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

OFFICE USE ONLY
APPLICATION #: OPM-0441-13

OSHPD Preapproval of Manufacturer's Certification (OPM)

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

Manufacturer Information

Manufacturer: Handicare

Manufacturer's Technical Representative: Chris Huisman

Mailing Address: 10888 Metro Court, St Louis MO 63043

Telephone: 610-266-5260 x147 Email: Chris.huisman@handicare.com

Product Information

Product Name: Prism Medical Lifts

Product Type: Patient Lifts

Product Model Number: C-300, C-450, C-625, C-800, & C-1000

General Description: Patient lifts – Overhead supported & Wall post supported

Applicant Information

Applicant Company Name: Prism Medical

Contact Person: Chris Huisman

Mailing Address: 10888 Metro Court, St Louis MO 63043

Telephone: 610-266-5260 x147 Email: Chris.huisman@handicare.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: _____ Date: 8/18/2017

Title: Project manager Company Name: Handicare

Registered Design Professional Preparing Engineering Recommendations

Company Name: Degenkolb Engineers

Name: Robert Graff California License Number: SE 5113

Mailing Address: 235 Montgomery St, Suite 500, San Francisco CA 94104

Telephone: 415-392-6952 Email: rgraff@degenkolb.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 product info provided within the calculation package.

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

Signature: Date: 02-01-2018

Print Name: William Staehlin

Title: SSE

Condition of Approval (if applicable):

GENERAL NOTES

I. GENERAL

1. THIS OSHPD PRE-APPROVAL OF MANUFACTURE'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. THIS PRE-APPROVAL IS VALID FOR THE EQUIPMENT DESCRIBED IN THESE DRAWINGS THROUGHOUT THE STATE OF CALIFORNIA, AND IS VALID FOR EQUIPMENT INSTALLED AT ANY HEIGHT WITHIN THE BUILDING.
3. PROVIDE LABELING ON LIFTS WITH THE DESIGN LIFT CAPACITY IDENTIFIED.

II. RESPONSIBILITIES OF THE STRUCTURAL ENGINEER OF RECORD

1. VERIFY MATERIALS AND WORKMANSHIP TO CONFORM WITH THE 2016 EDITION OF THE CALIFORNIA BUILDING CODE AND THE REQUIREMENTS OF THIS PRE-APPROVAL DOCUMENT.
2. VERIFY THE ADEQUACY OF THE EXISTING FRAMING TO SUPPORT THE LOADS INDICATED ON THIS SHEET, IN ADDITION TO ALL OTHER LOADS.
3. VERIFY ANCHORS ARE ADEQUATE DISTANCES FROM OPENINGS AND EDGES OF SLABS.
4. VERIFY ANCHORS ARE ADEQUATE DISTANCES FROM NEW OR EXISTING ANCHORS.
5. DESIGN ANY SUPPLEMENTARY MEMBER AND THEIR ATTACHMENTS OTHER THAN THOSE DETAILED WITHIN THIS PRE-APPROVAL.
6. VERIFY THE EQUIPMENTS WEIGHT, LOCATION. ANCHOR LOCATIONS AND ANCHOR DETAILS AGREE WITH THE INFORMATION SHOWN IN THIS PRE-APPROVAL.

III. STRUT FRAMING

1. CHANNEL FRAMING COMPONENTS AND CONNECTORS MANUFACTURED BY MASON WEST CORPORATION.
2. CHANNEL FRAMING TO CONFORM TO ASTM A1011 SS, GRADE 33 .
3. INSTALL BRACING WITH NO MORE THAN 5 DEGREE +/- PLAN DEVIATION.
4. STRUT TYPE: SOLID SECTIONS ONLY.
5. ALL STRUT NUTS AND BOLTS ARE 1/2" AND ARE TO BE TORQUED TO 50 FT-LBS UON.

IV. MECHANICAL ANCHORS

1. WEDGE ANCHORS INTO CONCRETE: USE ZINC PLATED CARBON STEEL HILTI KB-TZ (ICC ESR-1917 ISSUED MAY 2015. INSTALL ANCHORS IN ACCORDANCE WITH ICC REPORT
2. IF REINFORCEMENT IS ENCOUNTERED DURING DRILLING, ABANDON AND SHIFT THE HOLE LOCATION TO AVOID THE REINFORCEMENT. PROVIDE A MINIMUM OF 2 ANCHOR DIAMETERS OR 1 INCH, WHICHEVER IS LARGER, OF SOUND CONCRETE BETWEEN THE DOWEL AND THE ABANDONED HOLE. FILL THE ABANDONED HOLE WITH NON-SHRINK GROUT APPROVED BY THE ENGINEER OF RECORD. NOTIFY THE ENGINEER OF RECORD IF ANY REINFORCING IS DAMAGED.
3. ANCHORS WILL BE PROOF-TESTED BY OWNER'S TESTING AND INSPECTION AGENCY. WITH A REPORT OF THE TEST RESULTS SUBMITTED TO OSHPD.
4. IF ANY ANCHOR FAILS TESTING, REPLACE ANCHOR AND TEST ADDITIONAL ANCHORS OF THE SAME CATEGORY NOT PREVIOUSLY TESTED UNTIL TWENTY (20) CONSECUTIVE PASS, THEN RESUME INITIAL TESTING FREQUENCY.
5. TEST ANCHORS NO SOONER THAN 24 HOURS AFTER INSTALLATION.
6. TEST 50% WEDGE ANCHORS PER THE FOLLOWING METHOD:
   A. TORQUE WRENCH METHOD: TEST ANCHORS TO THE TORQUE LOAD INDICATED IN THE TABLE BELOW WITHIN THE FOLLOWING LIMITS:
      1. ONE-HALF TURN OF THE NUT.

WEDGE	
ANCHOR DIA. (IN)	TORQUE LOAD (FT-LBS)
3/8	25
1/2	40
5/8	60

V. ROUGH CARPENTRY

1. FRAMING LUMBER: DOUGLAS FIR (COAST REGION) GRADED AND MARKED IN ACCORDANCE WITH THE STANDARD GRADING RULES NO. 17 OF THE WEST COAST LUMBER INSPECTION BUREAU (W.C.L.I.B.) OR WESTERN LUMBER GRADING RULES, OF THE WESTERN WOOD PRODUCTS ASSOCIATION (W.W.P.A.). USE LUMBER WITH A MINIMUM GRADE OF D.F. #2, U.O.N..
2. ROUGH HARDWARE:
   A. NAILS: COMMON WIRE NAILS, ASTM F1667, STANDARDLENGTHS U.O.N. USE HOT-DIPPED ZINC-COATED GALVANIZED NAILS WHEN PENETRATING PRESSURE TREATED OR FIRE-RETARDANT LUMBER.
   B. BOLTS AND THREADED RODS: ASTM A307, SQUARE OR HEXAGONAL HEAD MACHINE BOLTS WITH ASTM A563 NUTS. USE MALLEABLE IRON WASHERS UNDER HEAD AND NUT WHEN IN CONTACT WITH WOOD.
   C. CREWS: ASTM A307, ANSI/ASME STANDARD B18.6.1. USE CADMIUM-PLATED PAN OR ROUND HEADED SCREWS AT STEEL TO WOOD AND WOOD TO WOOD CONNECTIONS.
   D. MISCELLANEOUS STEEL: ASTM A36.
3. BOLT INSTALLATION:
   A. DRILL BOLT HOLES A MAXIMUM OF 1/16 INCH LARGER IN DIAMETER THAN THE BOLT NOMINAL DIAMETER.

VI. STRUCTURAL STEEL

1. STRUCTURAL STEEL TO CONFORM TO THE FOLLOWING UNLESS OTHERWISE NOTED:

SECTIONS	TYPE
COLD FORMED HOLLOW STRUCTURAL SECTION (HSS)	ASTM A500 GRADE B
MACHINE BOLTS	ASTM A307
THREADED AND HANGER ROD	ASTM A36
NUTS FOR BOLTS AND MACHINE BOLTS	ASTM A563
PLAIN WASHERS	ANSI B18.22.1

2. HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123 AND ASTM A153 STRUCTURAL STEEL AND FASTENERS THAT ARE PERMANENTLY EXPOSED TO WEATHER.

VII. STRUCTURAL TESTS, INSPECTIONS, AND OBSERVATIONS

1. AN INDEPENDENT TESTING AGENCY AND SPECIAL INSPECTORS WILL BE RETAINED BY THE OWNER TO PERFORM THE FOLLOWING TESTS AND INSPECTION. PROVIDE ACCESS AND FURNISH SAMPLES TO THE AGENCY AS REQUIRED.
2. THE FOLLOWING ITEMS REQUIRE TESTS AND INSPECTIONS IN ACCORDANCE WITH THE REQUIREMENTS OF THE CHAPTER "STRUCTURAL TESTS AND INSPECTIONS" OF THE CODE.
3. MECHANICAL ANCHORS:
   A. VERIFY TYPE OF ANCHOR, ANCHOR DIMENSIONS, CONCRETE TYPE AND COMPRESSIVE STRENGTH, PREDRILLED HOLE DIMENSIONS, ANCHOR SPACING, EDGE DISTANCE, SLAB THICKNESS AND ANCHOR EMBEDMENT.
   B. PROOF-TEST AS INDICATED IN THE MECHANICAL ANCHORS SECTION OF THESE GENERAL NOTES.

VIII. DESIGN CRITERIA

1. APPLICABLE CODE: 2016 CALIFORNIA BUILDING CODE.
2. SEISMIC DESIGN:
   SEISMIC FORCE F = 3.00 Wp Ev = 0.50 Wp — Rp = 4.5, ap = 2.5, Ω = 2.0
   WHERE:
   Sds = 250% G — WORST CASE ACCEL.
   Ip = 1.5 — FOR NON-ESSENTIAL EQUIP.
   Z/h= 1.0 — FOR ANY FLOOR
3. CRANE LOADING PER AISC
   TRANSVERSE LOADING = 0.2 (DL+LL)
   LONGITUDINAL LOADING = 0.1 (DL+LL)

IX. HOW TO USE THIS PRE-APPROVAL

1. REVIEW AND UNDERSTAND ALL GENERAL NOTES AND FIGURES BEFORE PROCEEDING.
2. FOR THE SELECTED LIFT AND TRACK DETERMINE THE MAX HANGER SPACING AND BRACE SPACING FORM THE TABLES ON S2.
3. BASED ON THE LIFT AND STRUCTURE TYPES SELECT A HANGER CONNECTION FROM THE TABLE ON S3.
4. BASE ON THE LIFT AND STRUCTURE TYPES SELECT A BRACE CONNECTION FROM THE TABLE ON S5.
5. DETERMINE THE MAXIMUM DEMANDS ON THE EXISTING STRUCTURE FROM THE NEW UNIT FROM THE TABLE ON THIS SHEET, AND VERIFY THE ADEQUACY OF THE EXISTING STRUCTURE WITH THE ENGINEER OF RECORD FOR THE BUILDING.

SHEET LIST

S1 GENERAL NOTES
S2 LAYOUT & TRACK SECTIONS
S3 SECTION & TRAPEZE
S4 HANGER CONNECTION DETAILS
S5 HANGER CONNECTION DETAILS
S6 BRACE CONNECTION DETAILS
S7 BRACE CONNECTION DETAILS
S8 WALL POST INSTALLATION

LOADS IMPOSED ON STRUCTURE

MAX LRFD LOADS W/OMEGA		
	T Hanger	P Brace
Lift	lbs	lbs
C300	1216	707
C450	1611	1471
C625	1977	1471
C800	2360	1506
C1000	2779	1506

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HANDICARE PATIENT LIFTS

Title: GENERAL NOTES

Sheet Number: S1

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Date	11/17/17		

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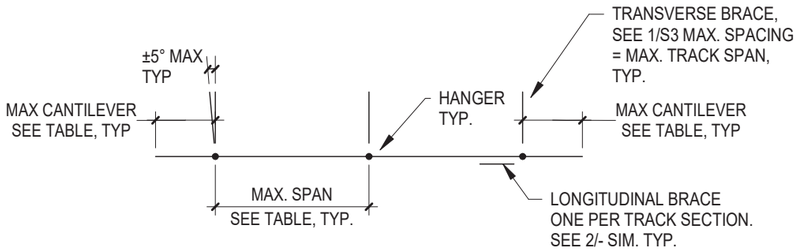

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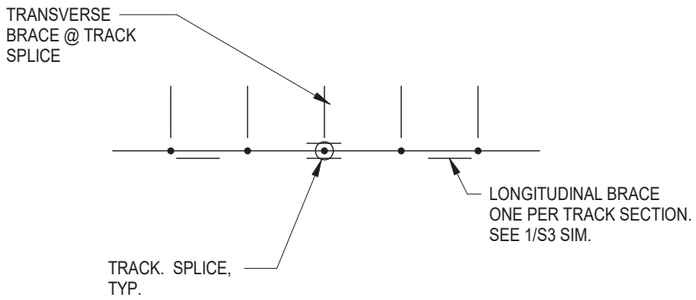

MULTIPLE SECTION

CURVED TRACK

1 TRACK LAYOUT PLANS

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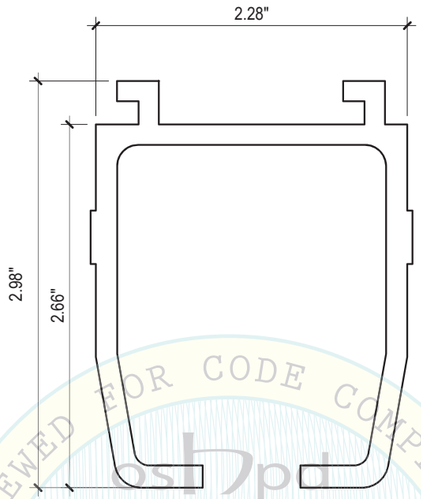
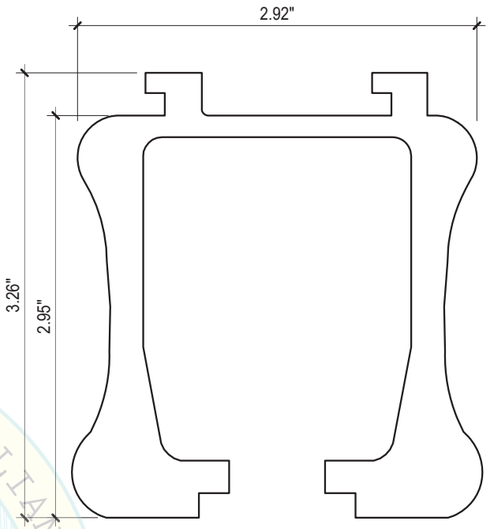


STANDARD TRACK

6063 T6 ALUMINIUM

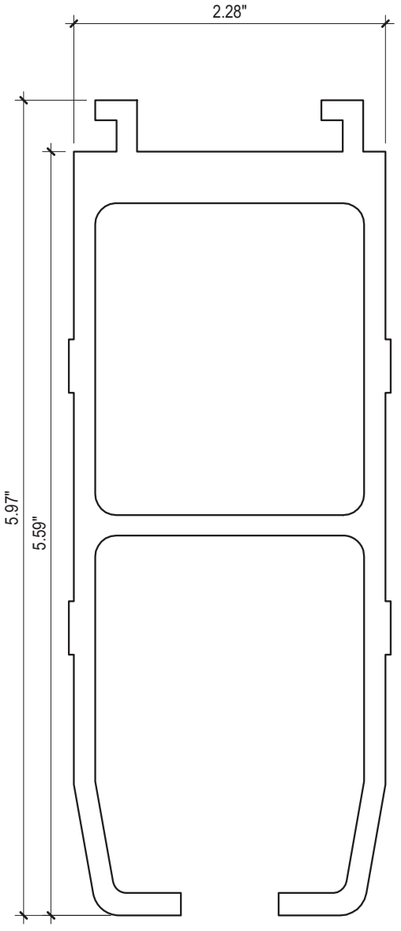
MAXIMUM TRACK SPANS (INCHES)			
LIFT	STD	SUPER	PLUS
C300	51	113	130
C450	40	96	108
C625	34	84	94
C800	30	74	83
C1000	26	66	74



SUPER TRACK

6005 T5 ALUMINIUM

MAXIMUM TRACK CANTILEVER (INCHES)			
LIFT	STD	SUPER	PLUS
C300	12	28	32
C450	10	24	26
C625	8	21	23
C800	7	18	20
C1000	6	16	18



TRACK PLUS

6063 T6 ALUMINIUM

2 TRACK SECTIONS

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HANDICARE PATIENT LIFTS

Title: LAYOUT & TRACK SECTIONS

Sheet Number: S2

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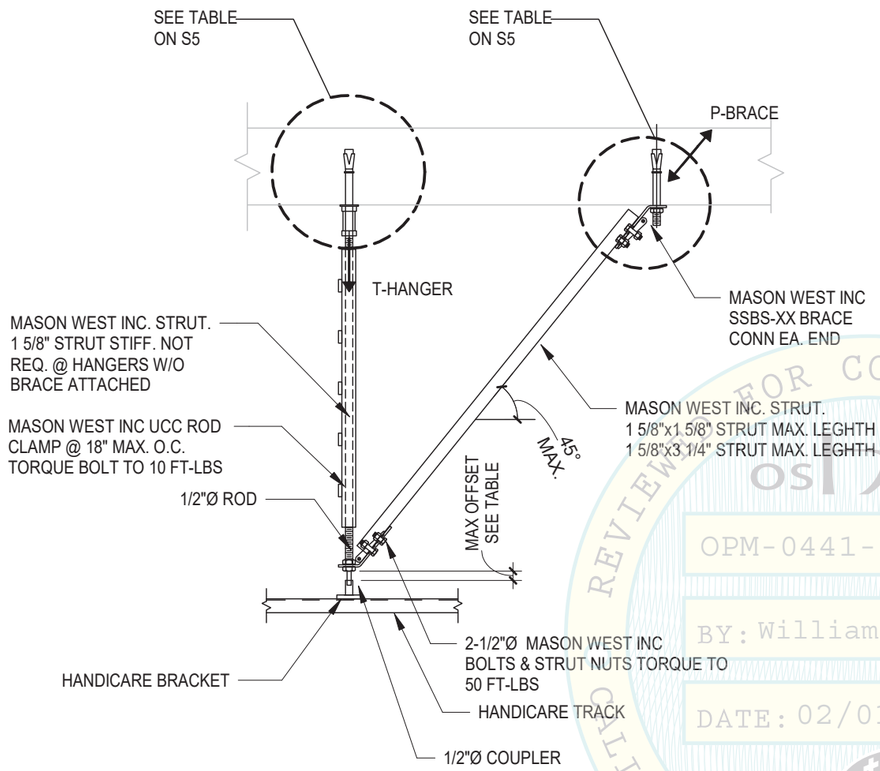

MAXIMUM OFFSET	
LIFT	INCHES
C300	2
C450	1.625
C625	1.5
C800	1.375
C1000	1.125

1 SECTION @ BRACE

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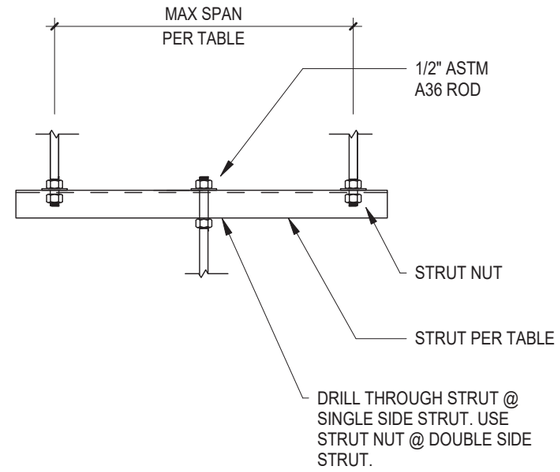
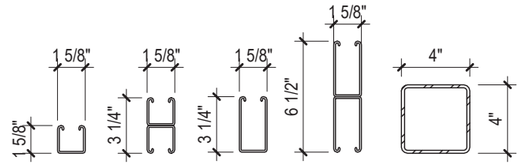


STRUT SPAN (INCHES)					
LIFT	STD	DOUBLE	DEEP	DOUBLE DEEP	HSS 4X4X3/16
C300	28	76	60	126	216
C450	20	58	49	114	183
C625	16	48	45	102	162
C800	13	39	37	93	146
C1000	11	32	31	87	134



2 TRAPEZE

N.T.S.

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HANDICARE PATIENT LIFTS

Title: SECTION & TRAPEZE

Sheet Number: S3

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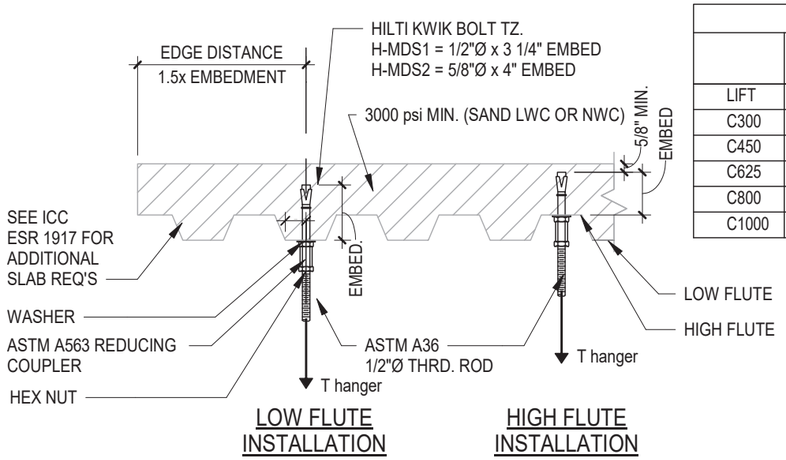
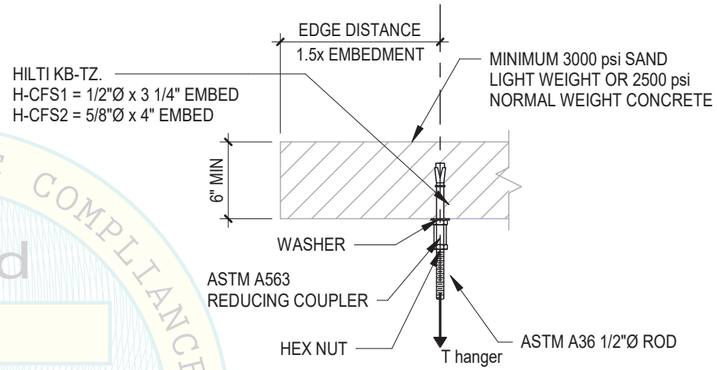


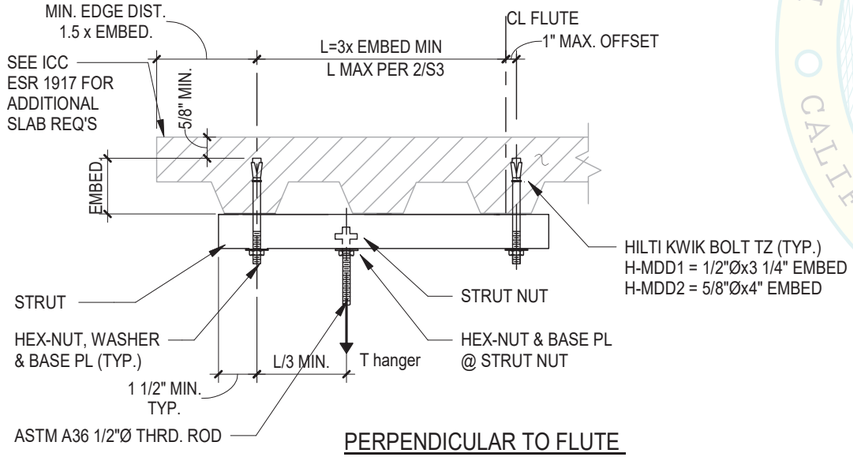
H-MDS# CONC. ON DECK SINGLE ANCHOR

HANGER CONNECTION TABLE

	CONCRETE FLAT SLAB						COMP METAL DECK				CONC JOIST			STEEL BEAM		STEEL JOIST	SOLID LUMBER		WOOD I-JOIST	
LIFT	H-CFS1	H-CFS2	H-CFD1	H-CFD1N	H-CFD2	H-CFD3	H-MDS1	H-MDS2	H-MDD1	H-MDD2	H-CPJ1	H-CPJ2	H-CPJ3	H-SB1	H-SB2	H-OWJ1	H-DL1	H-DL2	H-IJ1	H-IJ2
C300	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
C450	OK	OK	OK	OK	OK	OK	NO	OK	NO	OK	NO	OK	OK	OK	OK	OK	OK	OK	OK	OK
C625	NO	OK	NO	NO	OK	OK	NO	OK	NO	OK	NO	OK	OK	NO	OK	OK	OK	OK	OK	OK
C800	NO	NO	NO	NO	OK	OK	NO	NO	NO	OK	NO	OK	OK	NO	OK	OK	NO	OK	NO	OK
C1000	NO	NO	NO	NO	NO	OK	NO	NO	NO	OK	NO	NO	OK	NO	OK	OK	NO	OK	NO	OK

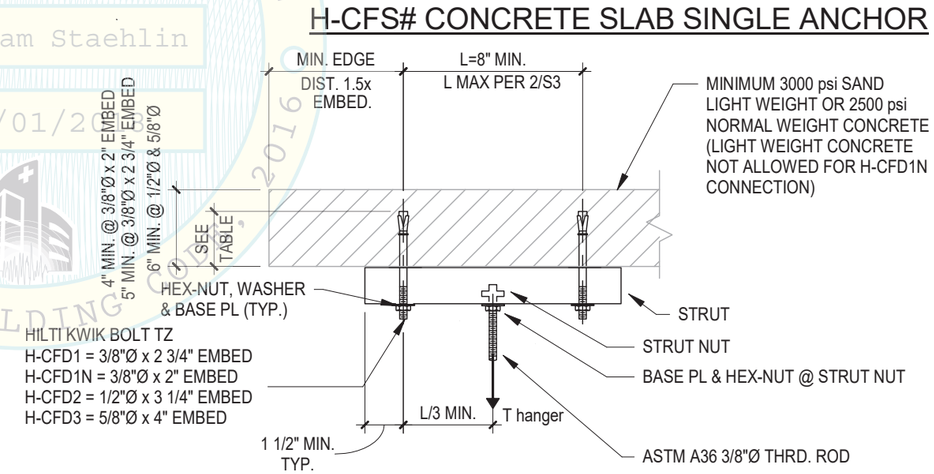


H-CFS# CONCRETE SLAB SINGLE ANCHOR



PERPENDICULAR TO FLUTE

H-MDD# CONC. ON DECK DOUBLE ANCHOR



H-CFD# CONCRETE SLAB DOUBLE ANCHOR

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HANDICARE PATIENT LIFTS

Title: HANGER CONNECTIONS

Sheet Number: S4

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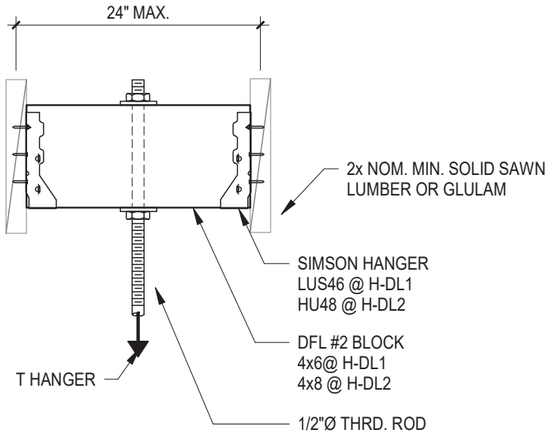
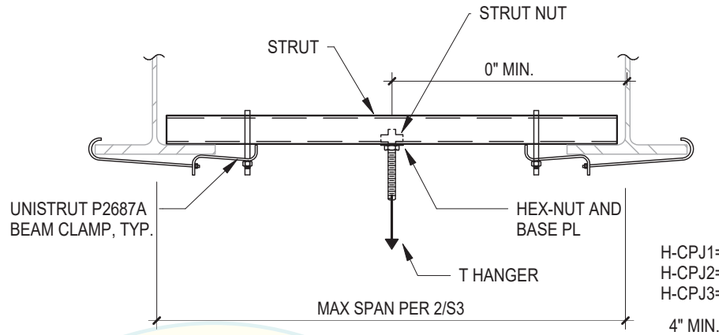
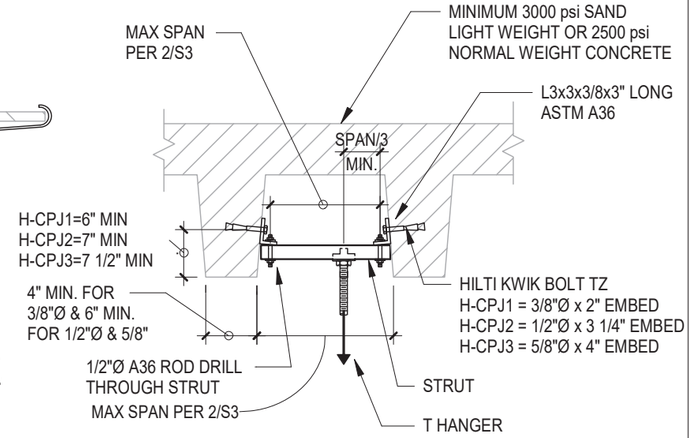


H-DL# WOOD

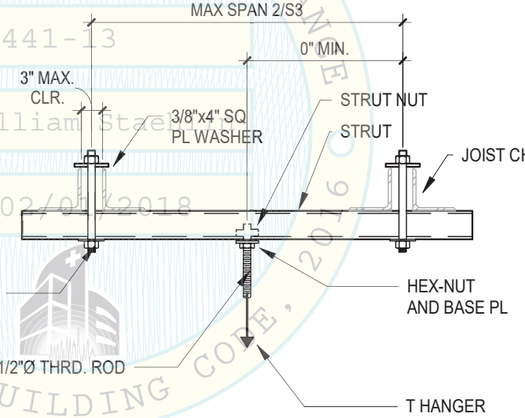


SB2 ABOVE STEEL BEAM FLANGE

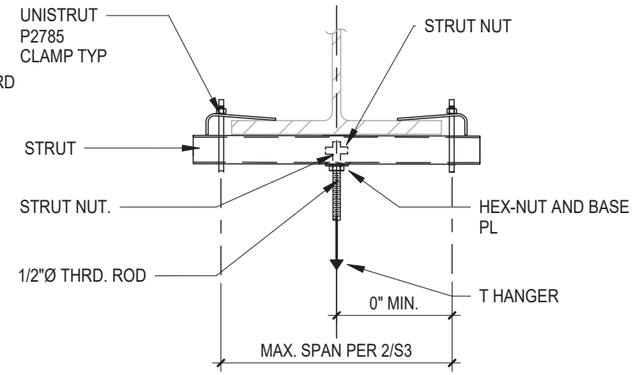


H-CPJ# CONCRETE JOIST

H-IJ# WOOD I - JOIST



H-OWJ1 OPEN WEB STEEL JOIST



SB1 BELOW STEEL BEAM

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HANDICARE PATIENT LIFTS

Title:
HANGER CONNECTION DETAILS

Sheet Number
S5

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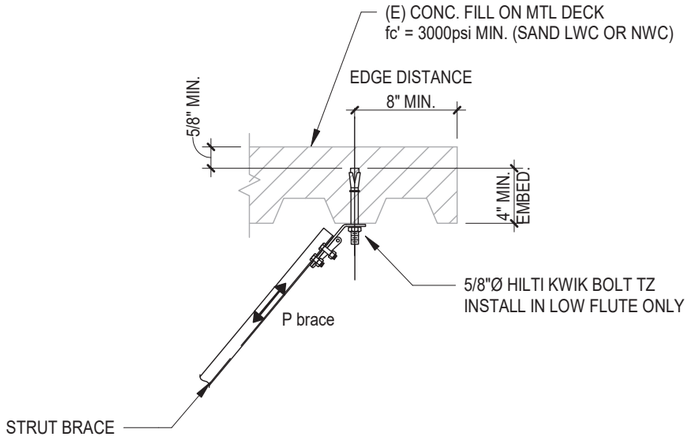
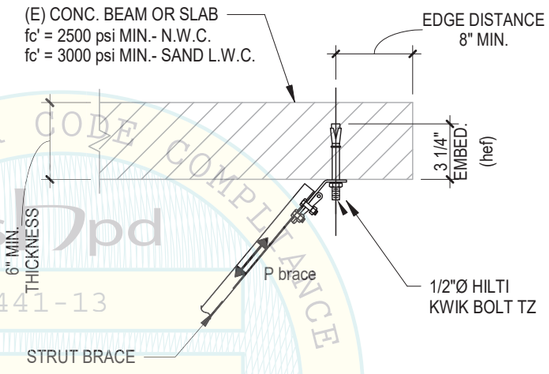
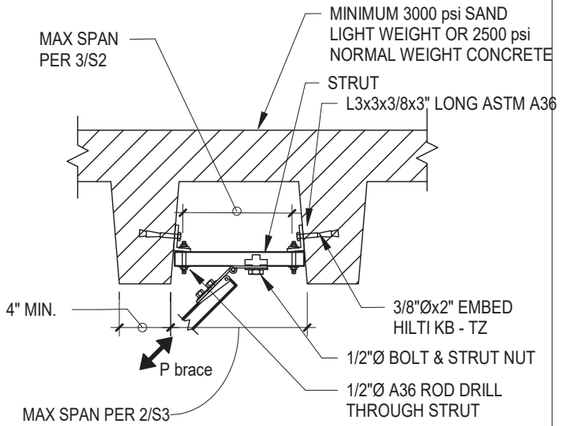


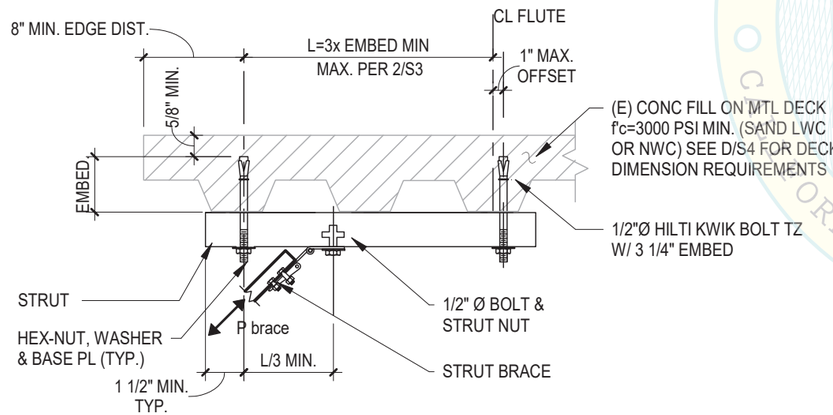
B-MDS-1 CONCRETE ON DECK SINGLE ANCHOR

BRACE CONNECTION TABLE											
	CONCRETE FLAT SLAB		COMP METAL DECK		CONC JOIST	STEEL BEAM			STEEL JOIST	STEEL LUMBER	WOOD I-JOIST
LIFT	B-CFS1	B-CFD1	B-MDS1	B-MDD1	B-CPJ1	B-SB1	B-SB2	B-SB3	B-OWJ1	B-DL1	B-IJ1
C300	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
C450	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
C625	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
C800	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
C1000	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

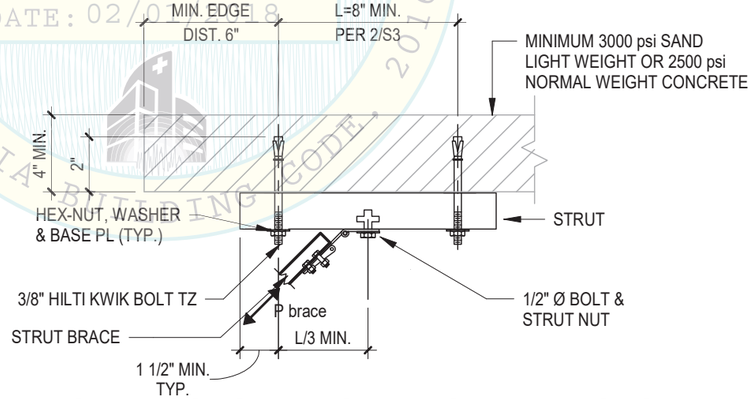




H-CPJ 1 CONCRETE JOIST



B-MDD-1 CONCRETE ON DECK DOUBLE ANCHOR



B-CFS-1 CONCRETE SLAB SINGLE ANCHOR

B-CFD-1 CONCRETE SLAB DOUBLE ANCHOR

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REGISTERED PROFESSIONAL ENGINEER
ROBERT M. GRAFF
No. 5113
STRUCTURAL
STATE OF CALIFORNIA

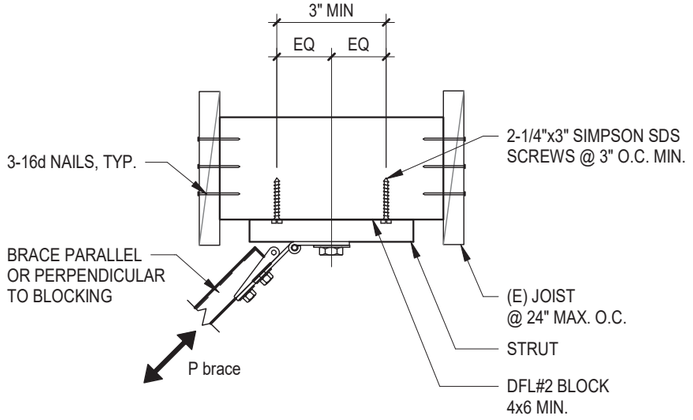
HANDICARE PATIENT LIFTS

Title: BRACE CONNECTIONS

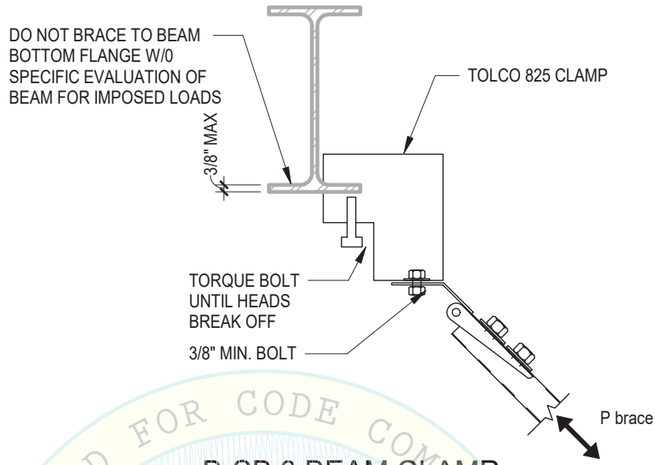
Sheet Number: S6

Drawn	QL	Job number:	B5535011.00
Design:	RMG	Rev:	
Check:	RMG	Scale:	N.T.S.
Date	11/17/17		

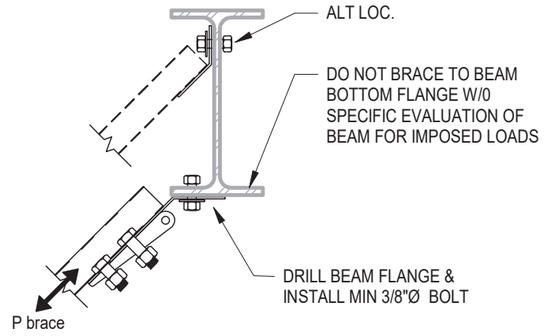
OF Sheets



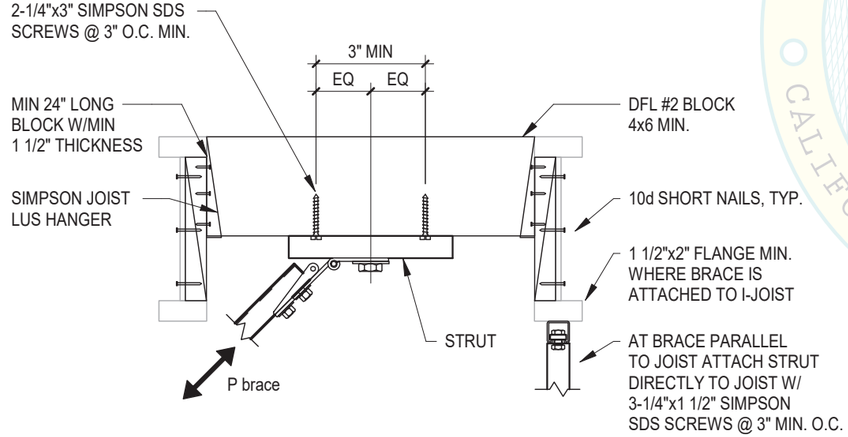
B-DL1 WOOD



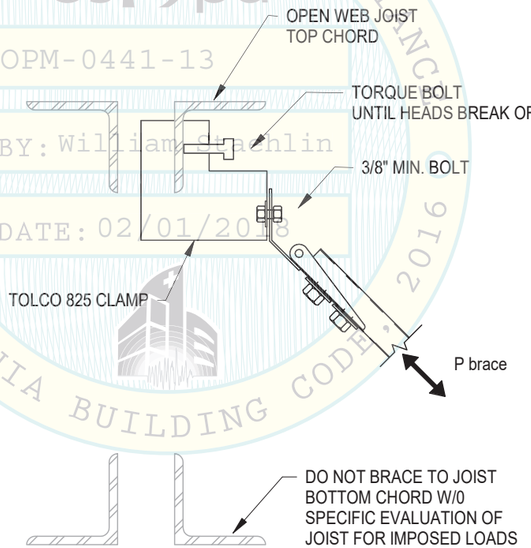
B-SB 3 BEAM CLAMP



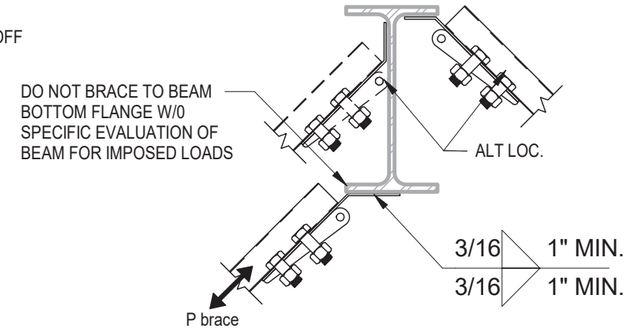
B-SB 1 BOLT BEAM



B-IJ1 WOOD I - JOIST



B-OWJ 1 OPEN WEB JOIST



B-SB 2 WELD BEAM

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HANDICARE PATIENT LIFTS

Title: BRACE CONNECTIONS

Sheet Number: S7

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Check:	Checker	Scale:	As indicated
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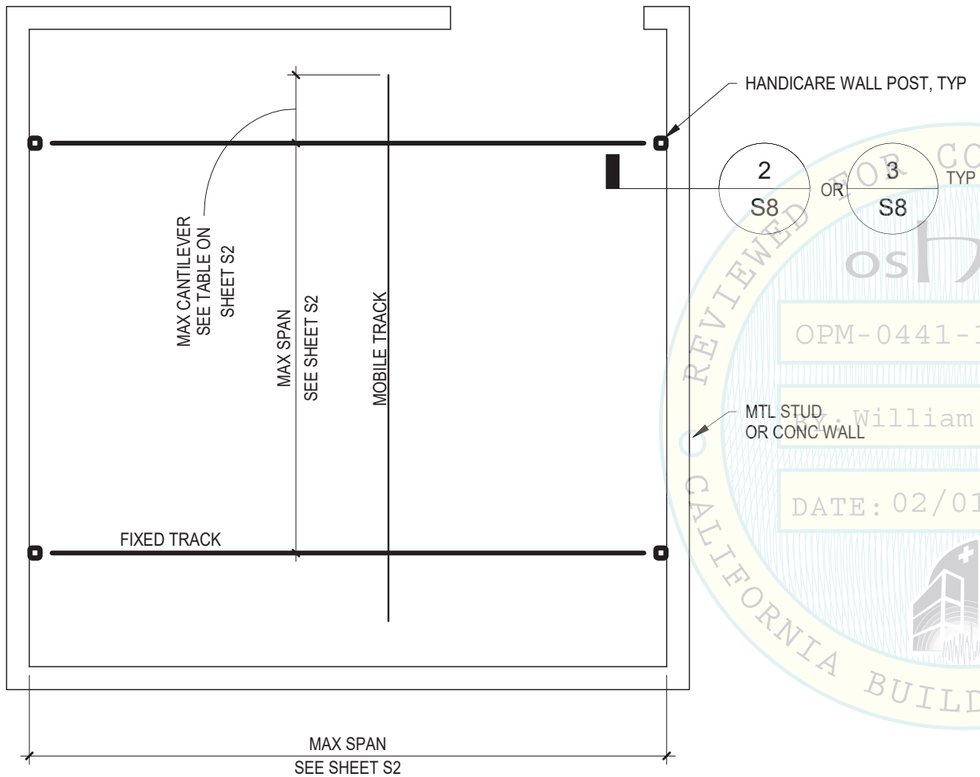
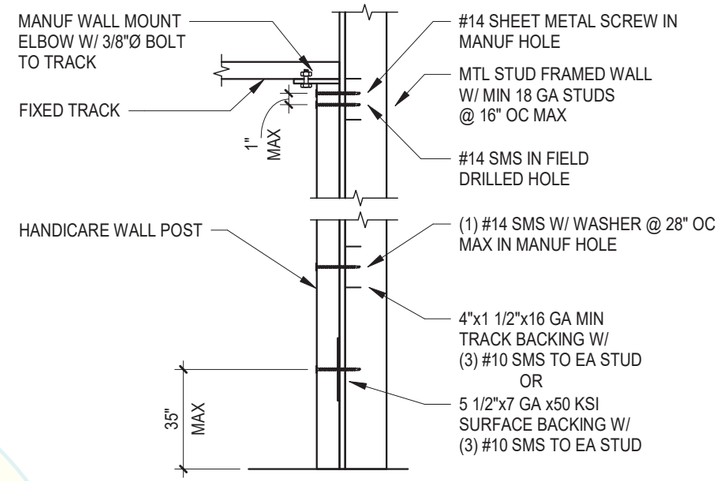


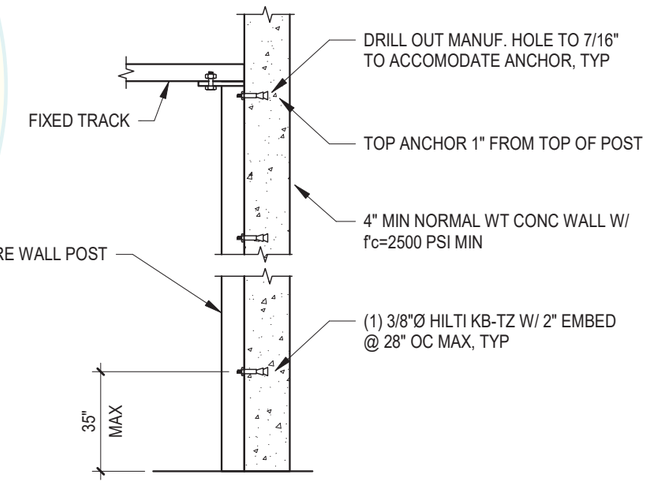
1 LAYOUT PLAN

N.T.S.



3 WALL POST AT METAL STUD WALL

N.T.S.



2 WALL POST AT CONC WALL

N.T.S.

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HANDICARE PATIENT LIFTS

Title: WALL POST INSTALLATION

Sheet Number: S8

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