**APPLICATION FOR OSHPD PREAPPROVAL OF MANUFACTURER’S CERTIFICATION (OPM)**

**OSHPD Preapproval of Manufacturer’s Certification (OPM)**

<table>
<thead>
<tr>
<th>Type:</th>
<th>X New</th>
<th>☐ Renewal/Update</th>
</tr>
</thead>
</table>

### Manufacturer Information

**Manufacturer:** ABBOTT  
**Manufacturer’s Technical Representative:** Scott Hansen  
**Mailing Address:** 1921 Hurd Drive, Irving, TX 75038  
**Telephone:** (972) 518-6658  
**Email:** scott.hansen@abbott.com

### Product Information

**Product Name:** Medical Analyzer  
**Product Type:** Automated Laboratory Blood and Plasma Analyzer  
**Product Model Number:** Alinity s  
**General Description:** The Alinity s is an automated instrument used for blood and plasma screening. The instrument can be installed in stand-alone or integrated configurations. The instrument can be interfaced with an Abbott a3600 Accelerator Automation Track to automate sample delivery to the instrument.

### Applicant Information

**Applicant Company Name:** ABBOTT  
**Contact Person:** Scott Hansen  
**Mailing Address:** 1921 Hurd Drive, Irving, TX 75038  
**Telephone:** (972) 518-6658  
**Email:** scott.hansen@abbott.com  
**Title:** Mechanical Engineering Manager
# 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

---

## OSHPD 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 OSHPD prior to testing.*

- [X] Analysis  
- [ ] Experience Data  
- [ ] Combination of Testing, Analysis, and/or Experience Data (Please Specify): __________

---

## OSHPD Approval

Date: 8/24/2020

Name: William Staehlin  
Title: Senior Structural Engineer

Condition of Approval (if applicable): __________
ABBOTT LABORATORIES
ALINITY's Interface INSTRUMENTS
OPM-0576-19

NOTES:

1. THE CONTRACTOR AND THE INSPECTOR SHALL OBTAIN A COPY OF THIS
PRE-APPROVAL FROM THE OSHPD WEBSITE.

2. THIS PRE-APPROVAL COVERS THE SUPPORTS AND ATTACHMENTS OF THE
LABORATORY EQUIPMENT TO THE STRUCTURE.
GENERAL NOTES:
1. THIS OSH/P RE-APPROVAL 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. IT IS THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER OF RECORD FOR A SITE SPECIFIC PROJECT TO
   VERIFY:
   A. THE ADEQUACY OF THE NEW OR EXISTING STRUCTURE TO RESIST THE FORCES AND WEIGHT SPECIFIED
      FOR EACH COMPONENT IN ADDITION TO ALL OTHER LOADS. PROVIDE AND DESIGN SUPPLEMENTARY
      MEMBERS AS REQUIRED.
   B. THAT THE ANCHORS ARE LOCATED AT AN ADEQUATE DISTANCE FROM ANY SLAB EDGES OR OPENINGS.
   C. THAT THE ANCHORS ARE LOCATED AT AN ADEQUATE DISTANCE FROM ANY NEW OR EXISTING ANCHORS.
      THE SPACING SHOWN IN THE TEST VALUES TABLE ON THIS PAGE IS THE REQUIRED SPACING OF
      ANCHORS OF OTHER DIAMETERS AND EMBEDMENTS WILL VARY.
   D. THAT THE INSTALLATION IS IN CONFORMANCE WITH THE 2019 CBC AND WITH THE DETAILS SHOWN IN
      THIS PRE-APPROVAL.
3A. EXPANSION ANCHORS INSTALLED IN NORMAL WEIGHT OR LIGHT-WEIGHT CONCRETE SHALL BE
   STAINLESS STEEL HILTI KB-TZ EXPANSION ANCHORS COMPLYING WITH ICC-ES ESR-1917 REVISED
   JANUARY 2020. ADHESIVE ANCHORS INSTALLED IN NORMAL WEIGHT CONCRETE SHALL BE ASTM F593 CW1
   (316) INSTALLED USING HILTI HIT-RE 500 V3 ADHESIVE COMPLYING WITH ICC-ES ESR-1914 REVISED
   JANUARY 2020.
   B. INSTALLATION: INSTALL THE POST-INSTALLED DRILLED-IN CONCRETE ANCHORS IN ACCORDANCE WITH
      THE REQUIREMENTS GIVEN IN THE ICC EVALUATION REPORT FOR THE SPECIFIC ANCHOR AND THE
      PARAMETERS GIVEN IN THE TABLES PROVIDED.
   C. TESTING:
      • JOB TESTING: FOR VERIFYING SATISFACTORY INSTALLATION WORKMANSHIP, PERFORM JOB SITE
        TESTING IN ACCORDANCE WITH THE TEST LOAD TABLE PROVIDED IN THIS DOCUMENT. TEST
        50% OF THE INSTALLED ANCHORS. FOR TENSION TESTING, THE TEST LOAD MAY BE APPLIED BY ANY
        METHOD THAT WILL EFFECTIVELY MEASURE THE TENSION IN THE ANCHOR SUCH AS DIRECT PULL
        USING A HYDRAULIC JACK OR CALIBRATED SPRING LOADING DEVICES. FOR TORQUE TESTING, THE
        TEST LOAD SHALL BE APPLIED WITH A CALIBRATED TORQUE WRENCH. ALL TESTS SHALL BE CONDUCTED IN
        THE PRESENCE OF THE INSPECTOR OF RECORD. 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 EQUIPMENT INSTALLATION. ALSO REFER TO CBC 1910A.5.5 “TESTS FOR
        POST-INSTALLED ANCHORS IN CONCRETE”.
      • FAILURE/ACCEPTANCE CRITERIA: THE FOLLOWING CRITERIA APPLY FOR THE ACCEPTANCE OF
        INSTALLED ANCHORS:
        • HYDRAULIC RAM METHOD: APPLY AND HOLD TEST LOAD FOR A MINIMUM OF 15 SECONDS;
         THE ANCHOR SHOULD HAVE NO OBSERVABLE MOVEMENT AT THE APPLICABLE TEST LOAD;
         ANY MOVEMENT SHOULD BE NOTED. THE WASHERS UNDER THE NUT MAY BE DISPLACED;
         A PRACTICAL WAY TO DETERMINE OBSERVABLE MOVEMENT IS THAT THE
         WASHERS UNDER THE NUT BECOME LOOSE OR BY A CONTINUOUS LOSS OF JACMING PRESSURE.
        • TORQUE WRENCH METHOD (EXPANSION ANCHORS ONLY): THE APPLICABLE TEST TORQUE MUST
         BE REACHED WITHIN THE FOLLOWING LIMITS: WEDGE TYPE: ONE-HALF (½) TURN OF THE NUT.
   D. TEST VALUES: APPLY TEST LOADS TO ANCHORS WITHOUT REMOVING THE NUT.

---

**POST-INSTALLED ADHESIVE ANCHOR SCHEDULE**

<table>
<thead>
<tr>
<th>ANCHOR TYPE &amp; DIA (INCH)</th>
<th>HOLE DIA (INCH)</th>
<th>EFFECTIVE EMBED (INCH)</th>
<th>MIN CONC THICKNESS (INCH)</th>
<th>MIN CONC EDGE DISTANCE (INCH)</th>
<th>MIN AB SPACING UNO (INCH)</th>
<th>TENSION TEST LOAD (LBS)</th>
<th>CONDITION OF ANCHORAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/16&quot; HILTI HAS-R</td>
<td>0.5625</td>
<td>2.75</td>
<td>4</td>
<td>12</td>
<td>6.75</td>
<td>2360</td>
<td>CASE 2</td>
</tr>
<tr>
<td>(ASTM F593 CW1 316 SS)</td>
<td>ALL THIRD ROD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**POST-INSTALLED MECHANICAL ANCHOR SCHEDULE**

<table>
<thead>
<tr>
<th>ANCHOR TYPE &amp; DIA (INCH)</th>
<th>INSTALLATION EMBED (INCH)</th>
<th>EFFECTIVE EMBED (INCH)</th>
<th>HOLE DEPTH (INCH)</th>
<th>MIN CONC THICKNESS (INCH)</th>
<th>MIN CONC EDGE DISTANCE (INCH)</th>
<th>MIN AB SPACING UNO (INCH)</th>
<th>TEST LOAD (LBS)</th>
<th>TURQUE (FT-LBS)</th>
<th>CONDITION OF ANCHORAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>KB-TZ 304</td>
<td>0.575*</td>
<td>2.3125</td>
<td>2.00</td>
<td>2.625</td>
<td>SEE DIALS</td>
<td>1350</td>
<td>25</td>
<td></td>
<td>CASE 1</td>
</tr>
<tr>
<td>SS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**ABBEY**
**ALUNITY' S INTERFACE INSTRUMENTS**
**EQUIPMENT SUPPORTS & ATTACHMENTS**

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

Sheet Title: General Notes
Rev: Description: Date: Job No: 18156
Date: 7/21/2020
By: MTC
Page: 2 of 18

08/24/2020
OPM-0576: Reviewed for Code Compliance by William Staehlin

4 of 20
4. TWO (2) CONDITIONS OF SUPPORTS & ATTACHMENTS ARE SPECIFIED AND PRESENTED IN THIS PRE-APPROVAL:

2/7th
1. ROOF
2. BASE

CASE 1: SUPPORTS & ATTACHMENTS DLTS LOCATED AT UPPER FLRS
ABY THE BASE OF A BLDG (z/f = 1.0), IT IS ASSUMED THAT THE
FLRS ARE BUILT OF A MIN 3/4" NWC OR 5/8"C TOPPING OVER MTL
DECK (t/c = 3000 PSI, MIN).

CASE 2: SUPPORTS & ATTACHMENTS DLTS LOCATED AT OR BLW THE
BASE OF A BLDG (z/f = 0.0). THE FLRS ARE ASSUMED
TO BE BUILT OF A MIN 4" NWC SLAB (t/c = 3000 PSI, MIN).

5. THIS PRE-APPROVAL MAY BE USED AT ANY GEOGRAPHICAL LOCATION IN THE STATE OF
CALIFORNIA WHERE S_e < 3.0 AND IS LESS THAN OR EQ TO 2.5.

6. COORDINATE THE ANCHOR BOLT LAYOUT WITH THE COMPONENT IN THE FIELD PRIOR TO SETTING
ANCHOR BOLTS.

7. ANCHOR BRACKETS SHALL BE PAINTED WITH A RUST INHIBITIVE PRIMER FOLLOWED BY A COLOR
COAT SELECTED BY THE HOSPITAL FACILITY OR MATCH THE COLOR OF THE BASE OF THE EQUIP.
IF A COLOR IS NOT SPECIFIED BY THE HOSPITAL.

8. FASTENERS AND ASSOCIATED HARDWARE SHALL BE FIELD PAINTED TO MATCH BRACKETS AFTER
INSTALLATION IS COMPLETE.

9. STRUCTURAL STEEL SHAPES AND CONNECTORS SHALL CONFORM TO THE FOLLOWING, UNO:
A. PLATES, ANGLES, BARS & MISCELLANEOUS SHAPES .......................... ASTM A36
B. PLATES AS NOTED .................................................. ASTM A572 GR 50
C. MACHINE BOLTS .......................................................... ASTM A307

10. CONTRACTOR SHALL FURNISH AND INSTALL THE SEISMIC SUPPORTS AND ATTACHMENTS
INCLUDING SEISMIC BRACKETS, EXPANSION ANCHORS, THRU-BOLTS, STRUT PLATES BELOW SLABS,
HIGH STRENGTH BOLTS, ETC.) IN CONJUNCTION WITH COMPONENT SETTING INSTRUCTIONS FROM
ABBOTT FIELD INSTALLATION PERSONNEL.

11. DRAWING SCALES ARE NOT PROVIDED. DO NOT SCALE OFF OF THESE DRAWINGS
THE INTENT OF THESE DRAWINGS IS TO SHOW HOW TO FABRICATE THE SEISMIC BRACKET TO
ANCHOR THE EQUIPMENT SPECIFIED. THE REPRESENTATIONS OF THE EQUIPMENT ARE ONLY
INTENDED TO SHOW THE COORDINATION WITH THE SEISMIC BRACKETS.

12. BOLTS THROUGH CONCRETE ON METAL DECK:
A. BOLTS SHALL BE TORQUED BY 1/2 TURN OF THE NUTS AFTER SNUG TIGHT (THE SNUG TIGHT
CONDITION IS DEFINED AS THE TIGHTNESS REQUIRED TO BRING THE CONNECTED
FLRS INTO FIRM CONTACT) CONDITION IS ACHIEVED, UNO.
B. THRU BOLT HOLES SHALL BE 3/4" LARGER THAN BOLT SIZE
(HOLE SIZE = BOLT SIZE + 1/16")
C. THRU BOLTS IN CONCRETE SHALL RECEIVE SPECIAL INSPECTION & TESTING
(THRU BOLTS WITH STEEL-TO-STEEL CONNECTION IN TENSION DO NOT REQUIRE TESTING)
IN ACCORDANCE WITH REQUIREMENTS FOR POST-INSTALLED ANCHORS.

13. TAKE CARE TO AVOID DAMAGING KEABAR OR POST-TENSIONING TENDONS WHEN INSTALLING
ANCHORS TO CONCRETE.

WELDING NOTES:
1. WELDING OF SEISMIC BRACKETS SHALL BE PERFORMED BY CERTIFIED WELDERS USING E70XX
ELECTRODES (UNO). THE USE OF E70-T4 WELDING WIRE IS NOT ALLOWED FOR ANY APPLICATION.
WELDS SHALL BE IN CONFORMITY WITH THE STRUCTURAL WELDING CODE-STEEL OF THE AMERICAN
WELDING SOCIETY (AWS D1.1-15). SUBMIT WELDING PROCEDURES AND SPECIFICATIONS TO OWNER’S
TESTING LABORATORY FOR REVIEW AND APPROVAL PRIOR TO BEGINNING SEISMIC BRACKET
FABRICATION.

2. WELD LENGTHS CALLED FOR ON PLANS ARE THE NET EFFECTIVE LENGTH REQUIRED. WHERE FILLET
WELD SYMBOL IS GIVEN WITHOUT INDICATION OF SIZE, USE MINIMUM SIZE WELDS AS SPECIFIED IN
ASCE 350-16, SECTION J2.2b.

DESIGN CRITERIA
DESIGN OF SUPPORTS & ATTACHMENTS FOR ALL EQUIP COMPONENTS IS PER 2019 CBC

ASCE 7-16 TABLE 13.6-1
OTHER MECHANICAL OR ELECTRICAL COMPONENTS

\[ S_{dR} = 2.5 \]

\[ L_f = 1.5 \]

\[ q_s = 1.0 \]

\[ F_w = 1.5 \]

\[ \omega_w = 1.5 \]

\[ \% \text{ AS NOTED ON COMPONENT BASE PLANS & ELEVS} \]

SEISMIC LOADS FOR CASE 1 - UPPER FLRS ABY THE BASE, z/f <= 1.0 (LRFD)

\[ F_p = 3.0 \text{ Wp} \]

\[ F_v = 0.50 \text{ Wp} \]

SEISMIC LOADS FOR CASE 2 - SLAB AT OR BLW BASE, z/f = 0 (LRFD)

\[ F_p = 1.12 \text{ Wp} \]

\[ F_v = 0.50 \text{ Wp} \]
### Component Dimensions Sched:

<table>
<thead>
<tr>
<th>NO.</th>
<th>Component</th>
<th>Leveling Foot Dims</th>
<th>CG Location</th>
<th>Op Wt (Wₚ)</th>
<th>PG</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TYPICAL TRACK MODULE(2)</td>
<td>90&quot; MAX 11.50&quot; MIDSPAN</td>
<td>5.75&quot;</td>
<td>26.9&quot;</td>
<td>185#</td>
</tr>
<tr>
<td>2</td>
<td>ALINITY s</td>
<td>71.30&quot; 31.30&quot; 34.9&quot; 16.5&quot; 35.5&quot;</td>
<td>3.50&quot;</td>
<td>20.39&quot;</td>
<td>174#</td>
</tr>
<tr>
<td>3</td>
<td>INTERFACE MODULE</td>
<td>13.01&quot; 5.85&quot; 7.65&quot; 3.50&quot; 20.39&quot;</td>
<td>5.85&quot;</td>
<td>3.50&quot;</td>
<td>44#</td>
</tr>
</tbody>
</table>

**Notes:**
1. See component dimension schedule for more info.
2. Component Op Wt (Wₚ) includes wt of two top tracks, bott track, and two support frames as shown on Fig. 2.
3. The components furnished are not intended to be used to lay out the components. This information is being furnished for use by the SOR.
4. Frames for return lane weigh approximately 7 lbs ea. Wt in table is for return lane only.

---

### Abbreviations:

- **Ø** = Anchor Bolt
- **AB** = Anchor Bolt
- **AD** = Adjacent
- **ASC** = American Institute of Steel Construction
- **ASC** = American Society of Civil Engineers
- **ASD** = Allowable Strength Design
- **ASTM** = American Society for Testing & Materials
- **AWS** = American Welding Society
- **BBDG** = Building
- **BWL** = Below
- **BOT** = Bottom
- **CB** = California Building Code
- **CG** = Center of Gravity
- **CJP** = Complete Joint Penetration
- **CLR** = Clear or Clearance
- **CLSE** = California Licensed Structural Engineer
- **CLN** = Centerline
- **CO** = Connection
- **COORD** = Coordinate
- **CTR** = Center
- **DBL** = Double
- **DIA (Ø)** = Diameter
- **DIM** = Dimension
- **DRL** = Detail
- **DWT** = Drawing
- **EACH** = Each End
- **EAE** = Each End
- **ELEV** = Elevation
- **EQ** = Equipment
- **F** = Minimum Ultimate Compressive Strength
- **FF** = Finished Floor
- **FLG** = Flange
- **FLR** = Floor
- **FMG** = Framing
- **FT (**)** = Foot, Feet
- **FYS (**)** = Specified Yield Strength of Reinforcing, PSC or Specified Minimum Yield Stress of Steel, ksi
- **GA** = General Contractor
- **HCD** = Height
- **ICC** = International Code Council
- **IN (**)** = Inch
- **KSI** = Kips per square inch
- **L** = Length
- **LBS** = Pounds
- **LRFD** = Load & Resistance Factor Design
- **LFRS** = Lateral Force Resisting System
- **MAX** = Maximum
- **MAX** = Manufacturer
- **MIN** = Minimum
- **MTR** = Metal
- **NBR** = Number or Pounds
- **NTS** = Not to Scale
- **NSAP** = Near Side & Far Side
- **NC** = Normal Weight Concrete
- **OPC** = Opening
- **OSHP** = Office of Statewide Health Planning & Development
- **PI** = Plate
- **PSI** = Pounds per square inch
- **R** = Radius
- **REQ** = Required
- **SER** = Structural Engineer or Record
- **SW** = Similar
- **SLWC** = Sand Light Weight Concrete
- **SLG** = Slab on Grade
- **SQ** = Square
- **SS** = Stainless Steel
- **STD** = Steel
- **TB & Top** = Top & Bottom
- **TEMP** = Temporary
- **THRD** = Thread or Threaded
- **TSC** = Top of Concrete
- **Tu** = Anchorage Tension Reaction Due to Seismic Force
- **Typ** = Typical
- **UNO** = Unless Noted Otherwise
- **V** = Anchorage Shear Reaction
- **VERT** = Vertical
- **W** = Anchorage Shear Reaction Due to Seismic Force
- **W** = Component Self-Weight

---

**Sheet Title:** Abbreviations

**Abbott Machinery**: Instrumentation Support Systems & Attachments

**CYS Structural Engineers, Inc.**

2495 Natoma St. Drive, Suite 660

Sacramento, CA 95833

Tel: (916) 920-2020

www.cyseng.com
NOTES:
1. MAX OPERATING WT Wp = 165 LBS INCLUDING SUPPORT FRAMES, T&B RAIL, TRACK, COVERS, ETC.
2. COMPONENT SUB-ASSEMBLY CONNS SHALL BE PERFORMED BY ABBOTT, NOT BY THE GENERAL CONTRACTOR.
MAX ANCHOR FORCES AT LRFD AT LEVELING LEG

CASE 1
\[ T_{\text{max}} = 1362 \text{#} \]
\[ C_{\text{max}} = 1584 \text{#} \]
\[ V_{\text{max}} = 508 \text{#} \]

CASE 2
\[ T_{\text{max}} = 748 \text{#} \]
\[ C_{\text{max}} = 969 \text{#} \]
\[ V_{\text{max}} = 286 \text{#} \]

1. ECCENTRICITY & PULLING ACTION MUST BE CONSIDERED BASED ON THE SEISMIC BRACKET CONFIGURATION.
2. INCLUDES OVERSTRENGTH FACTOR (\(\phi\)).
3. OVERSTRENGTH FACTOR (\(\phi\)) MUST BE APPLIED FOR ANCHORAGE TO CONC.

SECTION A-A

BASE PLAN

NOTE:
A DISTANCE OF 5.5" BTW AB OF ADJ BRACKETS IS ACCEPTABLE.

SIDE ELEV

SEISMIC BRACKET PER PG 12, TYP OF 4
ALINITY™ OUTLINE

LEVELING LEG, TYP

SEISMIC ATTACHMENT ASSEMBLY PER PG. 13

1. SEISMIC BRACKET & HARDWARE SHALL BE FURNISHED & INSTALLED BY THE GENERAL CONTRACTOR, UNO.

20mm ISO 898-1 CLASS 10.9 BOLT (Fy = 130 KSI MIN) LEVELING LEG PER MFR

FASTENERS, TYP OF 8
MAX ANCHOR FORCES AT LFRD AT LEVELING LEGs

<table>
<thead>
<tr>
<th>Case</th>
<th>Tmax</th>
<th>Tmin</th>
<th>Vmax</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>394#</td>
<td>436#</td>
<td>104#</td>
</tr>
<tr>
<td>2</td>
<td>218#</td>
<td>251#</td>
<td>59#</td>
</tr>
</tbody>
</table>

1. Eccentricity & pryng action must be considered based on the seismic bracket configuration.
2. Includes overstrength factor (Ω).
3. Overstrength factor (Ω) must be applied for anchorage to conc.
INTERFACE MODULE SEISMIC BRACKET:

TYP SEISMIC BRACKET DETAIL:

"H" VARIES TO ACCOMMODATE VERT ADJUSTMENT OF THE COMPONENT FOR LEVELING PURPOSES AS MEASURED FROM THE FLR TO THE BOTT OF THE COMPONENT PER THE CASE 1 & CASE 2 FLR TO COMPONENT CLEARANCES AS FOLLOWS:

BRACKET A: "H" = 2.25" FOR 2.25" ≤ CLR ≤ 3.50"

BRACKET B: "H" = 3.50" FOR 3.50" ≤ CLR ≤ 4.25"

NOTES:
1. FOR CASE 1 & CASE 2 ANCHORAGE TO FLR, SEE FIGS 16 & 18 FOR THE TYP TRACK MODULE & INTERFACE MODULE RESPECTIVELY.
2. BRACKET LAYOUT SHALL BE FOLLOWED AS SHOWN ON PLANS ON PG 9.
3. LEFT-HAND BRACKET SHOWN. SEE BASE PLAN A-A ON PG 9 FOR RIGHT-HAND BRACKET CONFIGURATION.
4. GENERAL CONTRACTOR SHALL PROVIDE & INSTALL SEISMIC BRACKET.

ELEV

PLAN

SEISMIC BRACKET ASTM A36 (F_p = 36 KSI)

2- 5/16" Holes for Seismic Attachment to FLR

For Abbott Use
Max Track Ht
Per Bracket
A = 985mm
B = 920mm
BOTTOM BRACKET DETAIL:

PLAN VIEW

SIDE ELEV

FRONT ELEV

22mm\# HOLE, TYP OF 2

\frac{3}{4}" HOLE, TYP OF 4

HSS6x4 3/8" CUT IN HALF

2" 31" 6" TYP

1.5" 1.5" TYP

47"
TOP BRACKET DETAIL:

PLAN VIEW

SIDE ELEV

FRONT ELEV

2" 2"
39" TYP

ANGLE SECTION DETAILS

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

REV: Description  Date  Job No:  18156

DATE:  08/24/2020

Rev Description Date Job No:  18156

15 of 18

08/24/2020

OPM-0576: Reviewed for Code Compliance by William Staehlin
CASE 1 - SUSPENDED FLR W/ THRU-BOLTS

HALF "A" ASTM A36 THROD (2 TOTAL PER BRACKET) THRU SLAB W/ NUT & WASHER
(MIN.F_y = 36 KSI)

1/2" THRU RODS (2 TOTAL PER BRACKET) THRU SLAB W/ NUT & WASHER
(MIN. F_y = 36 KSI)

CASE 2 - SOG
(SLAB AT OR BLW GRADE)

2 - 0.50" HILTI HAS-R
(ASTM F593 CW1 316 SS) ALL-THRD ROD
EMBEDDED 2.75" W/ HILTI HIT-RE 500 V3

CHASSIS OF ALINITY s

INERTIALLY THR 6061-T6 ALUM BOSS ANCHOR WELDED TO BASE FRAME BY MFR
HSS SECTION PER PG. 14

SEE ENLARGED DTL A-A

CHASSIS OF ALINITY s

HSS SECTION PER PG. 14

ANGULAR SECTIONS PER PG. 15

(E) 4" MIN NWC SOG
(f'c=3000 PSF)

CASE 1

CASE 2

FACTORY LEVELING LEG W/ JAM NUT BYD

19 of 20

OPM-0576
William Staehlin
08/24/2020

OPM-0576

William Staehlin
08/24/2020
CASE 1 - SUSPENDED FLR W/ THRU-BOLTS

CASE 2 - SOG
(SLAB AT OR BELOW GRADE)