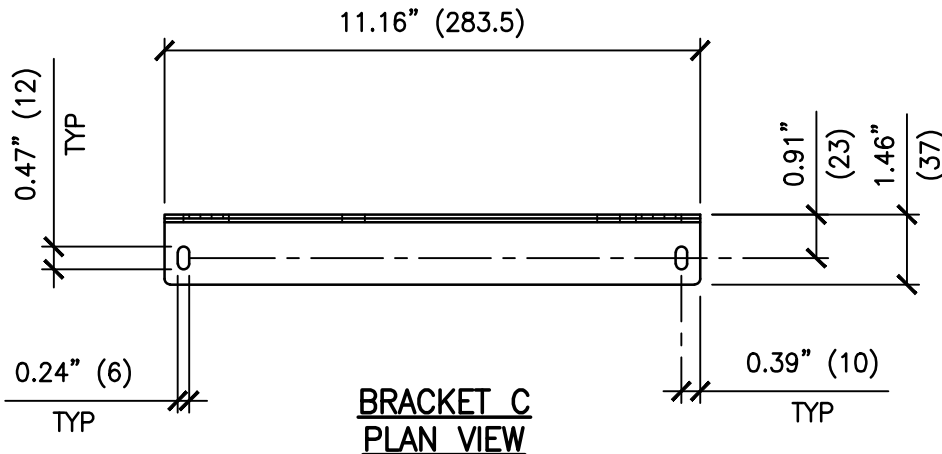
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SYSMEX XN-2000 ON BENCHTOP



SHEET TITLE: BRACKET DETAILS



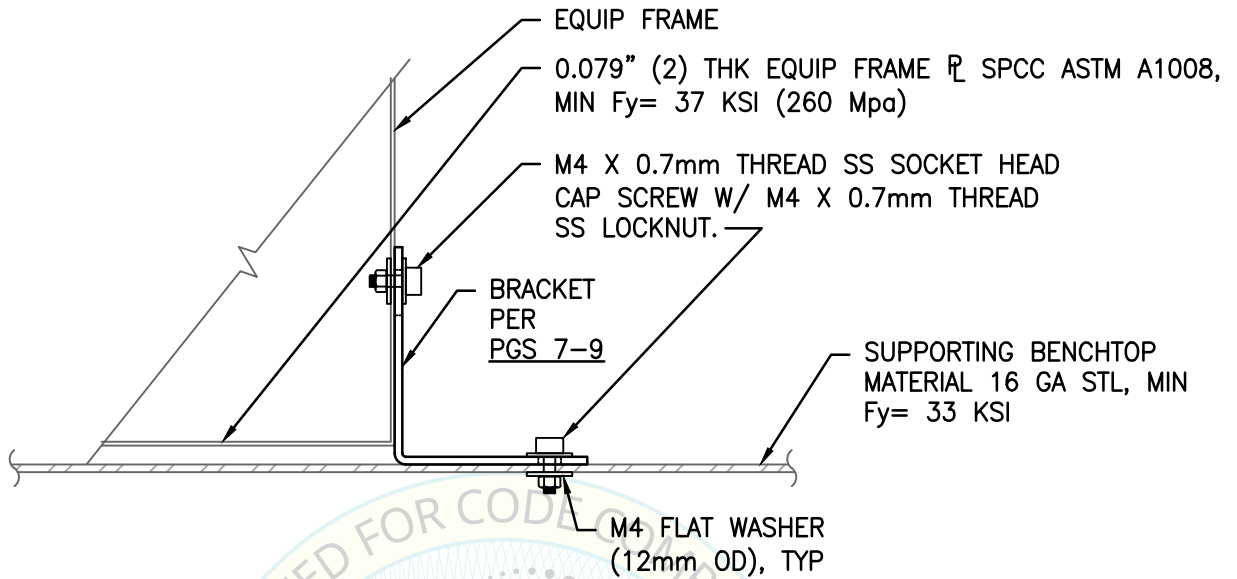
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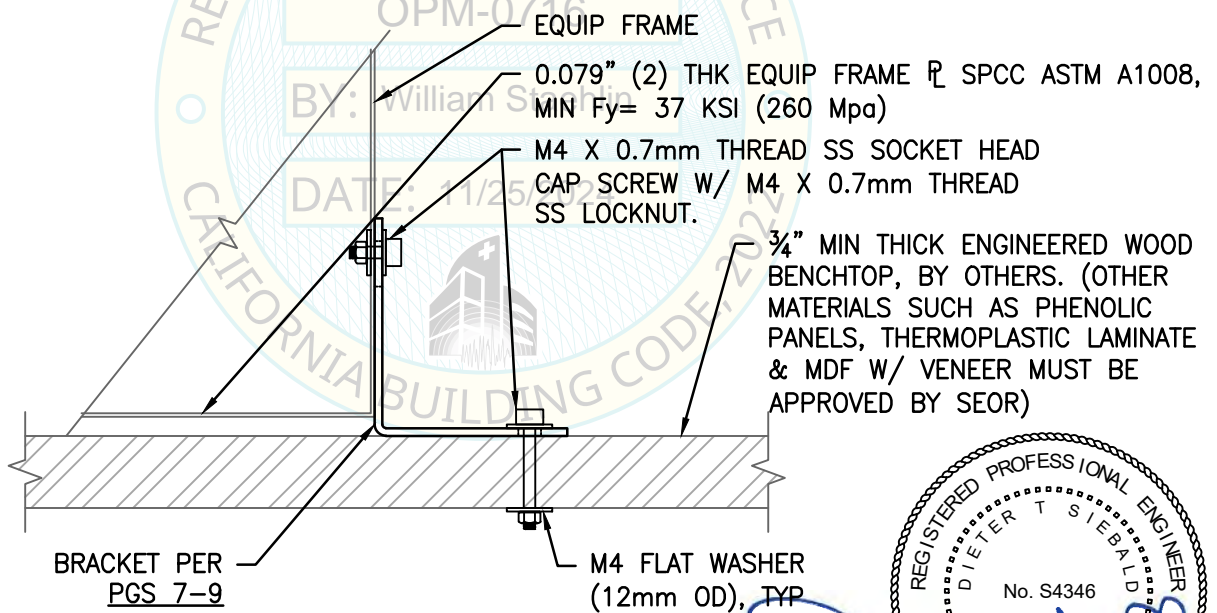
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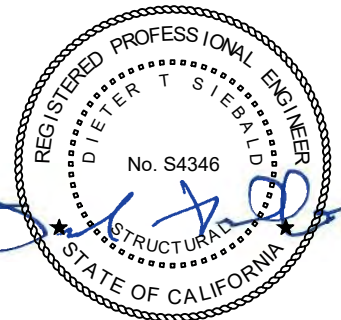
SYSMEX XN-2000 ON BENCHTOP



STEEL BENCHTOP ATTACHMENT



PLYWOOD BENCHTOP ATTACHMENT



SHEET TITLE: BENCHTOP ATTACHMENT DETAILS



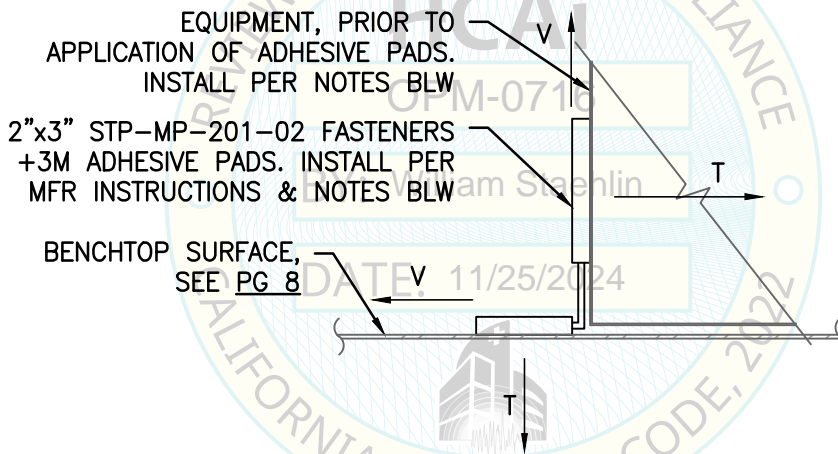
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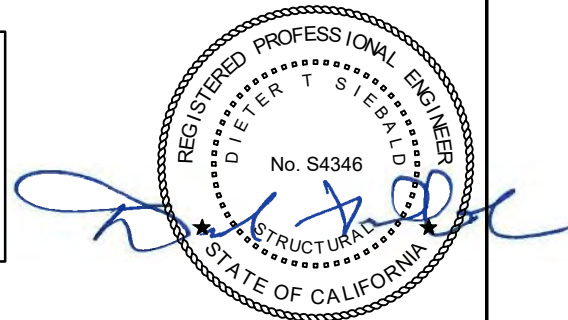
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SYSTEMEX XN-2000 ON BENCHTOP



NOTE:

FOLLOW MFR'S INSTRUCTIONS FOR ADHESION OF FOAM ADHESIVE TO BOND SURFACE AS FOLLOWS: LIGHTLY ABRAD THE BOND AREA OF SURFACES (POWDER-COATED STL, SS, PHENOLIC, THERMOPLASTIC LAMINATE) W/ A SCOTCHBRITE 7447 PAD & THEN CLEAN W/ A 70:30 ISOPROPYL ALCOHOL (IPA)/WATER SOLUTION, ALLOWED TO DRY PRIOR TO APPLICATION OF THE ADHESIVE PADS



SHEET TITLE: STP FASTENER TO BENCHTOP CONNECTION DETAIL



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