



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-0144

HCAI Preapproval of Manufacturer's Certification (OPM)

Type: ☐ New ☒ Renewal/Update

Manufacturer Information

Manufacturer: ARJO HUNT LEIGH

Manufacturer's Technical Representative: alfred Carvajal

Mailing Address: 2349 W. Lake Street, Suite 250, Addison, IL 60101

Telephone: (214) 557-3705

Email: Alfred.carvajal@arjo.com

Product Information

Product Name: MAXISKY CEILING LIFTS

Product Type: Patient Lift

Product Model Number: Multiple

General Description: Overhead patient lift system

Applicant Information

Applicant Company Name: Arjo Hunt Leigh

Contact Person: Alfred Carvajal

Mailing Address: 2349 W. Lake Street, Suite 250, Addison, IL 60101

Telephone: (214) 557-3705

Email: Alfred.carvajal@arjo.com

Title: National Installations Manager

"A healthier California where all receive equitable, affordable, and quality health care"

STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY





DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION  
OFFICE OF STATEWIDE HOSPITAL PLANNING AND DEVELOPMENT

Registered Design Professional Preparing Engineering Recommendations

Company Name: DEGENKOLB ENGINEERS

Name: Robert Graff

California License Number: S5113

Mailing Address: 375 Beale Street, Ste 500, San Francisco, CA 94105

Telephone: (510) 684-7039

Email: rgraff@degenkolb.com

Certification Method

Testing in accordance with: ☐ ICC-ES AC156 ☐ FM 1950 ☐ ASHRAE 171 ☐ FEMA 461

☐ 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: 7/31/2025

Name: Timothy Piland

Title: Senior Structural Engineer

Condition of Approval (if applicable):

"A healthier California where all receive equitable, affordable, and quality health care"

STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY



GENERAL NOTES

I. GENERAL

- 1. THIS OSHPD PRE-APPROVAL OF MANUFACTURE'S CERTIFICATION (OPM) IS BASED ON THE CBC 2022. THE DEMAND (DESIGN FORCES) FOR USE WITH THIS OPM SHALL BE BASED ON THE CBC 2022.
- 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.

II. RESPONSIBILITIES OF THE STRUCTURAL ENGINEER OF RECORD

- 1. VERIFY MATERIALS AND WORKMANSHIP TO CONFORM WITH THE 2022 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 HEREIN, IN ADDITION TO ALL OTHER LOADS.

Structural Loading (lbs)*						
	Lift Type					
	440	660	1000	MS2	MS2+S	MS2+D
T <sub>hanger</sub>	1264	1492	2053	1485	2466	1661
T <sub>brace</sub>	921	1017	1223	1010	1657	1197
V <sub>brace</sub>	921	1017	1223	1010	1657	1197
Weight Lbs	14	28	48	27	114	57
Capacity Lbs	440	600	1000	600	1000	1000

\* Loading is worst case of crane and Omega Seismic Forces

SEE SECTION 1/S3 FOR LOADING

- 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, UNISTRUT, POWER STRUT, AND B-LINE. SEE SHEET S9.
- 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.

IV. MECHANICAL & ADHESIVE ANCHORS

- 1. WEDGE ANCHORS INTO CONCRETE: USE ZINC PLATED CARBON STEEL HILTI KB-TZ2 (ICC ESR-4266 ISSUED DEC 2023). 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. TESTING & SPECIAL INSPECTION OF ANCHORS SHALL BE PERFORMED BY AN APPROVED INDEPENDENT AGENCY EMPLOYED BY THE FACILITY OWNER PER CBC §1704A, §1910A.5, & CAC 7-149. ALL REPORTS SHALL BE SENT TO THE INSPECTOR OF RECORD, OWNER AND THE ARCHITECT OR ENGINEER IN RESPONSIBLE CHARGE.
- 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	30
1/2	50
5/8	40

- 7. TEST 50% ADHESIVE ANCHORS PER THE FOLLOWING METHOD:
  - A. HYDRAULIC RAM METHOD: TEST ANCHORS TO THE TENSION LOAD INDICATED IN THE TABLE BELOW:

ROD DIA OR BAR SIZE	CMIN	TEST LOAD (LBS)	
		ANCHOR LOCATED > CMIN & < 12" FROM EDGE	ANCHOR LOCATED ≥ 12" FROM EDGE
1/2", #4	4"	2,000	3,400

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. #1.
- 2. ROUGH HARDWARE:
  - A. NAILS: COMMON WIRE NAILS, ASTM F1667, STANDARD LENGTHS 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. LAG SCREWS: ASTM A307, ANSI/ASME STANDARD B18.2.1. USE ANSI B18.22.1 WASHERS UNDER HEAD WHEN IN CONTACT WITH WOOD.
  - D. SCREWS: 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.
  - E. 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.
  - B. DRILL PRE-BORED LEAD HOLES FOR LAG SCREWS AS FOLLOWS.
    - 1. DRILL LEAD HOLE FOR THE SHANK TO A DEPTH EQUAL TO THE LENGTH OF THE UNTHREADED PORTION IN THE MAIN MEMBER. USE A DRILL BIT OF THE SAME DIAMETER AS THE LAG SCREW.
    - 2. EXTEND THE LEAD HOLE FOR THE THREADED PORTION OF THE LAG SCREW WITH A DRILL BIT WHOSE DIAMETER IS 60 PERCENT OF THE NOMINAL LAG SCREW DIAMETER.
    - 3. INSERT LAG SCREW INTO LEAD HOLE BY TURNING. DO NOT DRIVE WITH A HAMMER.
    - 4. LUBRICATE WITH SOAP OR BEESWAX TO FACILITATE INSTALLATION.

VI. METAL FRAMING

- 1. SCREWS INTO METAL STUDS: USE SHEET METAL SCREWS (SMS) PER ICC ESR-1976 ISSUED JULY 2024. INSTALL SCREWS IN ACCORDANCE WITH ICC REPORT.

VII. 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, A307 OR A193 GR B7
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 PERMANENTLY EXPOSED TO WEATHER.

VIII. 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 & ADHESIVE 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 & ADHESIVE ANCHORS SECTION OF THESE GENERAL NOTES.

IX. DESIGN CRITERIA

- 1. APPLICABLE CODE: 2022 CALIFORNIA BUILDING CODE.
- 2. SEISMIC DESIGN:
  - SEISMIC FORCE  $F = 3.00 W_p$   $E_v = 0.50 W_p$
  - WHERE:
    - $S_d = 250\% G$   $WORST CASE ACCEL.$   $R_p = 1.5$  LOW DEFORMATION
    - $I_p = 1.5$   $FOR NON-ESSENTIAL EQUIP.$   $a_p = 1.0$  RIGID COMPONENT
    - $Z/h = 1.0$   $FOR ANY FLOOR$   $\Omega = 1.5$
- 3. CRANE LOADING PER AISC
  - TRANSVERSE LOADING = 0.2 (DL+LL)
  - LONGITUDINAL LOADING = 0.1 (DL+LL)

X. HOW TO USE THIS PRE-APPROVAL

- 1. REVIEW AND UNDERSTAND ALL GENERAL NOTES AND FIGURES BEFORE PROCEEDING.
- 2. FOR THE SELECTED MAXISKY UNIT, DETERMINE THE TRACK LAYOUT AND DIMENSIONS.
- 3. BASED ON THE TRACK LAYOUT AND DIMENSIONS, DETERMINE THE APPROPRIATE TRACK, THE TRACK BRACING, AND TRACK HANGER REQUIREMENTS FROM THE TABLES ON SHEET S2.
- 4. DETERMINE THE MAXIMUM DEMANDS ON THE EXISTING STRUCTURE FROM THE NEW UNIT FROM THE TABLE ON SHEET S2, AND VERIFY THE ADEQUACY OF THE EXISTING STRUCTURE WITH THE ENGINEER OF RECORD FOR THE BUILDING.

SHEET LIST

S1	GENERAL NOTES	S7	BRACE CONNECTION DETAILS
S2	TRACK ELEVATION	S8	WALL POST
S3	TRACK SECTION	S9	STRUT PARTS SHEET
S4	HANGER CONNECTION DETAILS	S10	ARJO INC PARTS SHEET
S5	HANGER CONNECTION DETAILS	S11	ARJO INC PARTS SHEET
S6	BRACE CONNECTION DETAILS	S12	ARJO INC PARTS SHEET

ARJO INC  
MAXISKY CEILING LIFTS MODELS 440, 600, 1000, MS2 & MS2+  
PREAPPROVAL OF MANUFACTURER'S CERTIFICATION

Title:

GENERAL NOTES

Drawn	MSA	Job number:	C0535010.00
Design:	CMS	Rev:	
Check:	RMG	Scale:	N.T.S.
Date	7/16/2025		

Sheet Number

S1

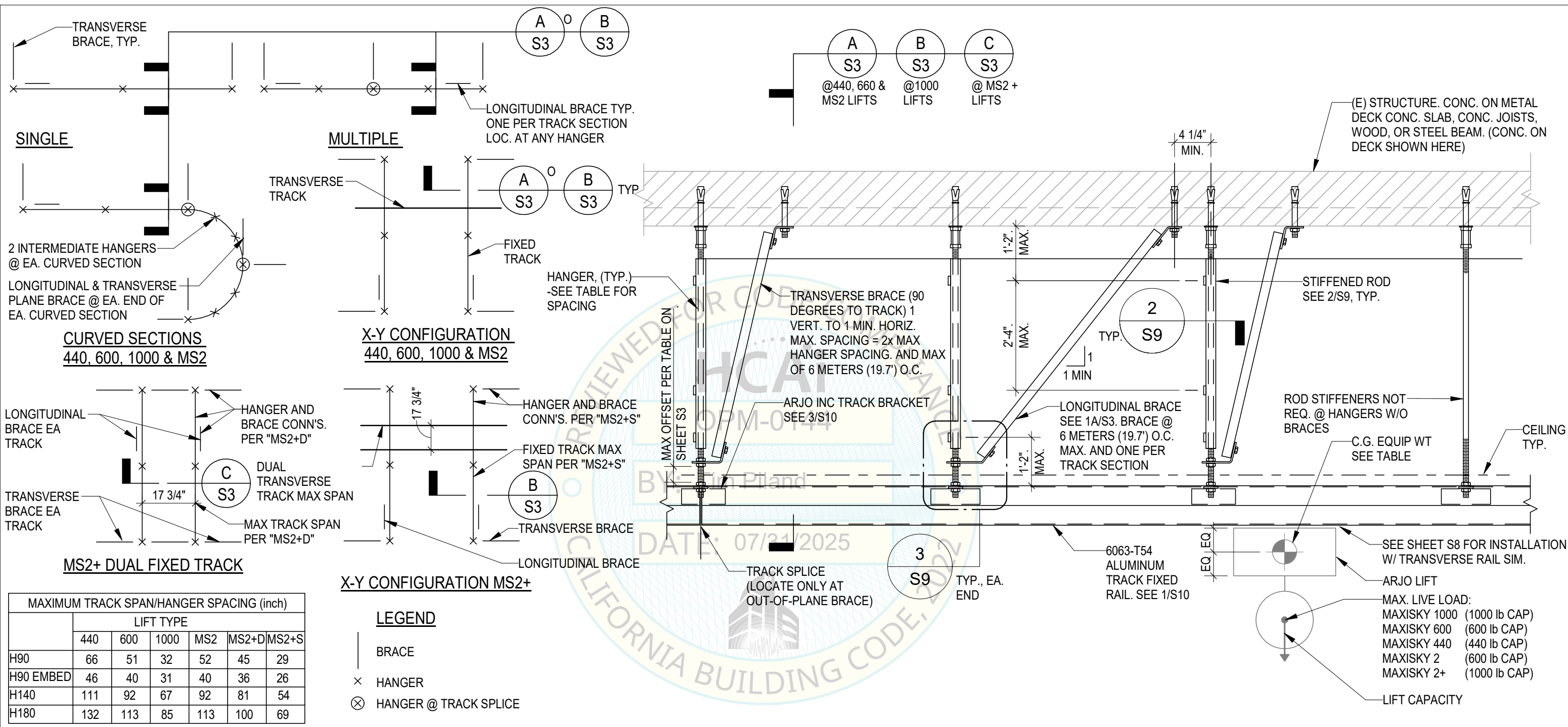
3 of 14 OF Sheets



DEGENKOLB ENGINEERS  
375 Beale Street, Suite 500  
San Francisco, CA 94104  
415.392.6952 Phone  
415.391.3157 Fax  
www.degenkolb.com







**B TRACK LAYOUT PLANS**

**A TRACK ELEVATION**

**1 TRACK ELEVATIONS & DETAILS**  
N.T.S.

**DEGENKOLB ENGINEERS**  
375 Beale Street, Suite 500  
San Francisco, CA 94104  
415.392.6952 Phone  
415.391.2157 Fax  
www.degenkolb.com



OPM-0144: Reviewed for Code Compliance by Timothy Piland

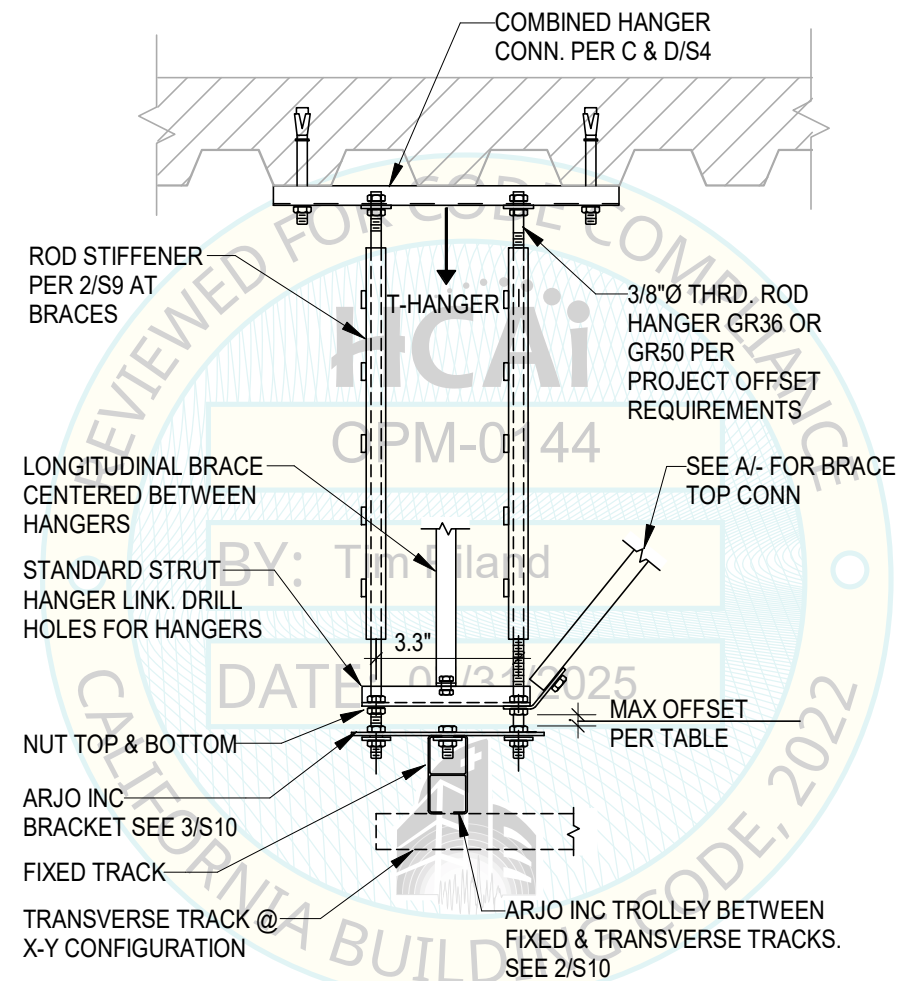
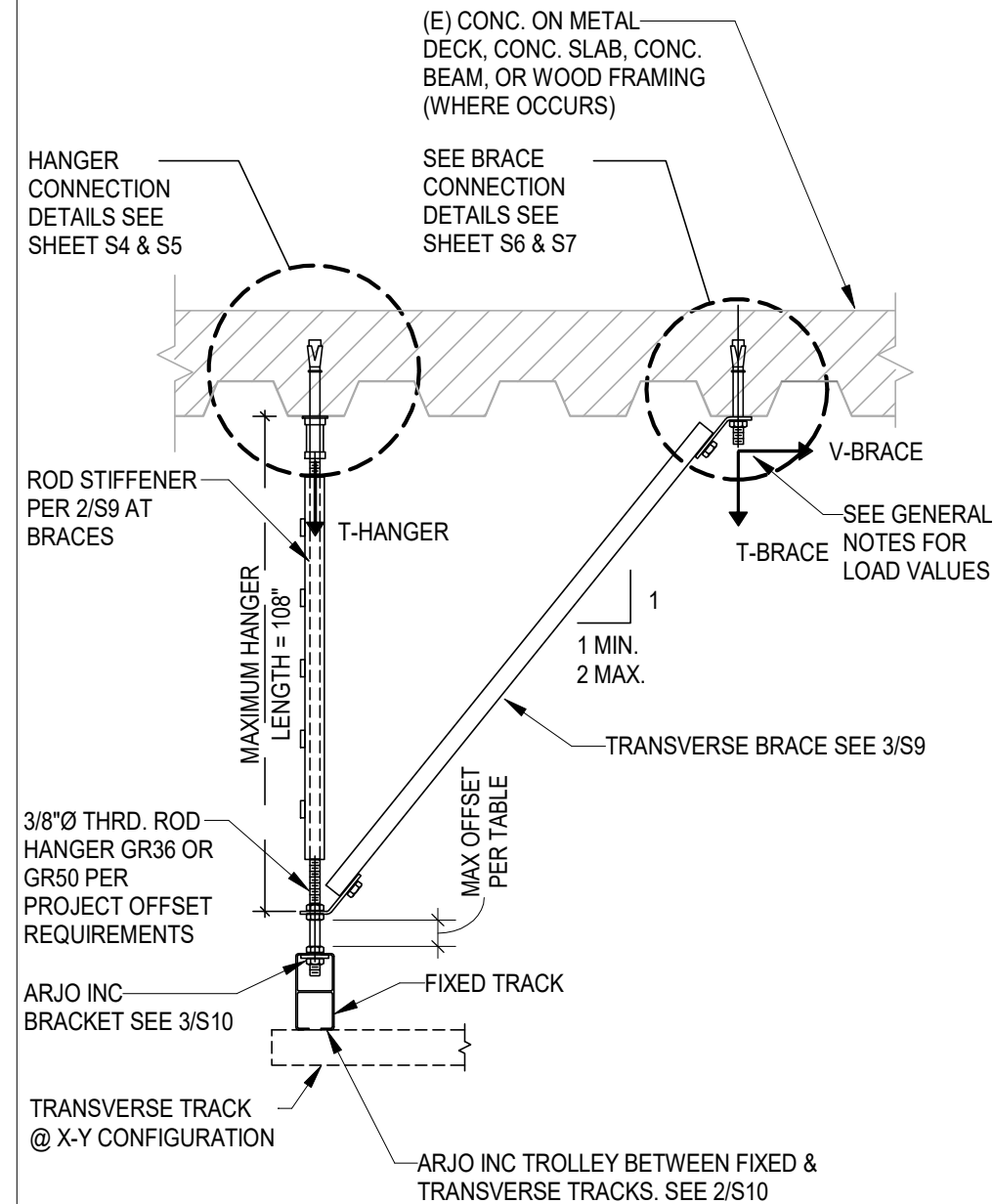
ARJO INC  
MAXISKY CEILING LIFTS MODELS 440, 600, 1000, MS2 & MS2+  
PREAPPROVAL OF MANUFACTURER'S CERTIFICATION

Title:  
**TRACK ELEVATION**

Drawn	MSA	Job number:	C0535010.00
Design:	CMS	Rev:	
Check:	RMG	Scale:	N.T.S.
Date	7/16/2025		

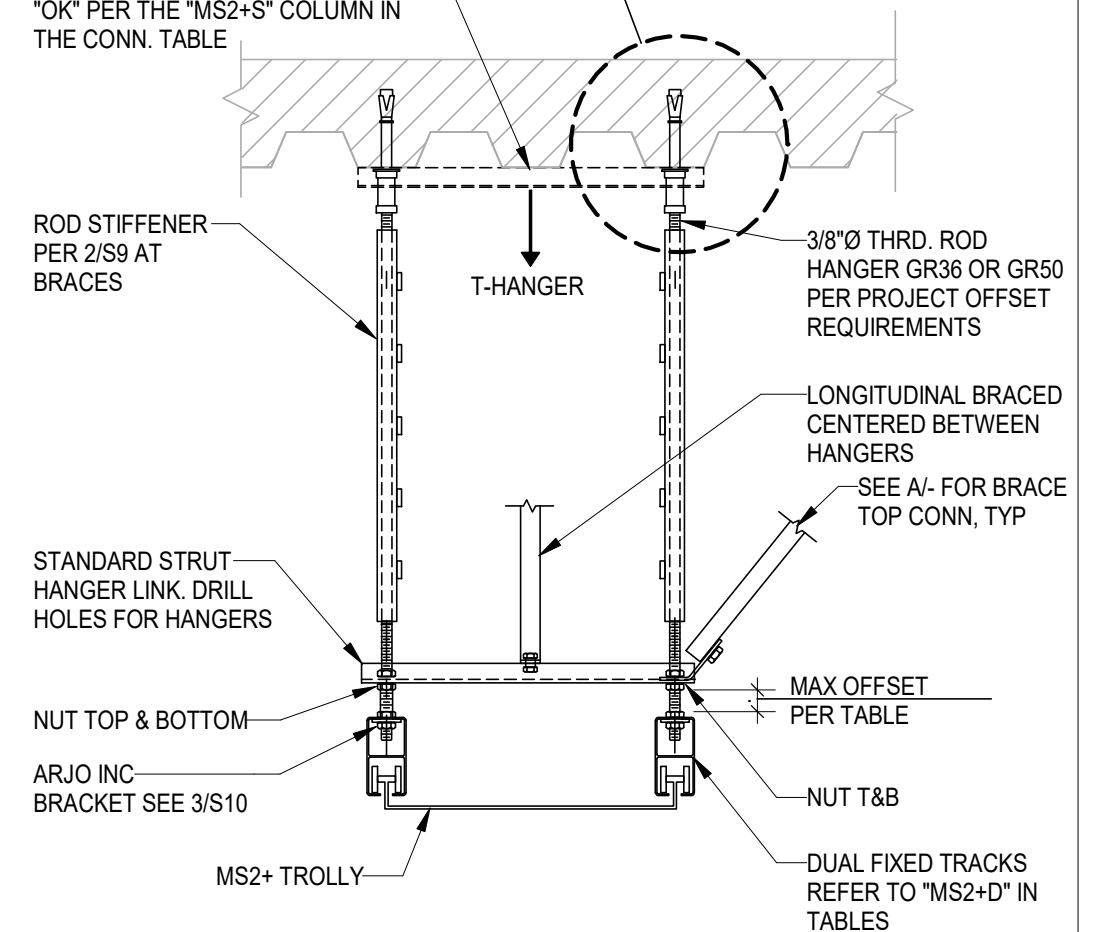
Sheet Number  
**S2**  
4 of 14 OF Sheets

LIFT	MAX HANGER OFFSET (IN)		
	HANGER ROD GRADE		
TYPE	A36	A307	A193 B7
440	1/2	5/8	1 5/8
600	3/8	1/2	1 3/8
1000	1/2	7/8	2 1/4
MS2	3/8	1/2	1 1/4
MS2 + Dual	1/2	1	2 1/2
MS2 + Single	1/2	5/8	1 3/4



PROVIDE CONN. @ EA. INDIVIDUAL HANGER PER DETAILS ON SHEETS S4 & S5. DETAILS MUST BE "OK" PER THE "MS2+D" COLUMN IN THE CONN. TABLE

WHERE COMBINED HANGER CONN PER C & D/S4 IS USED IT MUST BE "OK" PER THE "MS2+S" COLUMN IN THE CONN. TABLE



A SECTION @ 440 LIFT ONLY

B SECTION @ 600, 1000, MS2, & MS2+ LIFTS

C SECTION @ DUAL FIXED TRACKS MS2+ LIFTS

# 1 TRACK SECTIONS

N.T.S.



**DEGENKOLB ENGINEERS**  
375 Beale Street, Suite 500  
San Francisco, CA 94104  
415.392.6952 Phone  
415.391.2157 Fax  
www.degenkolb.com



OPM-0144: Reviewed for Code Compliance by Timothy Piland

ARJO INC  
MAXISKY CEILING LIFTS MODELS 440, 600, 1000, MS2 & MS2+  
PREAPPROVAL OF MANUFACTURER'S CERTIFICATION

Title:

TRACK SECTION

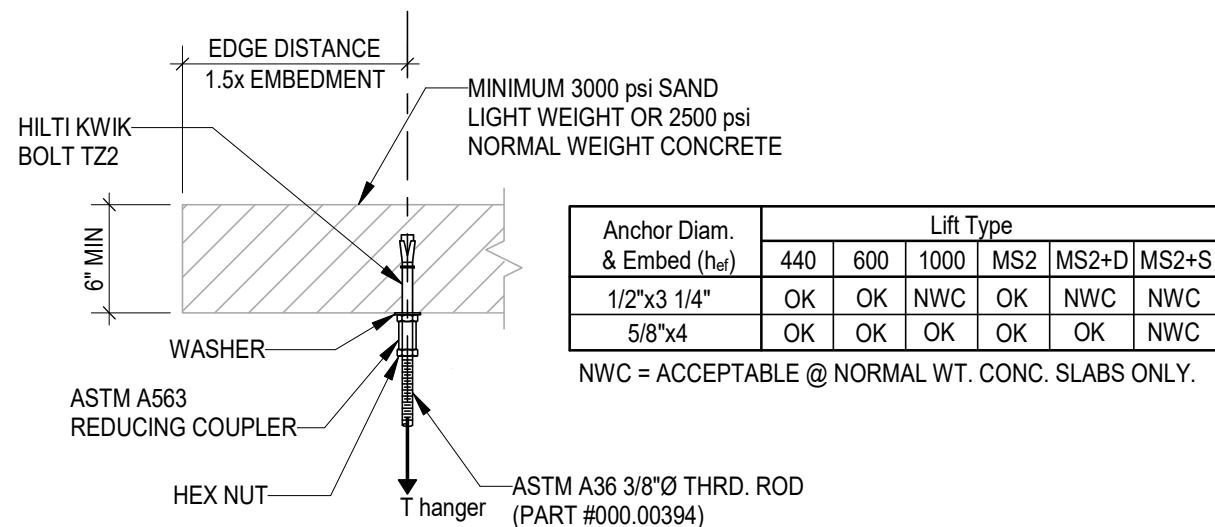
Drawn	MSA	Job number:	C0535010.00
Design:	CMS	Rev:	
Check:	RMG	Scale:	N.T.S.
Date	7/16/2025		

Sheet Number

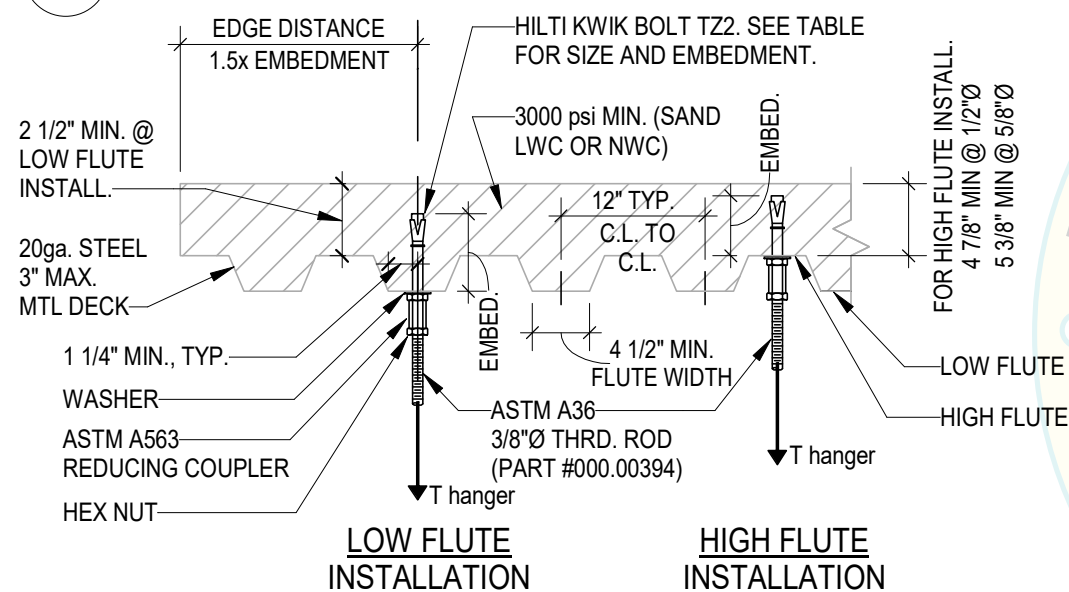
S3

5 of 14 OF Sheets





## A SOLID CONCRETE SLAB CONSTRUCTION

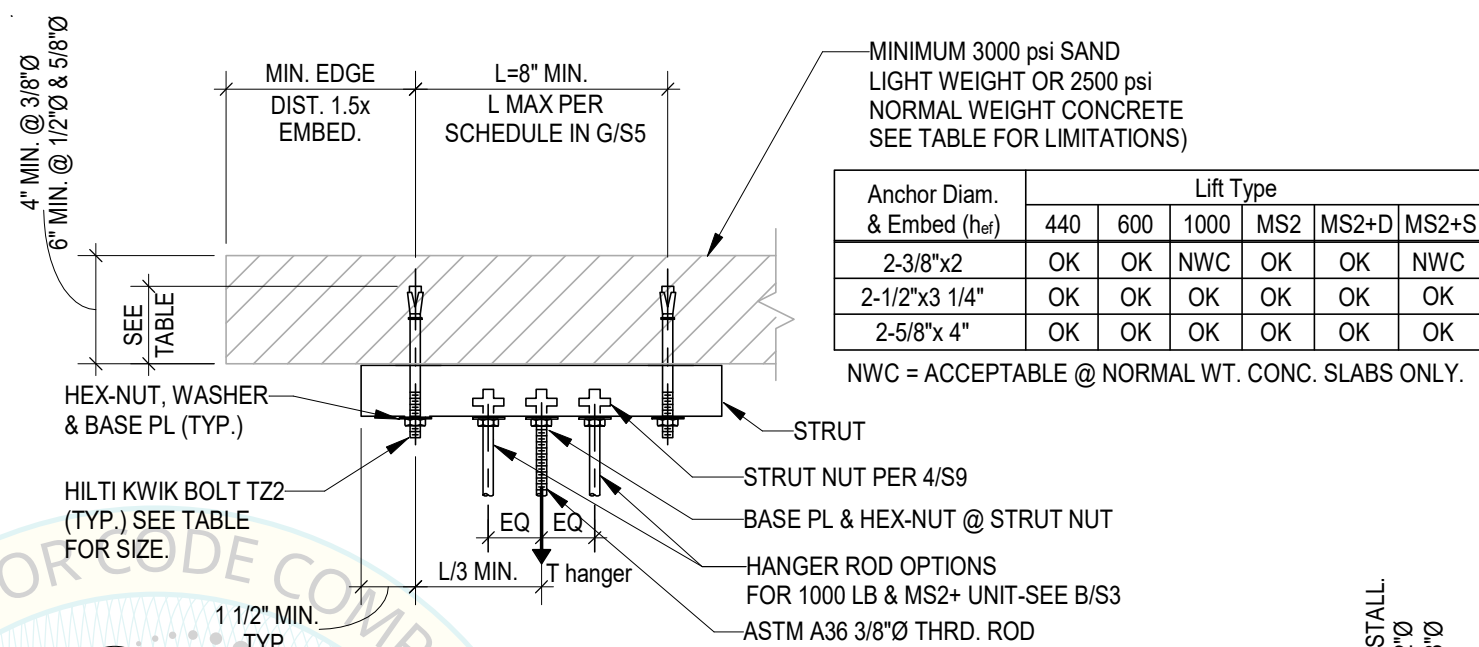


- NOTES:
- SEE DETAIL D/- FOR FLUTE DIMENSION REQUIREMENTS.
  - INSTALL IN HIGH OR LOW FLUTE.

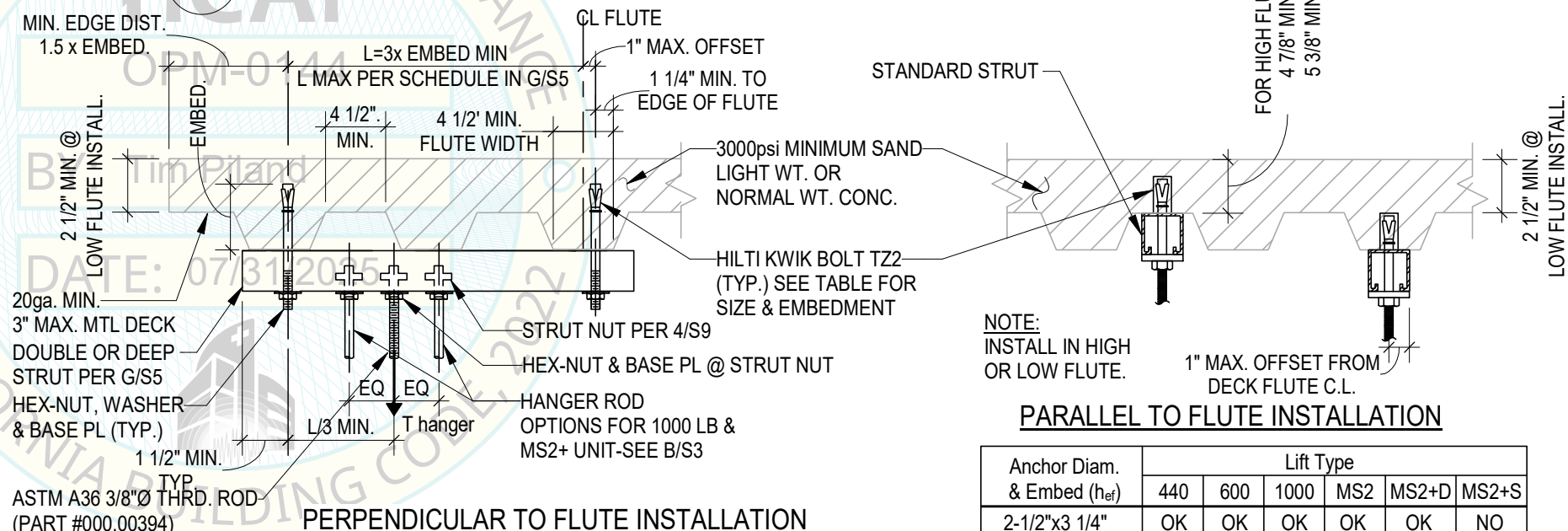
## B METAL DECK WITH CONC. FILL CONSTRUCTION

# 1 HANGER CONNECTION DETAILS

N.T.S.



## C SOLID CONCRETE SLAB CONSTRUCTION



- NOTE:
- THE STRUCTURAL ENGINEER OF RECORD IS RESPONSIBLE FOR VERIFYING THE ADEQUACY OF THE STRUCTURE FOR APPLIED LOADS INDICATED HEREIN, IN ADDITION TO ALL OTHER LOADS. SEE DETAIL 1/S2 FOR STRUCTURAL LOADING.
  - SEE SHEET S5 FOR BRACE CONNECTION TO STRUCTURE DETAILS.



**DEGENKOLB ENGINEERS**  
375 Beale Street, Suite 500  
San Francisco, CA 94104  
415.392.6952 Phone  
415.391.2157 Fax  
www.degenkolb.com



OPM-0144: Reviewed for Code Compliance by Timothy Piland

ARJO INC  
MAXISKY CEILING LIFTS MODELS 440, 600, 1000, MS2 & MS2+  
PREAPPROVAL OF MANUFACTURER'S CERTIFICATION

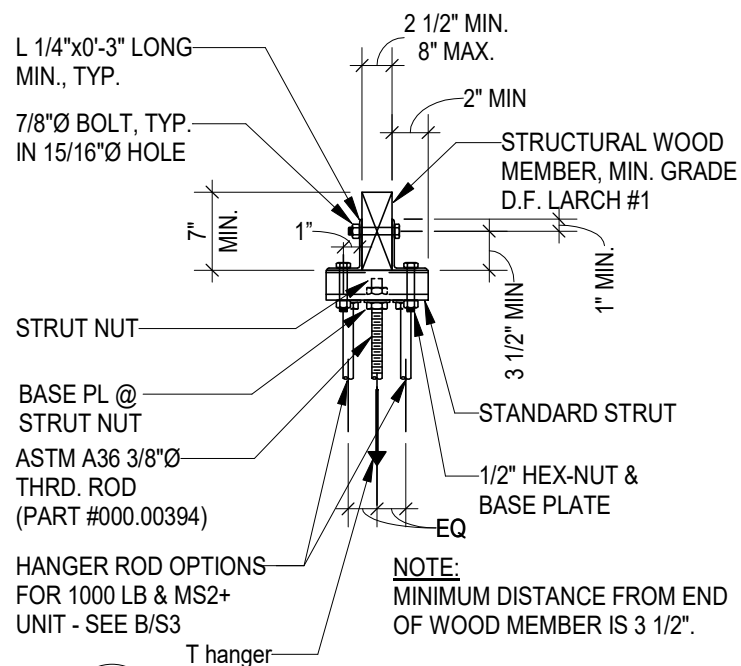
Title:  
HANGER CONNECTION DETAILS

Drawn: MSA Job number: C0535010.00  
Design: CMS Rev:  
Check: RMG Scale: N.T.S.  
Date: 7/16/2025

Sheet Number

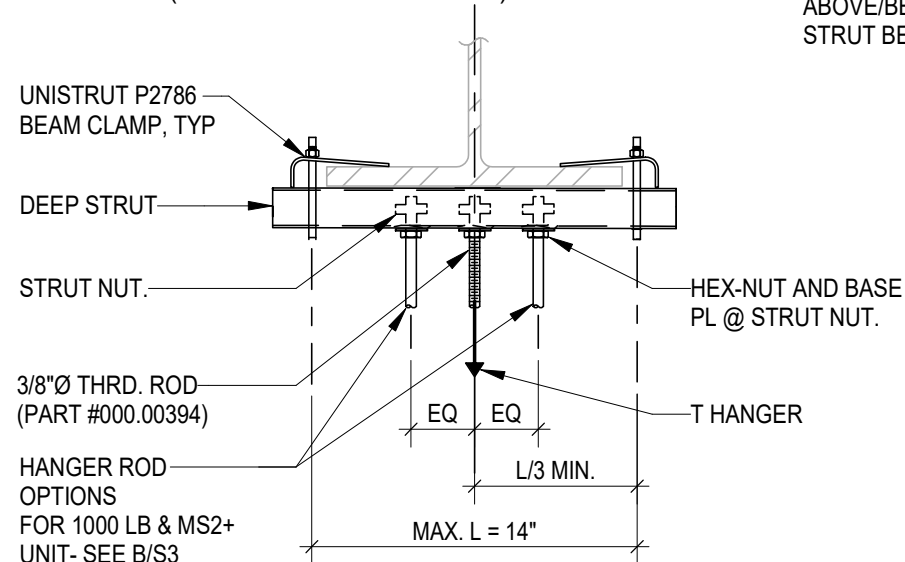
S4

6 of 14 OF Sheets



## E WOOD CONSTRUCTION

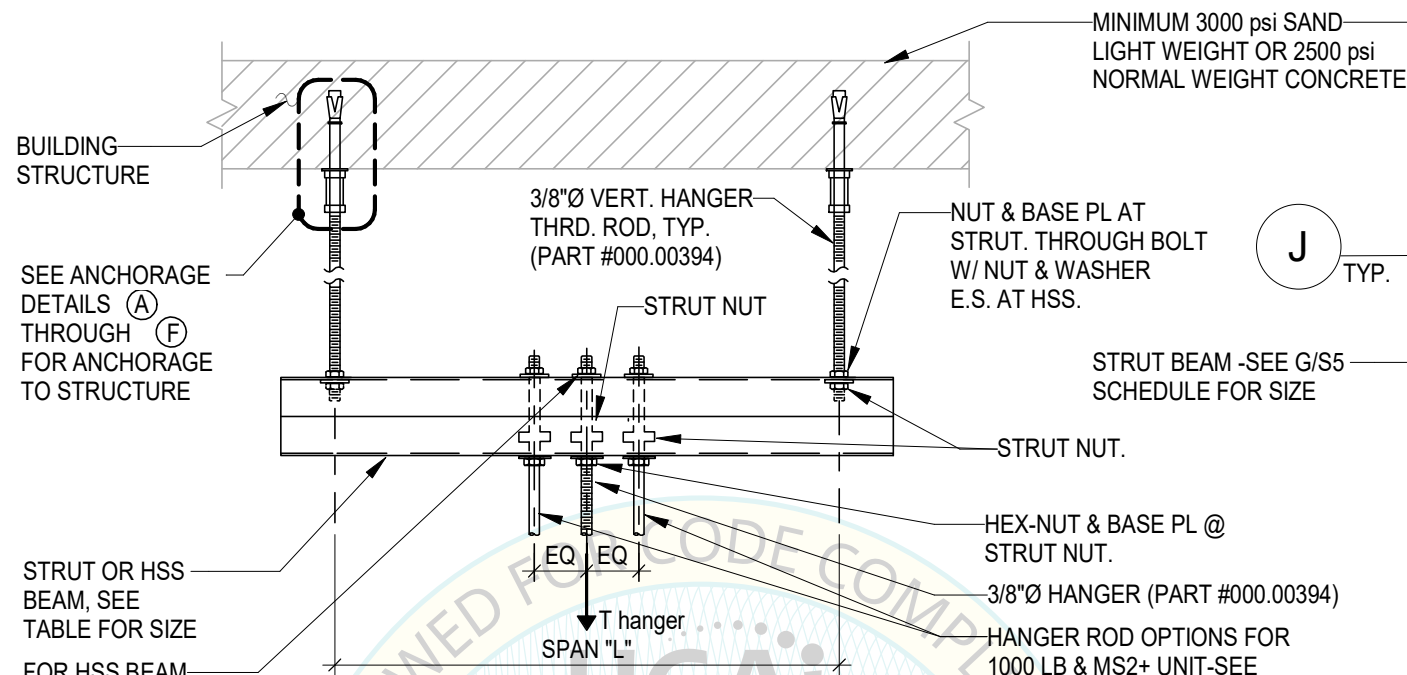
(NOT FOR USE WITH MS2+)



## F STEEL CONSTRUCTION

# 1 HANGER CONNECTION DETAILS

N.T.S.



NOTE: TRAPEZE TO SUPPORT ONE HANGER OR BRACE (HANGER PAIRS @ 1000 LIFT OK)

	Trapeze Span (in.)					
	Lift Type					
	440	600	1000	MS2	MS2+D	MS2+S
STANDARD STRUT*	21	17	11	17	16	10
DOUBLE STRUT*	59	48	33	48	45	30
DEEP STRUT *	59	51	35	51	47	32
HSS 3"x3"x3/16"	96	96	96	96	96	96

\* SEE 1/S9 FOR STRUT SECTIONS

## G HANGER AT OBSTRUCTION

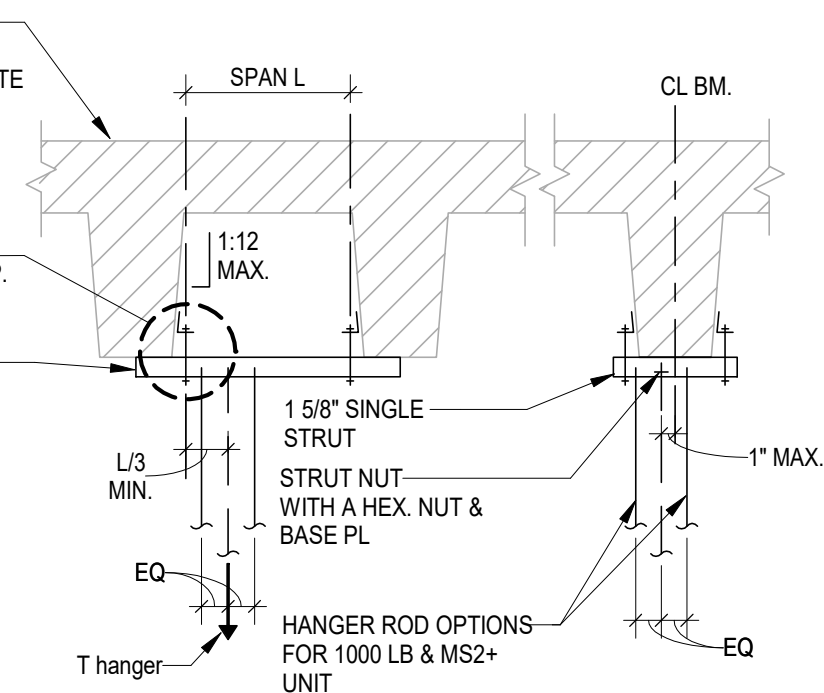
Anchor Diam. & Embed	Lift Type					
	440	600	1000	MS2	MS2+D	MS2+S
3/8"x2"	OK	OK	NWC	OK	OK	NWC
1/2"x3 1/4"	OK	OK	OK	OK	OK	OK

NWC = ACCEPTABLE @ NORMAL WT. CONC. SLABS ONLY.

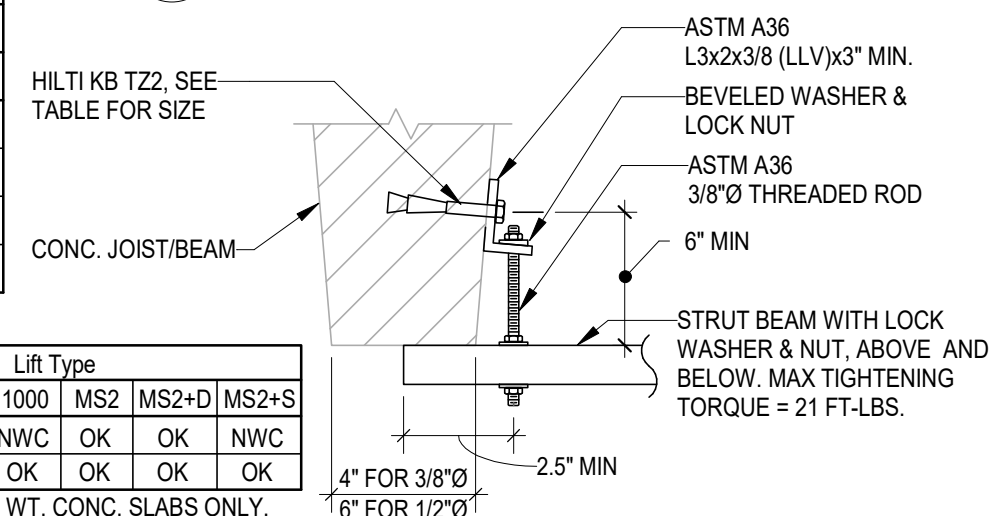
## J BRACKET-TO-BEAM DETAILS

NOTE:

1. THE STRUCTURAL ENGINEER OF RECORD IS RESPONSIBLE FOR VERIFYING THE ADEQUACY OF THE STRUCTURE FOR APPLIED LOADS INDICATED HEREIN, IN ADDITION TO ALL OTHER LOADS. SEE DETAIL 1/S2 FOR STRUCTURAL LOADING.
2. SEE SHEET S6 FOR BRACE CONNECTION TO STRUCTURE DETAILS.



## H CONC. JOIST/BEAM CONSTRUCTION



**DEGENKOLB ENGINEERS**  
375 Beale Street, Suite 500  
San Francisco, CA 94104  
415.392.6952 Phone  
415.391.2157 Fax  
www.degenkolb.com



OPM-0144: Reviewed for Code Compliance by Timothy Piland

ARJO INC  
MAXISKY CEILING LIFTS MODELS 440, 600, 1000, MS2 & MS2+  
PREAPPROVAL OF MANUFACTURER'S CERTIFICATION

Title:

HANGER CONNECTION DETAILS

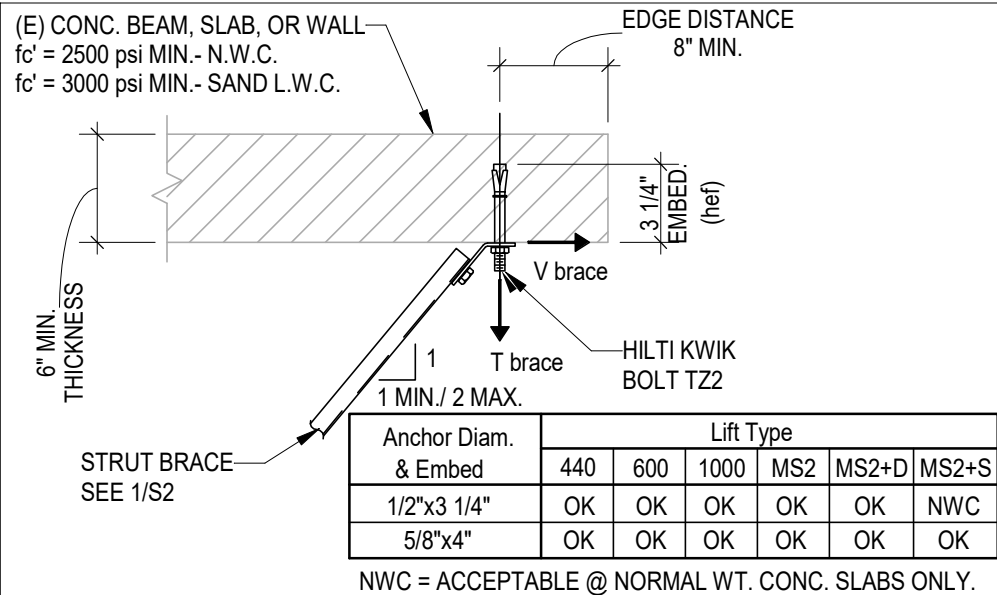
Drawn: MSA Job number: C0535010.00  
Design: CMS Rev:  
Check: RMG Scale: N.T.S.  
Date: 7/16/2025

Sheet Number

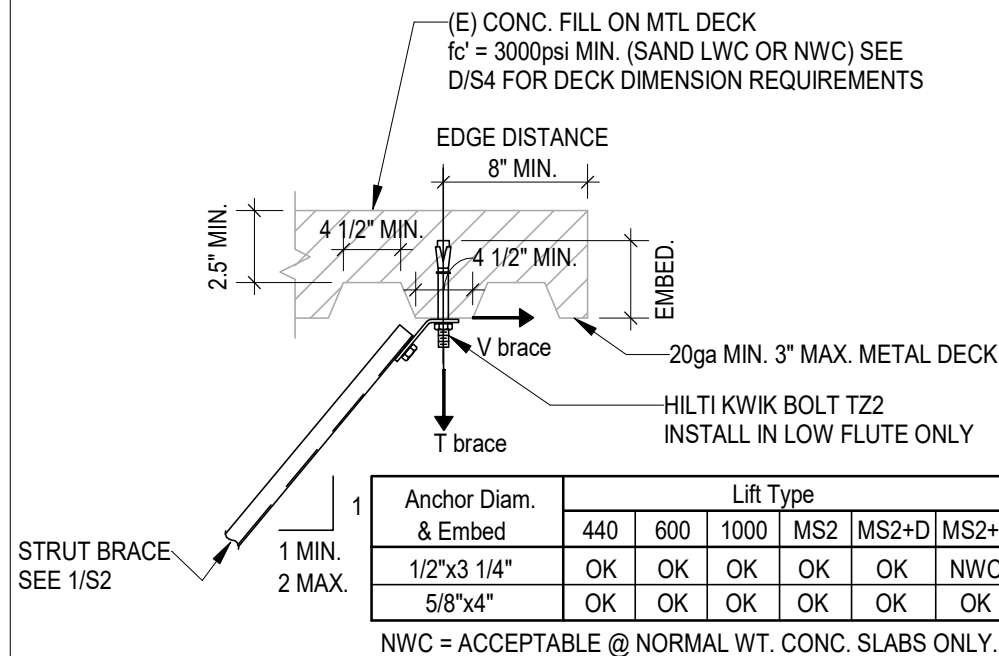
**S5**

7 of 14 OF Sheets





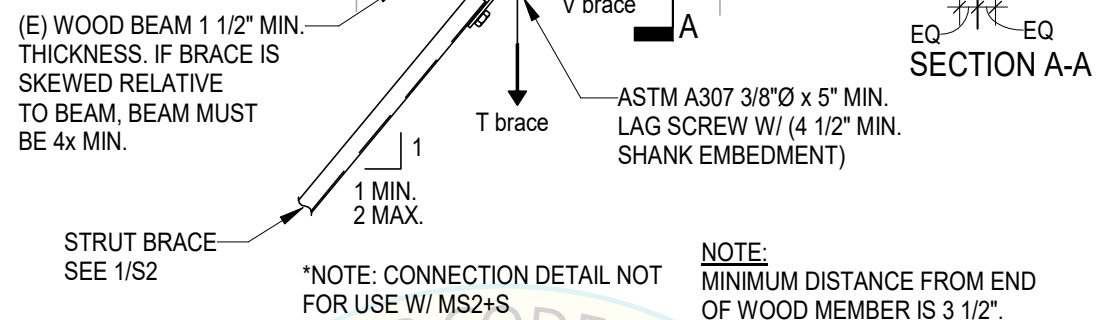
## K SOLID CONCRETE SLAB OR WALL CONSTRUCTION



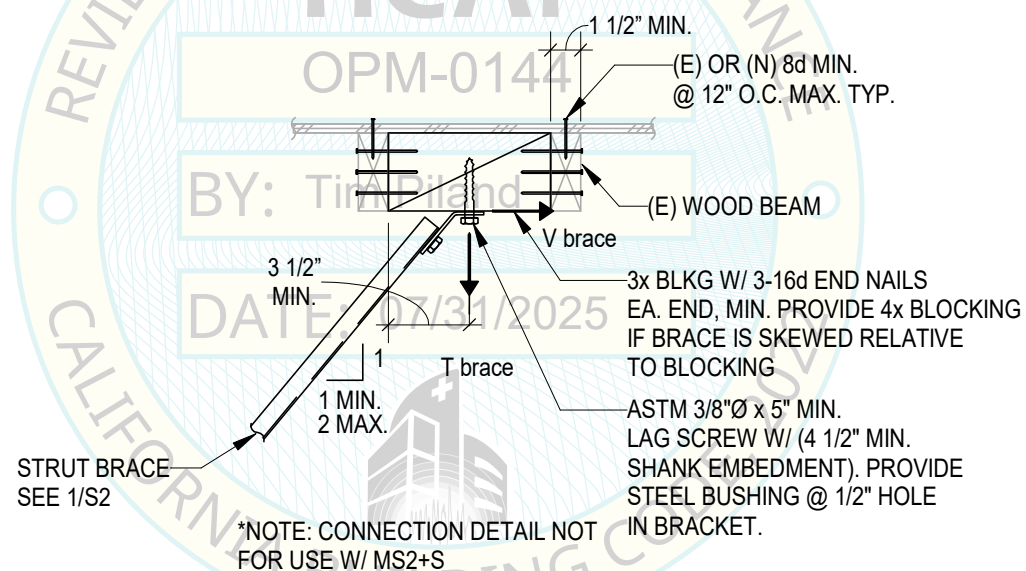
## L METAL DECK WITH CONCRETE FILL CONSTRUCTION

# 1 BRACE CONNECTION DETAILS

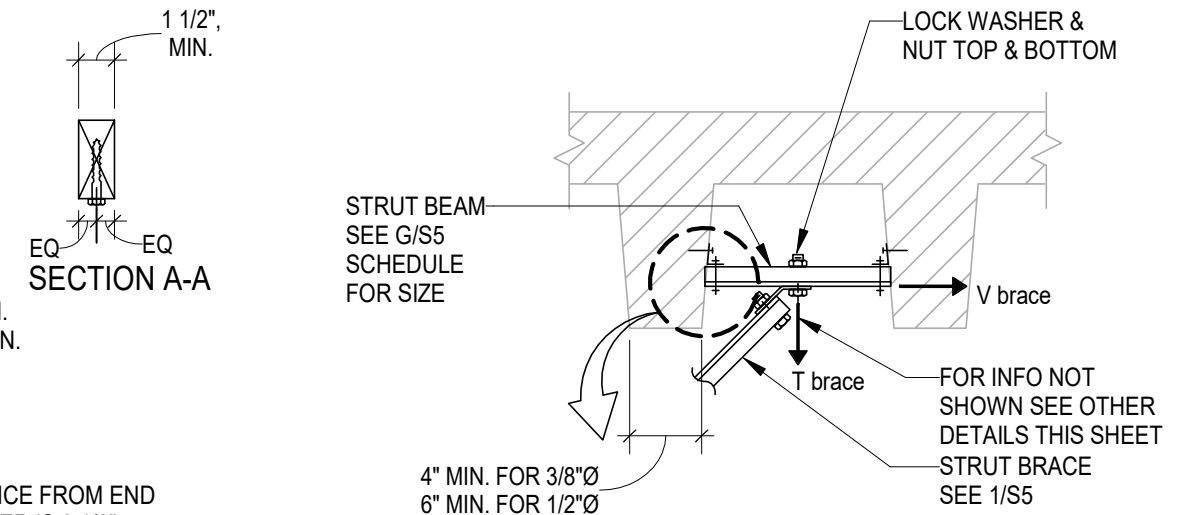
N.T.S.



## M BRACE PARALLEL TO WOOD BEAM



## N BRACE PERPENDICULAR TO WOOD BEAM



## P CONC. JOIST/BEAM CONSTRUCTION

### SHEET NOTES:

- THESE DETAILS ARE NOT USED WITH DIAGONAL BRACING MEMBERS, BUT MAY BE USED FOR VERTICAL HANGERS BRACED AT LOWER END (PER 1A/S2, SECTION X-X) OR FOR UNBRACED HANGERS.



**DEGENKOLB ENGINEERS**  
 375 Beale Street, Suite 500  
 San Francisco, CA 94104  
 415.392.6952 Phone  
 415.392.6952 Fax  
 www.degenkolb.com



OPM-0144: Reviewed for Code Compliance by Timothy Piland

ARJO INC  
 MAXISKY CEILING LIFTS MODELS 440, 600, 1000, MS2 & MS2+  
 PREAPPROVAL OF MANUFACTURER'S CERTIFICATION

Title:

BRACE CONNECTION DETAILS

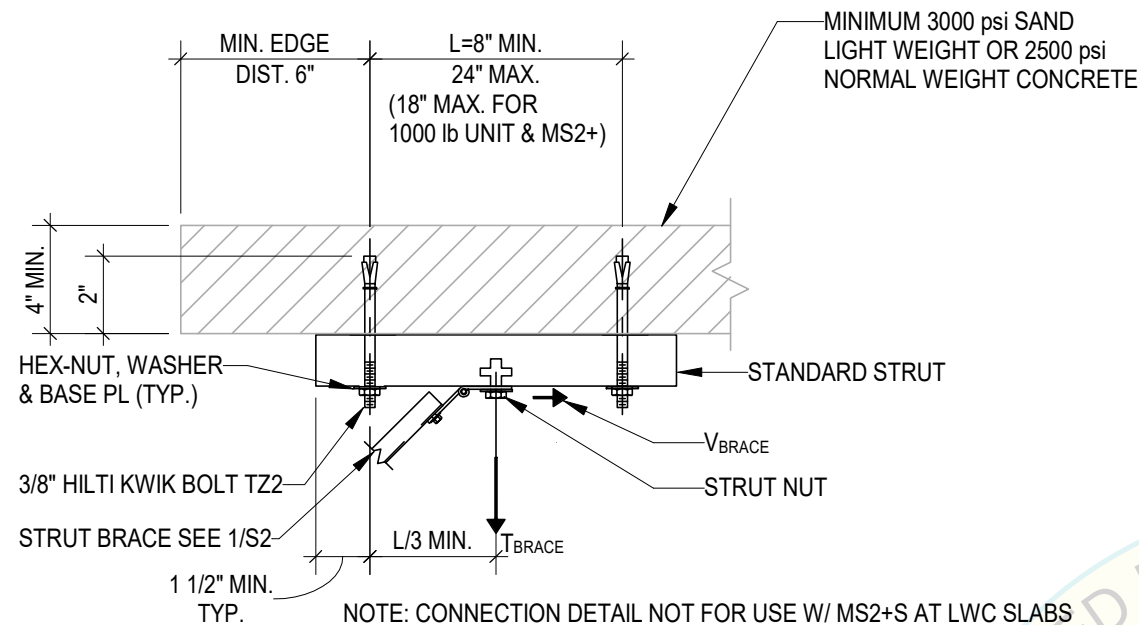
Drawn	MSA	Job number:	C0535010.00
Design:	CMS	Rev:	
Check:	RMG	Scale:	N.T.S.
Date	12/1/2023		

Sheet Number

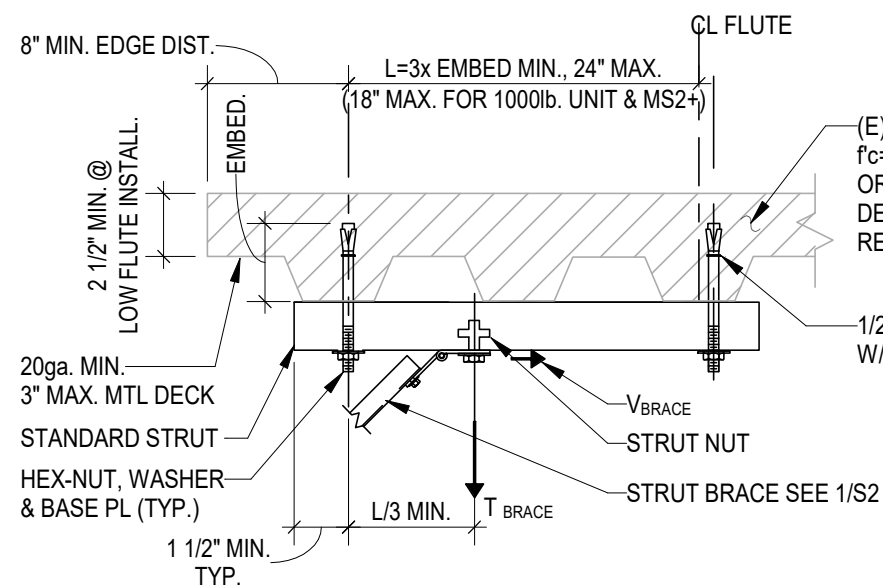
**S6**

8 of 14 OF Sheets





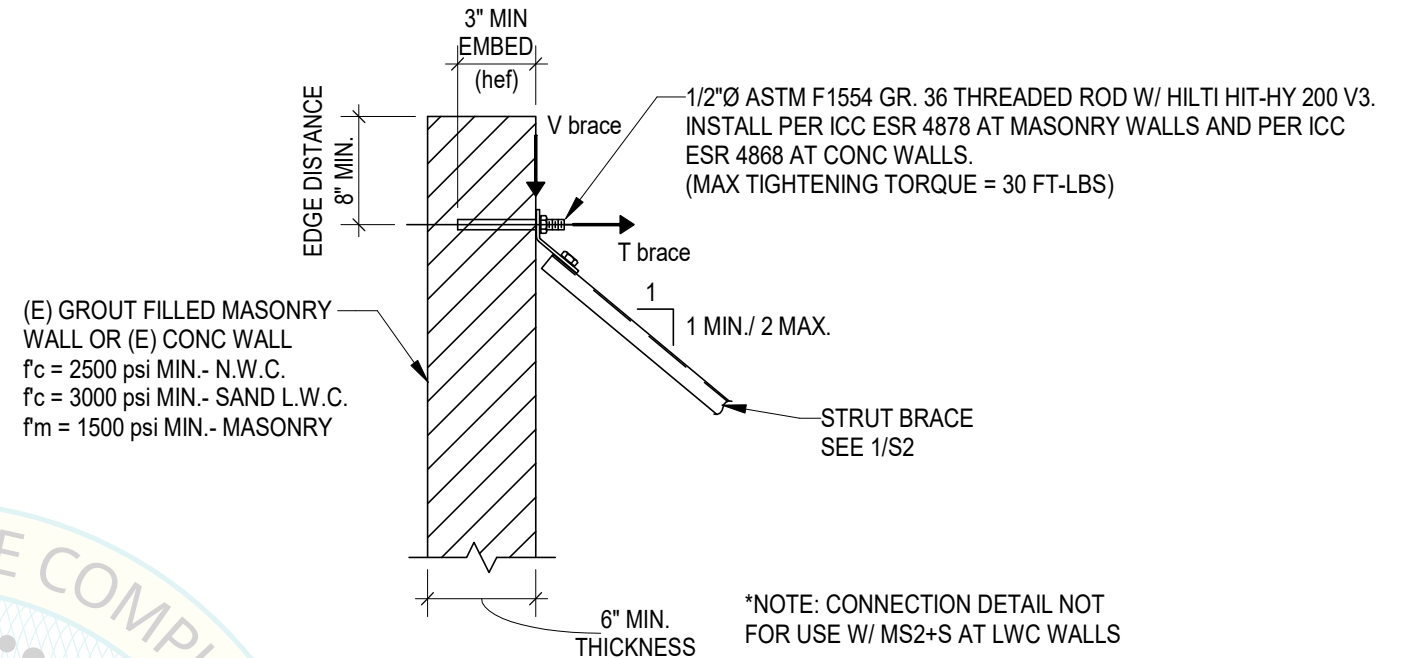
## R SOLID CONCRETE SLAB OR WALL CONSTRUCTION



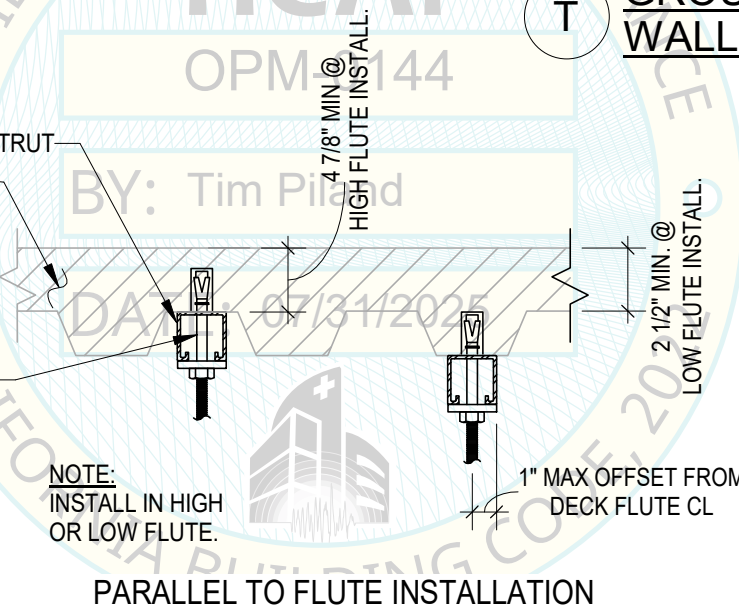
## PERPENDICULAR TO FLUTE INSTALLATION

NOTE: CONNECTION DETAIL FOR USE WITH ALL LIFTS

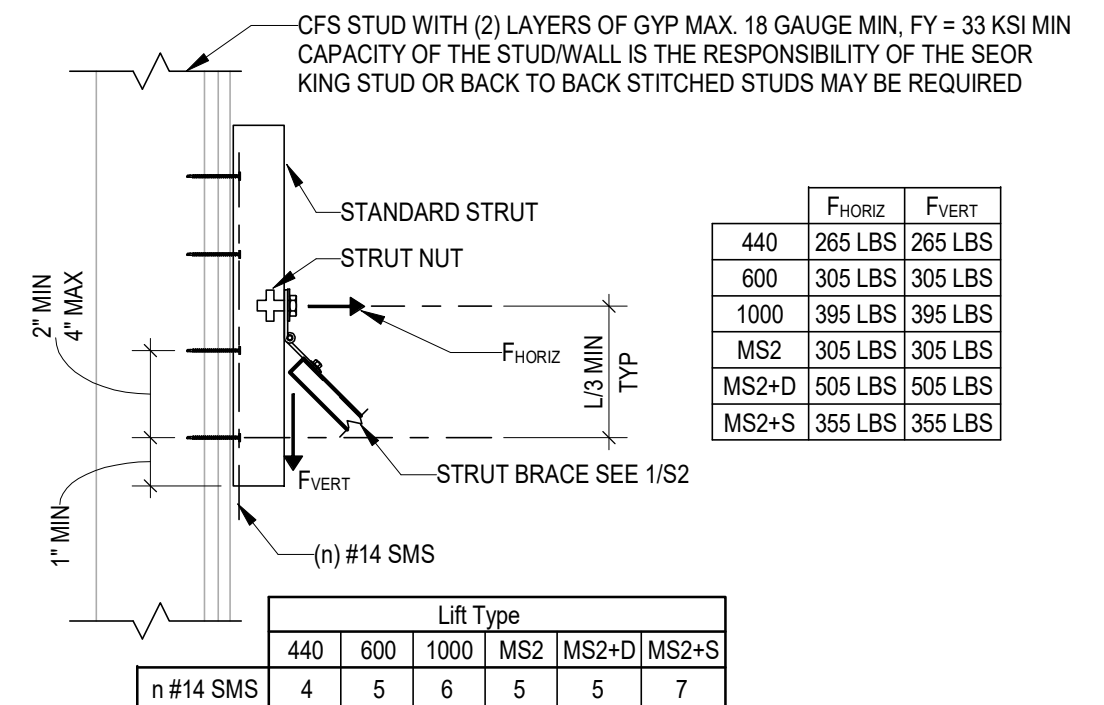
## S MTL DECK W/ CONC. FILL CONSTRUCTION



## T GROUT FILLED MASONRY OR SOLID CONCRETE WALL CONSTRUCTION



## PARALLEL TO FLUTE INSTALLATION



	F <sub>HORIZ</sub>	F <sub>VERT</sub>
440	265 LBS	265 LBS
600	305 LBS	305 LBS
1000	395 LBS	395 LBS
MS2	305 LBS	305 LBS
MS2+D	505 LBS	505 LBS
MS2+S	355 LBS	355 LBS

Lift Type						
	440	600	1000	MS2	MS2+D	MS2+S
n #14 SMS	4	5	6	5	5	7

## U BRACE TO PARTITION WALL CONNECTION



**DEGENKOLB ENGINEERS**  
375 Beale Street, Suite 500  
San Francisco, CA 94104  
415.392.6952 Phone  
415.392.6952 Fax  
www.degenkolb.com



OPM-0144: Reviewed for Code Compliance by Timothy Piland

ARJO INC  
MAXISKY CEILING LIFTS MODELS 440, 600, 1000, MS2 & MS2+  
PREAPPROVAL OF MANUFACTURER'S CERTIFICATION

Title:

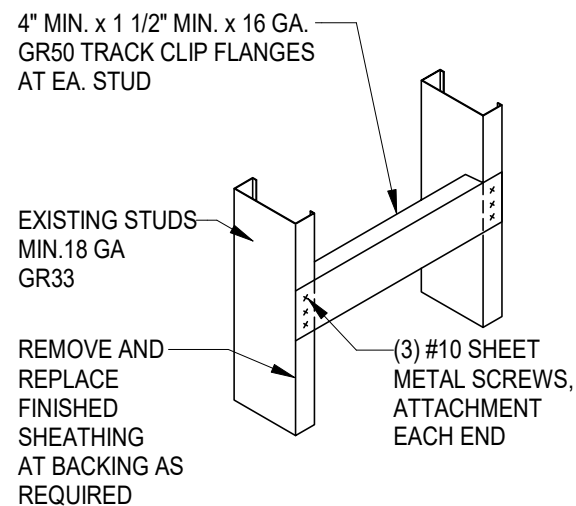
BRACE CONNECTION DETAILS

Drawn	MSA	Job number:	C0535010.00
Design:	CMS	Rev:	
Check:	RMG	Scale:	N.T.S.
Date	7/16/2025		

Sheet Number

**S7**

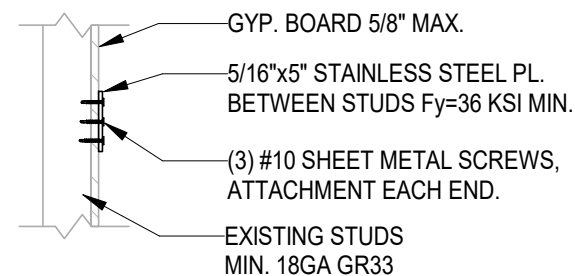
9 of 14 OF Sheets



**NOTE:**  
NO BACKING REQUIRED WHERE WALL POST CAN BE ATTACHED DIRECTLY TO A WALL STUD AND STUD IS MIN. 16 GA. GR50

## D BACKING PLATE

N.T.S.



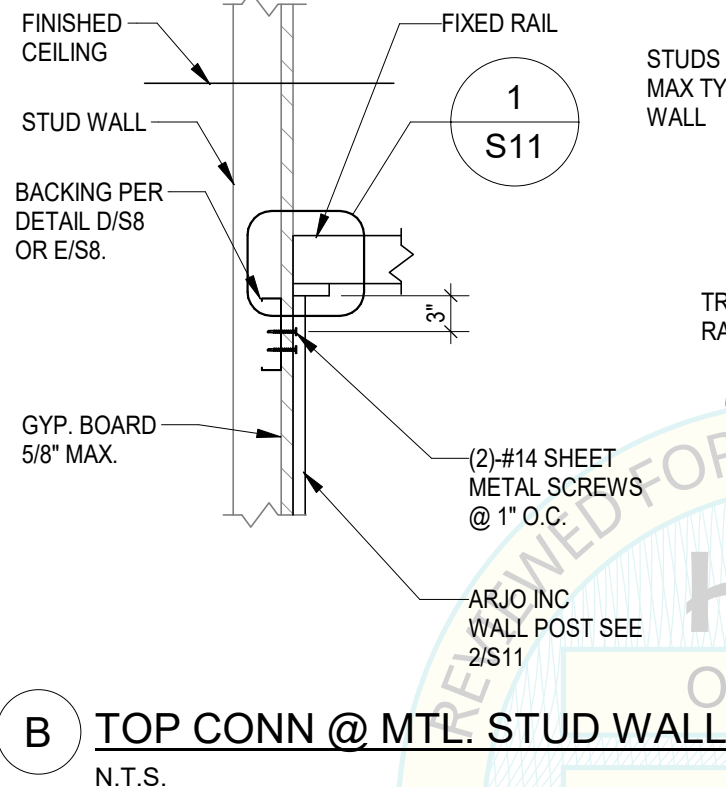
**NOTE:**  
NO BACKING REQUIRED WHERE WALL POST CAN BE ATTACHED DIRECTLY TO A WALL STUD AND STUD IS MIN. 16 GA. GR50

## E SURFACE BACKING PLATE

N.T.S.

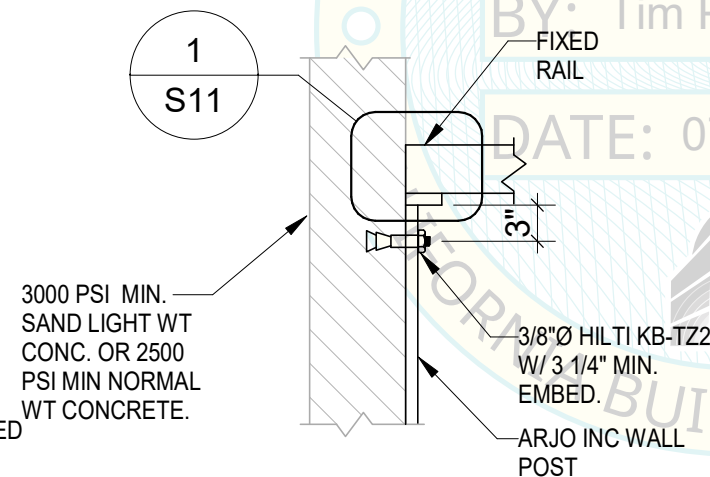
# 1 WALL POST INSTALLATION

N.T.S.



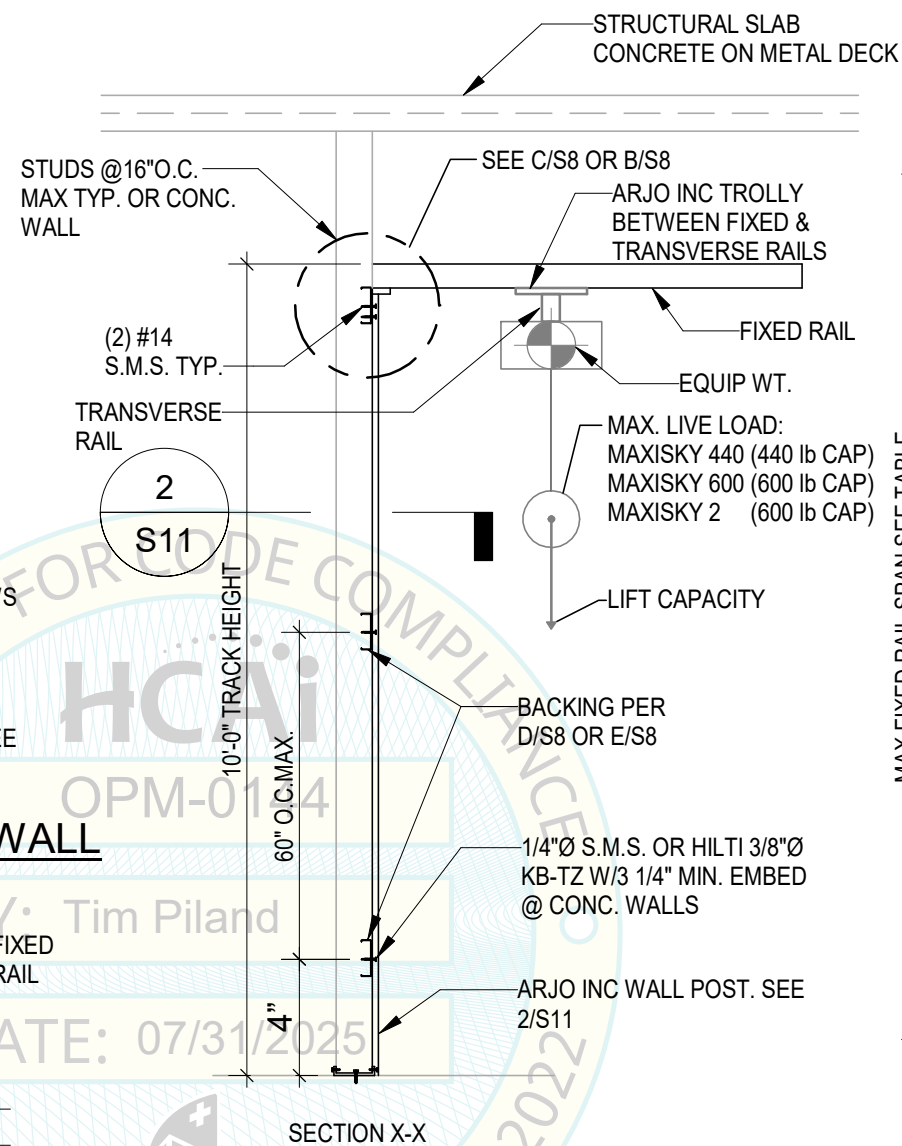
## B TOP CONN @ MTL. STUD WALL

N.T.S.



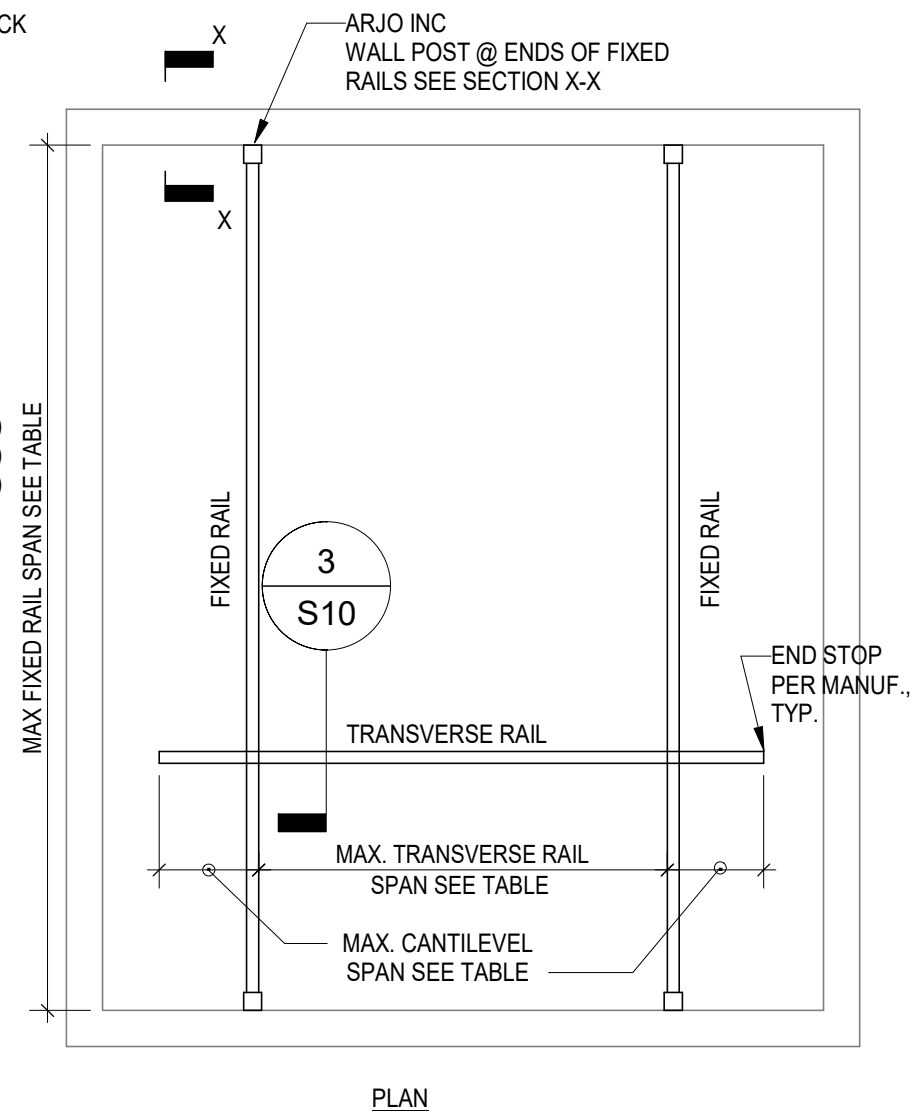
## C TOP CONN @ CONC. WALL

N.T.S.



## A WALL POST INSTALLATION (NOT APPLICABLE FOR 1000 & MS2+ LIFTS)

N.T.S.



PLAN

MAXIMUM RAIL SPANS (inch)				
		LIFT TYPE		MAXIMUM CANTILEVER
		440	600 & MS2	
TRACK	H90	66	51	12"
	H90 EMBED	46	40	12"
	H140	111	92	12"
	H180	132	113	12"

TRACK TO BE PROVIDED W/O SPLICES.



**DEGENKOLB ENGINEERS**  
375 Beale Street, Suite 500  
San Francisco, CA 94104  
415.392.6952 Phone  
415.392.6952 Fax  
www.degenkolb.com



OPM-0144: Reviewed for Code Compliance by Timothy Piland

ARJO INC  
MAXISKY CEILING LIFTS MODELS 440, 600, 1000, MS2 & MS2+  
PREAPPROVAL OF MANUFACTURER'S CERTIFICATION

Title:

WALL POST

Drawn: MSA Job number: C0535010.00  
Design: CMS Rev:  
Check: RMG Scale: As indicated  
Date: 7/16/2025

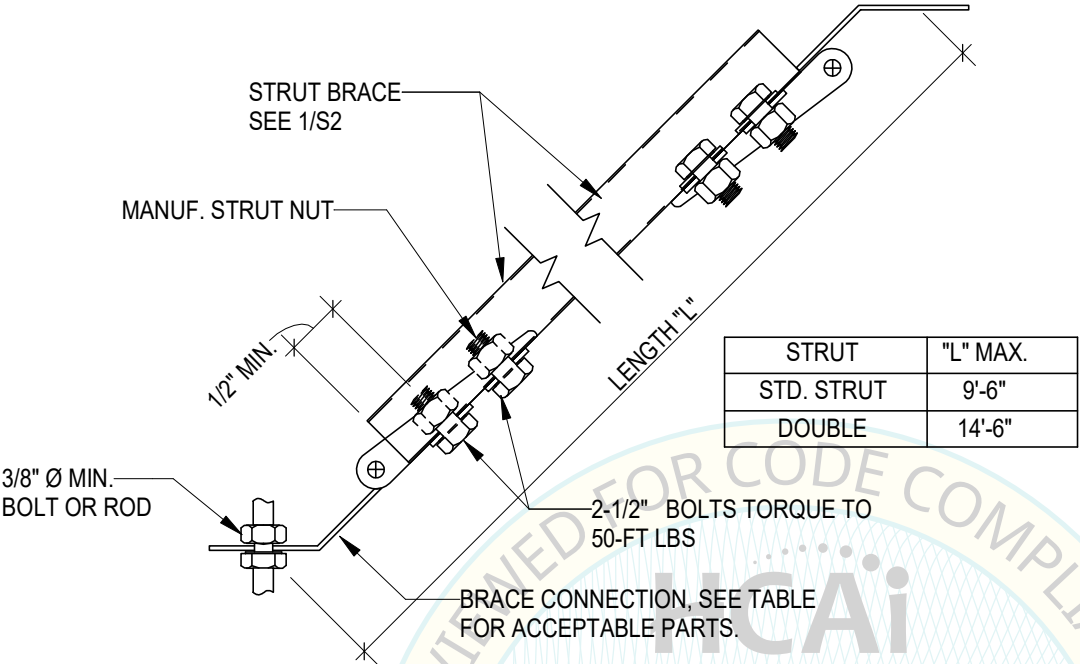
Sheet Number

**S8**

10 of 14 OF Sheets



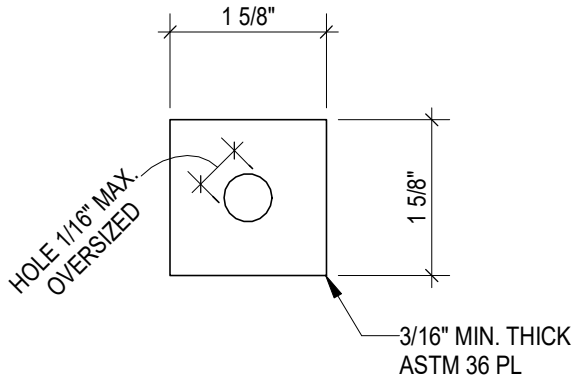
BRACE CONNECTORS	
MANUF	PART
MASON WEST	SSBS-XX
UNISTRUT	P3810-050
UNISTRUT	P1354AW
UNISTRUT	P3820-50
UNISTRUT	SPF 100-XXX
UNISTRUT	P3840-50 + 60
UNISTRUT	SPF 200-XXX
TOLCO	980
TOLCO	981
TOLCO	985
TOLCO	986



3

BRACE CONNECTION

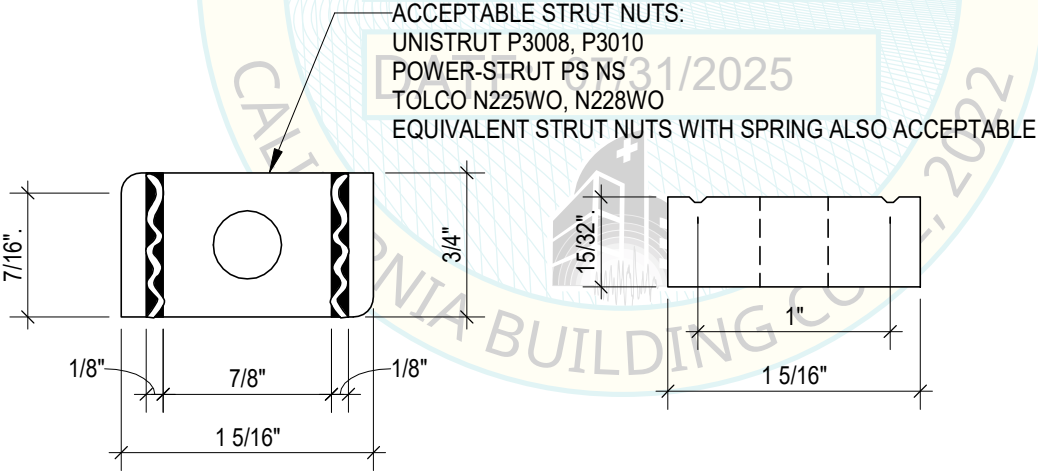
N.T.S.



5

BASE PLATE

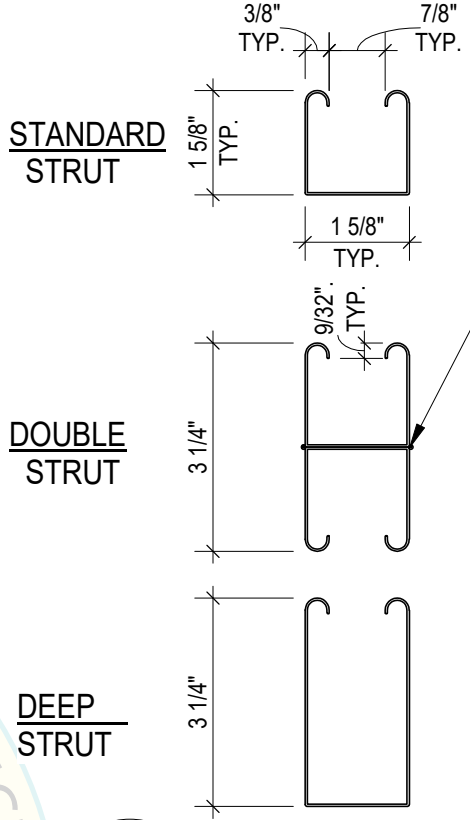
N.T.S.



4

STRUT NUT DIMENSION

N.T.S.



NOTE: APPROVED UNISTRUT/POWER-STRUT DOUBLE STRUT W/SPOT WELDS PER OPM-0295 ALSO ACCEPTABLE.

1/8 (3/4-6) 1/8 (3/4-6) PROVIDE 1ST WELDS AT MAXIMUM 3" FROM EACH END OF DOUBLE STRUT

STRUT PROPERTIES

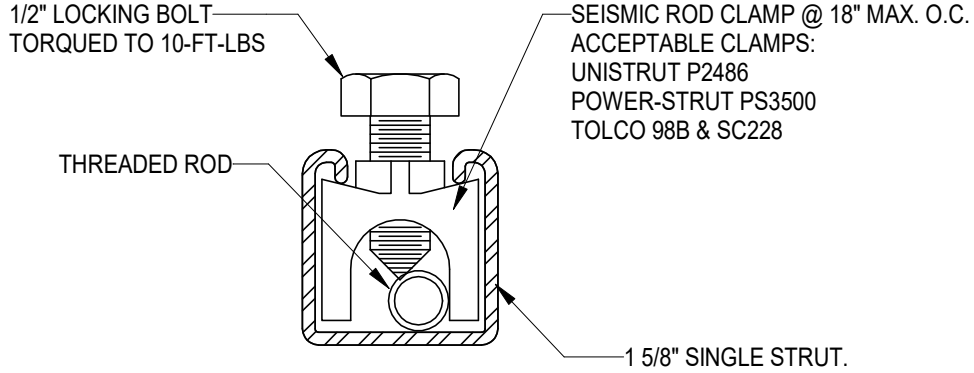
DESIGNATION	STD. STRUT	DOUBLE STRUT	DEEP STRUT
AREA IN <sup>2</sup>	0.54 MIN	1.09 MIN	0.84 MIN
WEIGHT lbs/ft	1.91 MAX	3.82 MAX	3.06 MAX
Ix IN <sup>4</sup>	0.180 MIN	0.896 MIN	1.073 MIN
Iy IN <sup>4</sup>	0.233 MIN	0.466 MIN	0.429 MIN
Sx IN <sup>3</sup>	0.195 MIN	0.570 MIN	0.609 MIN
Sy IN <sup>3</sup>	0.287 MIN	0.547 MIN	0.529 MIN

- NOTES:
- 1. ALL STRUT MANUF. BY MASON WEST, UNISTRUT, POWER-STRUT, OR B-LINE/TOLCO.
  - 3. ALL STRUT TO BE 12 ga.
  - 4. ALL STRUT TO BE SOLID W/O PUNCHED HOLES OR SLOTS.

1

STRUT SECTIONS

N.T.S.



2

SEISMIC ROD CLAMP

N.T.S.

SHEET NOTE: ALL PARTS ON THIS SHEET ARE TO BE PROVIDED BY UNISTRUT, POWER STRUT, MASON WEST, OR B-LINE/TOLCO. ALL STRUT AND PARTS TO BE FROM SINGLE MANUFACTURER.

DEGENKOLB ENGINEERS

375 Beale Street, Suite 500

San Francisco, CA 94104

415.392.6952 Phone

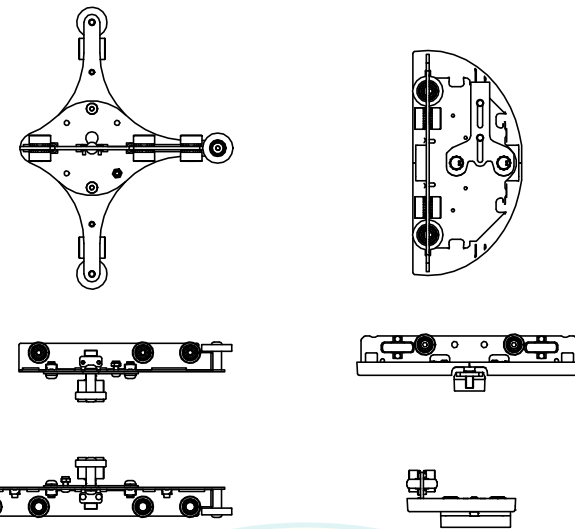
415.981.2157 Fax

www.degenkolb.com



ARJO INC  
MAXISKY CEILING LIFTS MODELS 440, 600, 1000, MS2 & MS2+  
PREAPPROVAL OF MANUFACTURER'S CERTIFICATION

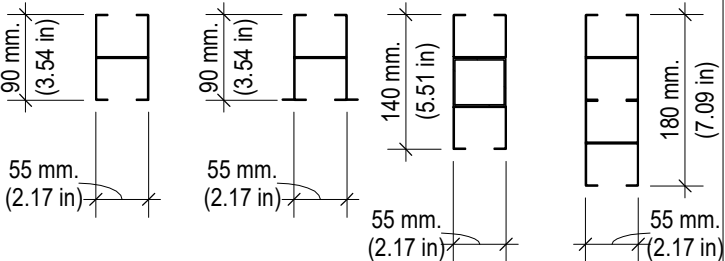
Title: STRUT PARTS SHEET			Sheet Number <b>S9</b>
Drawn	MSA	Job number: C0535010.00	
Design:	CMS	Rev:	
Check:	RMG	Scale: As indicated	
Date	7/16/2025		



SHEET NOTE:  
ALL PARTS ON THIS SHEET  
ARE TO BE PROVIDED BY  
ARJO INC

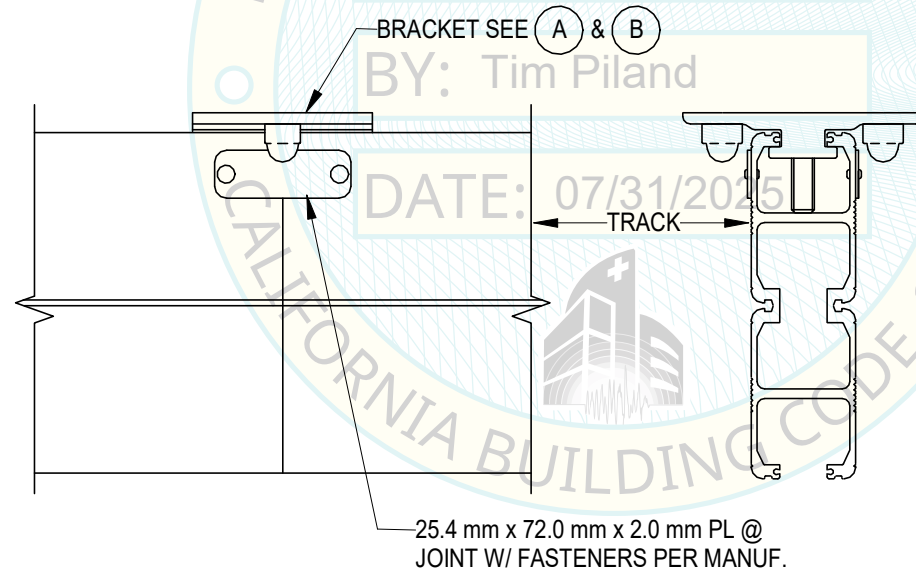
Kwik track	Track Properties - ASTM B429 ALLOY 6063-T5			
	H90	H90 EMBED	H140	H180
A (in. ) <sup>2</sup>	1.73	1.91	2.88	3.56
Sx (in. ) <sup>3</sup>	1.19	2.88	2.75	4.40
Sy (in. ) <sup>3</sup>	1.18	0.99	1.90	2.39
Ix (in. ) <sup>4</sup>	2.11	4.75	7.84	15.85
Iy (in. ) <sup>4</sup>	1.30	1.54	2.08	2.62
Weight (lb/ft)	2.1	2.3	3.43	4.25

NOTE:  
ALL TRACK SECTIONS ARE  
ASTM B429 ALLOY 6063  
ANSI H35.1 TEMPER T5



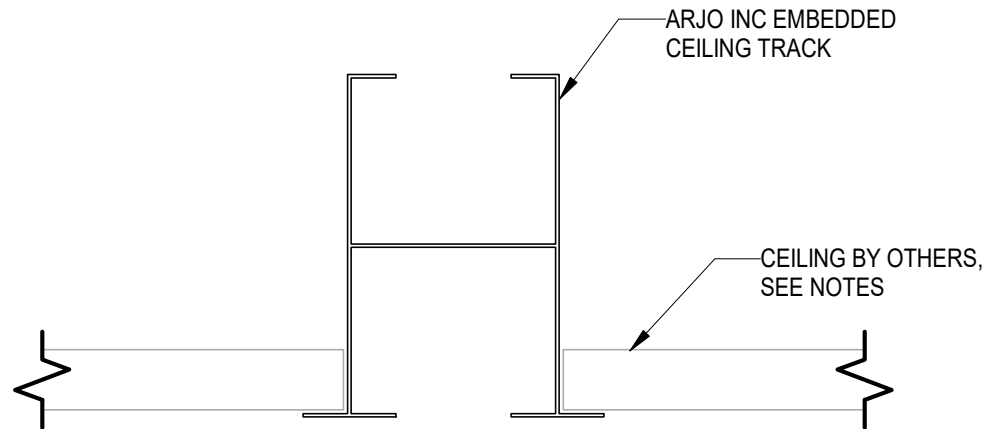
X-Y TROLLY (1000 LBS) X-Y TROLLY (600 LBS)

3 TROLLY  
N.T.S.



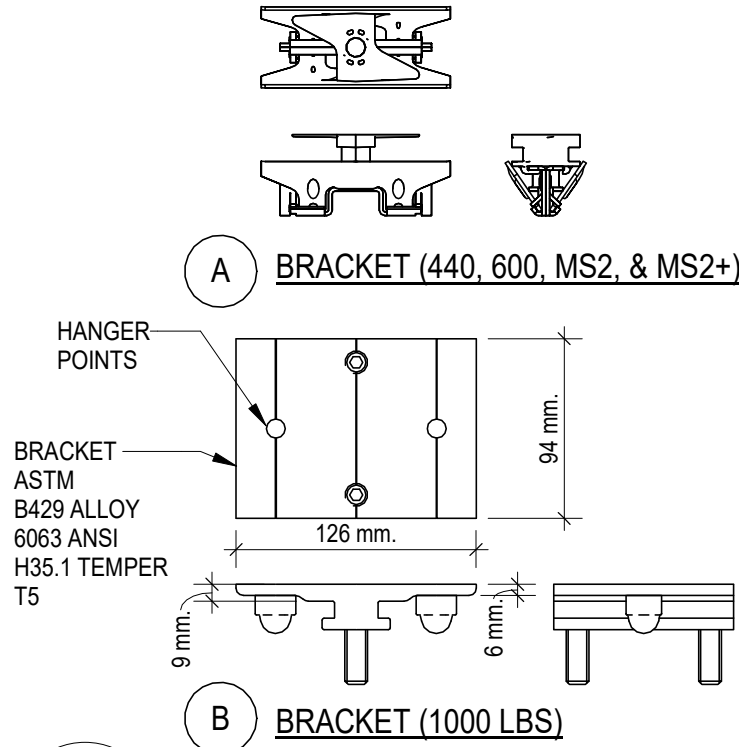
C BRACKET @ JOINT (ALL LIFTS)

1 TRACK SECTIONS  
N.T.S.



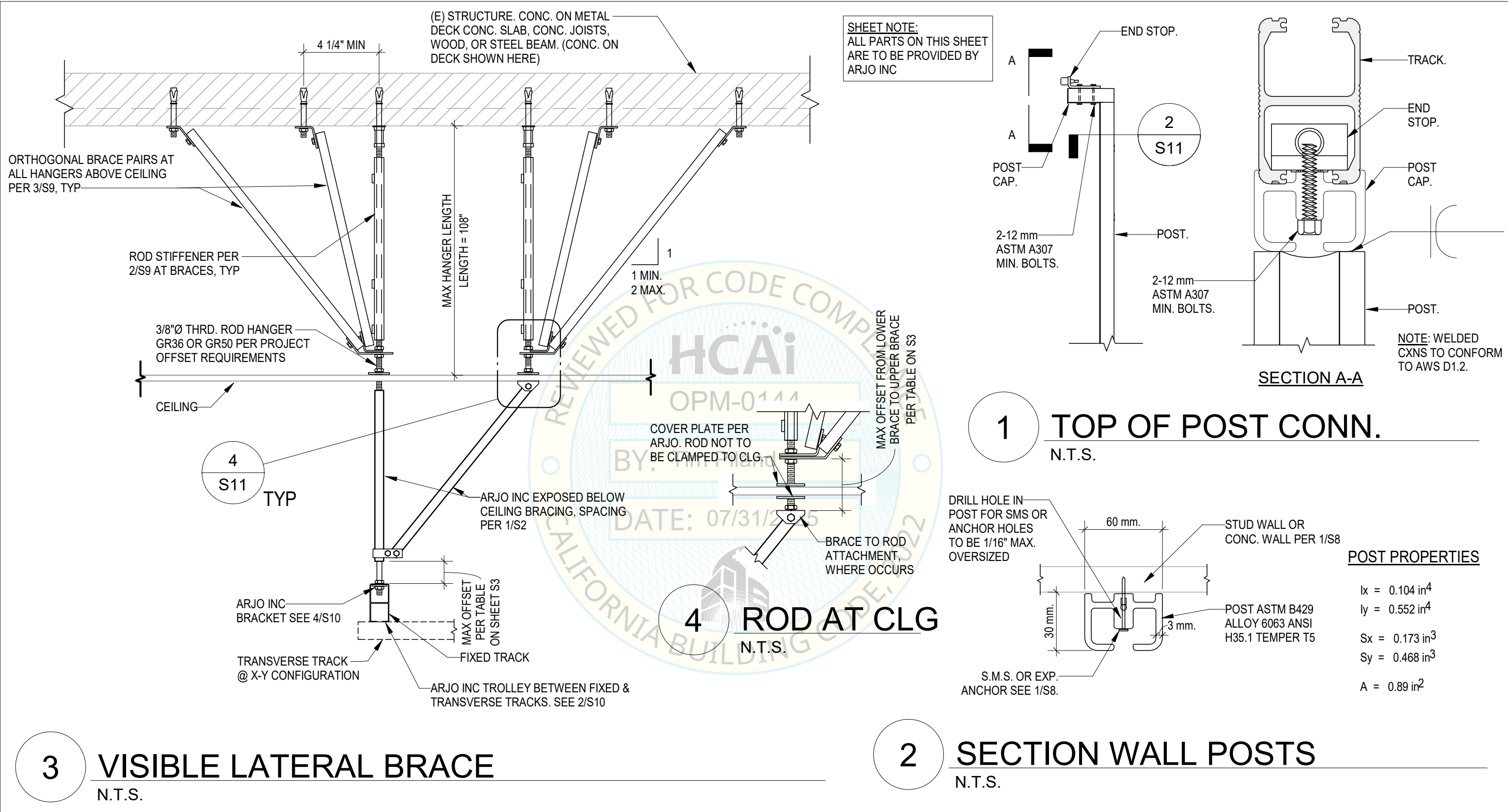
NOTES:  
1. SUSPENDED CEILING BY OTHERS ASSUMPTIONS:  
• 4 PSF MAX CEILING WEIGHT  
• EMBEDDED CEILING TRACK SUPPORTS 4' TRIBUTARY WIDTH FOR VERTICAL AND LATERAL LOADS

2 EMBEDDED TRACK  
N.T.S.



4 TRACK BRACKETS  
N.T.S.





**DEGENKOLB ENGINEERS**  
 375 Beale Street, Suite 500  
 San Francisco, CA 94104  
 415.392.6952 Phone  
 415.391.2157 Fax  
 www.degenkolb.com



OPM-0144: Reviewed for Code Compliance by Timothy Piland

ARJO INC  
 MAXISKY CEILING LIFTS MODELS 440, 600, 1000, MS2 & MS2+  
 PREAPPROVAL OF MANUFACTURER'S CERTIFICATION

Title:

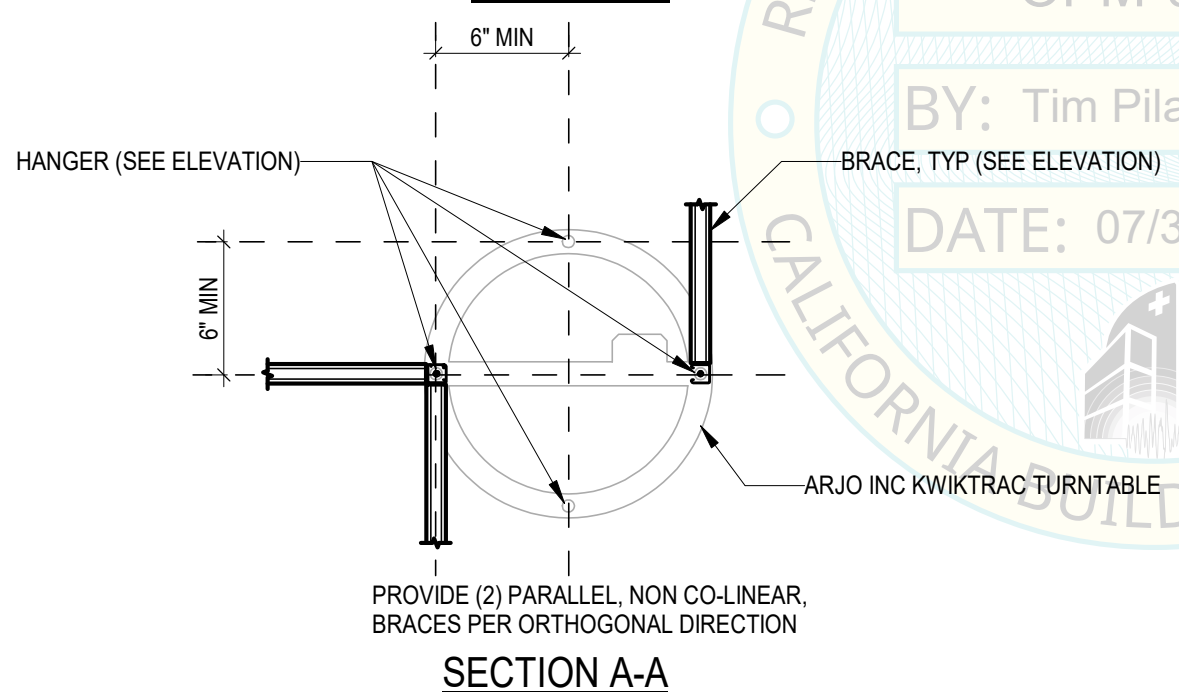
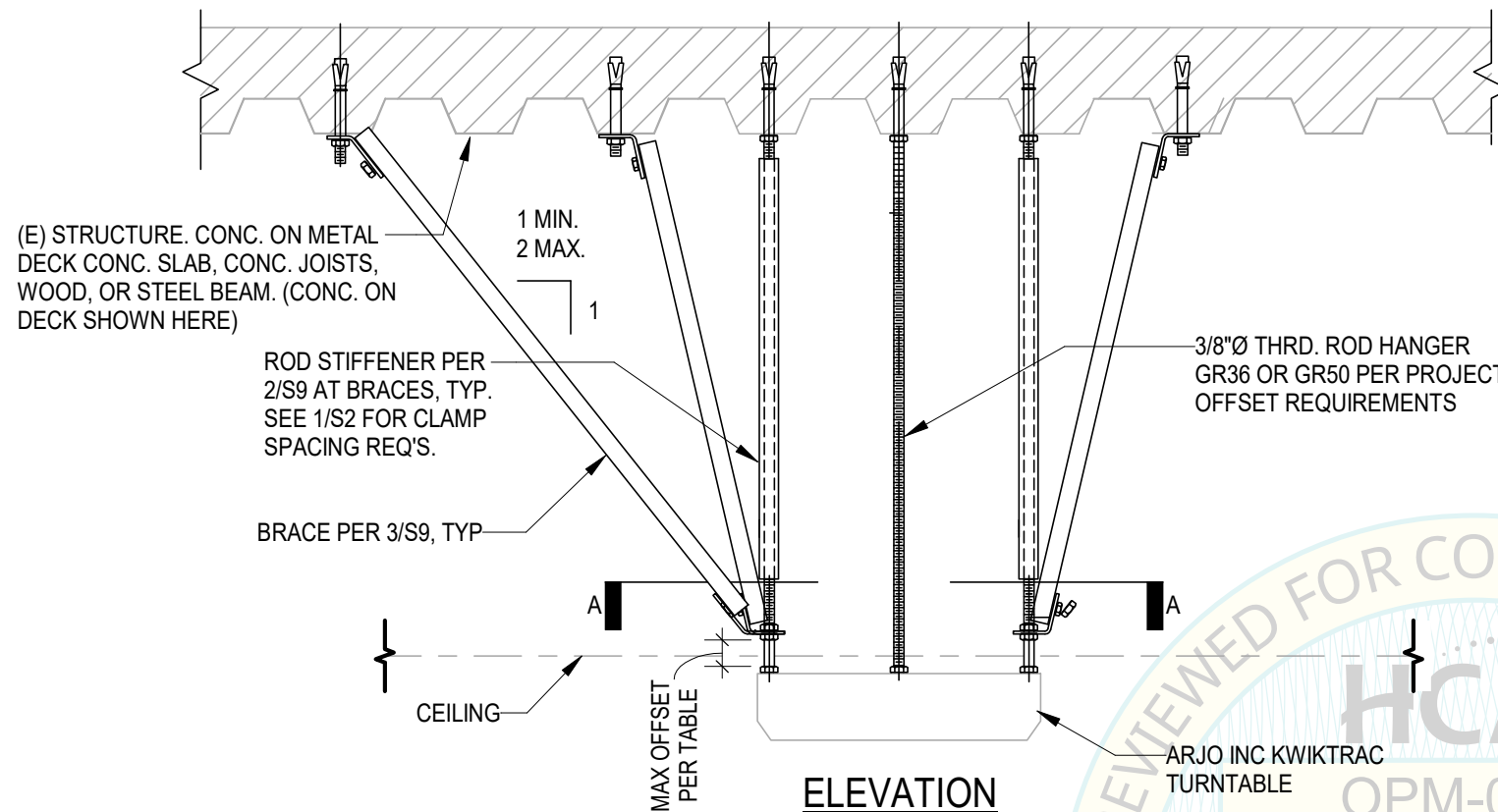
ARJO INC PARTS SHEET

Drawn	MSA	Job number:	C0535010.00
Design:	CMS	Rev:	
Check:	RMG	Scale:	As indicated
Date	7/16/2025		

Sheet Number

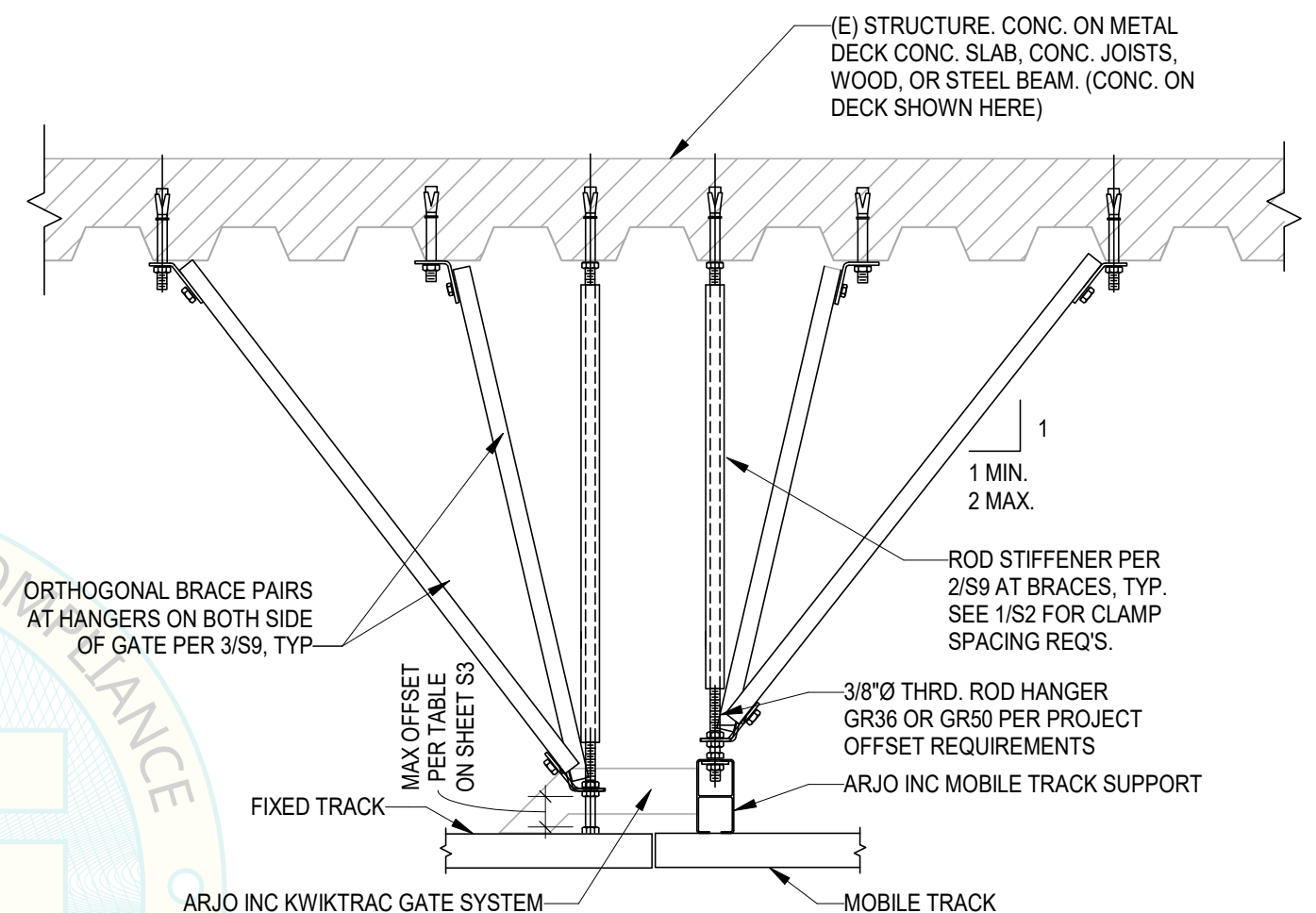
**S11**

13 of 14 OF Sheets



## 2 KWIKTRAK TURNTABLE

N.T.S



## 1 KWIKTRAK GATE SYSTEM

N.T.S.

**SHEET NOTE:**  
ALL PARTS ON THIS SHEET  
ARE TO BE PROVIDED BY  
ARJO INC



**DEGENKOLB ENGINEERS**  
375 Beale Street, Suite 500  
San Francisco, CA 94104  
415.392.6952 Phone  
415.391.2157 Fax  
www.degenkolb.com



OPM-0144: Reviewed for Code Compliance by Timothy Piland

ARJO INC  
MAXISKY CEILING LIFTS MODELS 440, 600, 1000, MS2 & MS2+  
PREAPPROVAL OF MANUFACTURER'S CERTIFICATION

Title:  
ARJO INC PARTS SHEET

Drawn	MSA	Job number:	C0535010.00
Design:	CMS	Rev:	
Check:	RMG	Scale:	N.T.S.
Date	7/16/2025		

Sheet Number

**S12**

14 of 14 OF Sheets