NOTES: UNLESS OTHERWISE SPECIFIED

1. THIS DRAWING IS NOT FOR CONSTRUCTION UNTIL ENGINEERING HAS REVIEWED AND STAMPED THIS DOCUMENT.

2. DIMENSIONS SHOWN ARE INCHES.

3. THE SELF-BONDING SYSTEM AND SINGLE GROUND LUG IS FOR USE WITH PV MODULES THAT HAVE A MAXIMUM SERIES FUSE RATING OF 30A.

4. MATERIALS ARE AS SPECIFIED OR EQUIVALENT:
   HARDWARE: 304 STAINLESS STEEL
   FABRICATED EXTRUDED PARTS: 6005-T5 ALUMINUM ALLOY
   FABRICATED DIE CAST PARTS: ANSI/AA A380 ALUMINUM ALLOY
   STEEL PIPE: SCHEDULE 40 GALVANIZED
   ALUMINUM PIPE: SCHEDULE 10 ANODIZED

5. THE MAXIMUM PERMISSIBLE LENGTH OF ANY STRUCTURE SHALL BE 200 FT. FOR SYSTEMS USING A SHARED RAIL CONFIGURATION, A THERMAL BREAK IS REQUIRED IN THE RAIL EVERY 40 FT. PER THE DRAWING DETAILS.

6. SUNTURF SYSTEM CONFIGURATIONS:
   PANEL ARRANGEMENT: 4LXN, OR 2PXN.
   TILT ANGLE: 20 TO 35 DEG.
   FOUNDATION TYPE: GSM, AGM, BGM, OR PGM.

7. PANEL DIMENSIONS ARE AS FOLLOWS:
   STANDARD PANEL (SP): MAX AREA: 3444 in²
   LARGE FORMAT (LF): MAX AREA: 3825 in²
   PANEL FRAME HEIGHTS: 30mm TO 50mm.

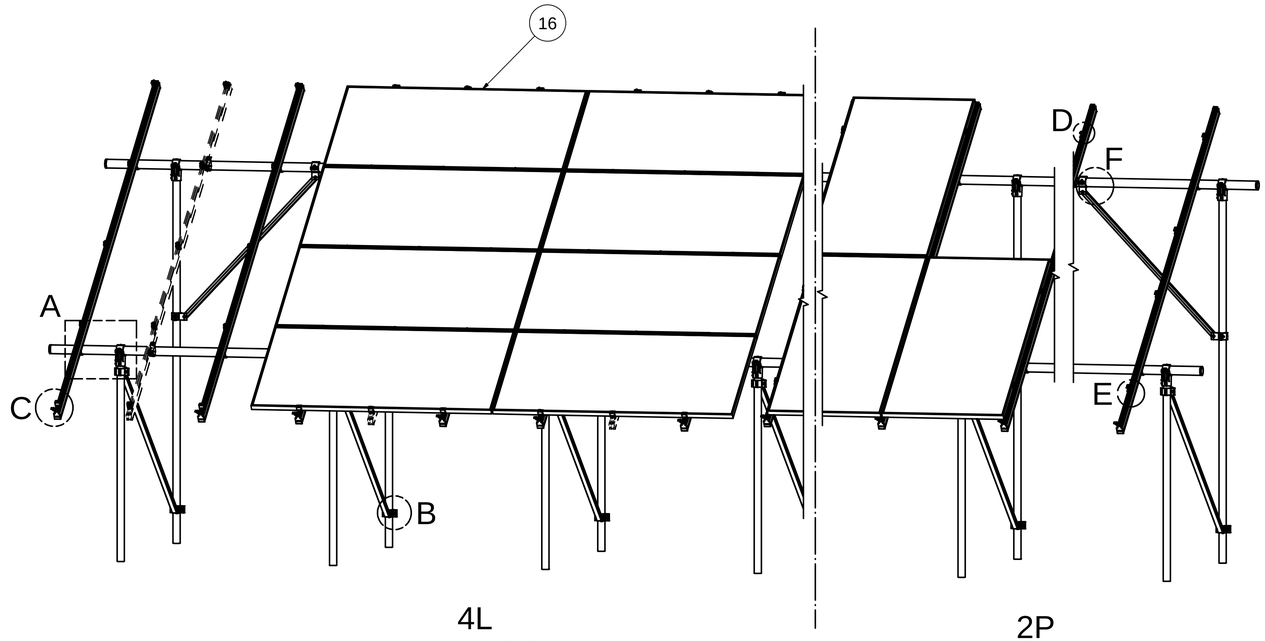
8. FOUNDATION TYPES:
   GSM = GROUND SCREW GROUND MOUNT
   AGM = HELICAL AUGER GROUND MOUNT
   PGM = POST-IN-CONCRETE GROUND MOUNT
   BSM = BALLAST GROUND MOUNT

9. SEE LETTER PROVIDED BY VECTOR STRUCTURAL ENGINEERING, LLC FOR FOUNDATION DESIGN AND LOAD TESTING REQUIREMENTS.

10. FOR 4L CONFIGURATIONS WITH ALL THE FOLLOWING CONDTIONS:
    1) LESS THAN 35° TILT
    2) LF PANEL
    3) SMR300 OR HR300 RAIL

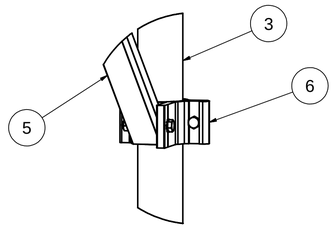
    A THIRD RAIL IS REQUIRED PER PANEL.

Packet A13	
Model Code	**ASCE 7-16**
Exposure Category	C
Wind Speed	105 mph and Lower
Ground Snow Load	80 PSF and Lower
Tilt	20 TO 35 DEG

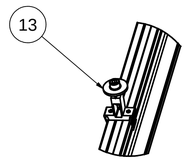


4L
4-IN-LANDSCAPE

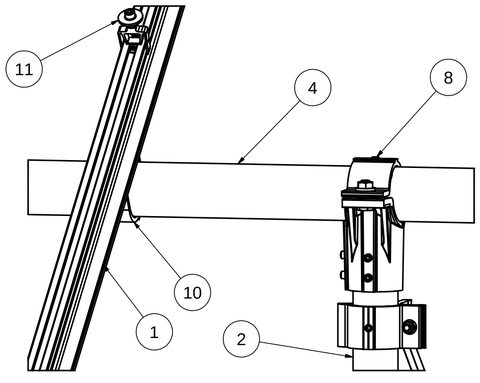
2P
2-IN-PROTRAIT



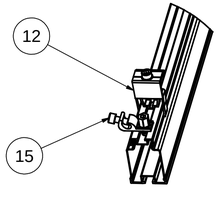
DETAIL B



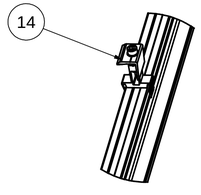
DETAIL D



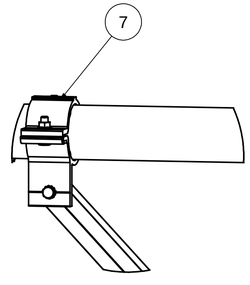
DETAIL A



DETAIL C



DETAIL E



DETAIL F

ITEM	PART NUMBER	DESCRIPTION	QTY
16		PANEL	
15	K10469-001	SMR GROUND LUG KIT	
14	K10420-XXX	SHARED RAIL END CLAMP,SMR POP-ON,CLEAR	
13	K10419-XXX	SHARED RAIL MID CLAMP,SMR POP-ON,CLEAR	
12	K10418-XXX	SMR POP-ON END CLAMP KIT,CLEAR	
11	K10417-XXX	MID CLAMP,SMR POP-ON,CLEAR	
10	K10343-005	2.5" AL PIPE U-CLAMP KIT	
9	K10342-001	2.5" PIPE SPLICE KIT	
8	K10341-002	2.5" PIPE TEE KIT	
7	K10222-001	2.5" PIPE CLAMP KIT	
6	K10219-001	2" AL PIPE CLAMP KIT	
5	A50164-XXX	1.5" SQ. STL TUBE BRACE, L=XXX	
4	A21168-XXX	PIPE, HSS, 2.875" OD X 12 GAUGE,L=XXX	
3	A21165-XXX (REAR)	PIPE, HSS, 2.375" OD X 12 GAUGE,L=XXX	
2	A21165-XXX (FRONT)	PIPE, HSS, 2.375" OD X 12 GAUGE,L=XXX	
1	A20444-XXX	SMR300 RAIL, L=XXX	

WELLS LIND HOLMES
STATE OF WASHINGTON
51006
STRUCTURAL ENGINEER
PROFESSIONAL ENGINEER
05/03/2024

VECTOR ENGINEERS
651 W. GALENA PARK BLVD. STE. 101 DRAPER, UTAH 84020 PHONE (801) 990-1775 WWW.VECTORPE.COM

VECTOR PROJECT #: U2716.0342.221
WA FIRM LICENSE #: 2202

Vector Structural Engineering requires that we review each site-specific install, and we are not liable for installs at site-specific locations we have not reviewed. This document does not address site-specific installations.

MATERIAL: SEE BOM
Third Angle Projection:
GENERAL SPECIFICATIONS
Dimensions in inches [millimeters]
TOLERANCES:
X.XXX ±0.01 [0.25mm]
X.XX ±0.02 [0.5mm]
X.X ±0.05 [1.0mm]
Unless otherwise specified
Break all sharp edges .010-.020 unless otherwise specified.
DRAWN BY: PHO
DATE: 07/13/2022
CHECKED BY:
APPROVALS:

SunModo Corp.
14800 NE 65TH STREET, VANCOUVER WA 98682

TITLE: PACKET A13
D
DRAWING NUMBER:
SCALE:
SHEET 1 of 5

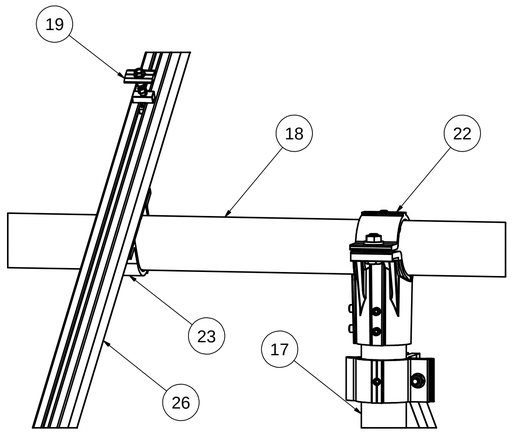
NOTES: UNLESS OTHERWISE SPECIFIED

1. APPROVED RAIL PROFILES - STANDARD PANELS
   A20288-XXX (HR300 RAIL), A20297-001 (END CAP),
   K10343-002 (U-CLAMP KIT);
   A20145-XXX (HR350 RAIL), A20285-001 (END CAP),
   K10343-001 (U-CLAMP KIT).

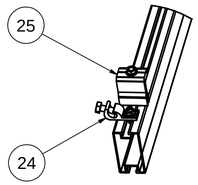
2. APPROVED RAIL PROFILES - OVERSIZE PANELS
   * A20288-XXX (HR300 RAIL), A20297-001 (END CAP),
     K10343-002 (U-CLAMP KIT);
   * A20145-XXX (HR350 RAIL), A20285-001 (END CAP),
     K10343-001 (U-CLAMP KIT).

3. K10224-XXX END CLAMP KIT OR K10299-XXX ADJ.
   END CLAMP KIT.

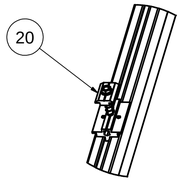
ALTERNATE(ALT) DETAILS
HR300, HR350 RAIL PROFILES



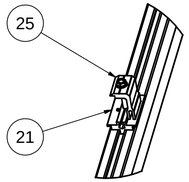
DETAIL A-ALT



DETAIL C-ALT



DETAIL D-ALT



DETAIL E-ALT

05/03/2024

VECTOR ENGINEERS
651 W. WILDING PARK BLVD. STE. 101 PHONE (801) 890-1775
DRAPER, UTAH 84020 WWW.VECTORSE.COM

VECTOR PROJECT #: U2716.0342.221
WA FIRM LICENSE #: 2202

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ITEM	PART NUMBER	DESCRIPTION	QTY
26		HELIORAIL.VARIES PER NOTE 1 & 2	
25		END CLAMP KIT. VARIES PER NOTE 3	
24	K10469-003	HR GROUNDING LUG KIT	
23	K10343-XXX	2.5” AL PIPE U-CLAMP KIT	
22	K10341-002	2.5" PIPE TEE KIT	
21	K10176-001	END CLAMP SHARED RAIL ADAPTOR	
20	K10182-001	SHARED RAIL GROUNDING MID-CLAMP KIT(FOR 2P)	
19	K10180-001	GROUNDING MID-CLAMP KIT WITH T COLLAR BOLT AND GROUNDING BASE	
18	A21168-XXX	PIPE, HSS, 2.875” OD X 12 GAUGE,L=XXX	
17	A21165-XXX	PIPE, HSS, 2.375” OD X 12 GAUGE,L=XXX	

SunModo Corp.

TITLE: PACKET A13

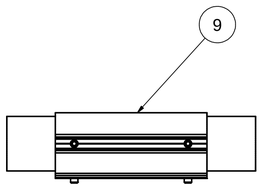
D | DRAWING NUMBER

SCALE: | SHEET 2 of 5 | REV

NOTES:
1. DIMENSIONS LABELED AS MAX ARE MAXIMUM ALLOWABLE AND MAY RESULT IN END POSTS BEING OUTSIDE ARRAY EDGES. MAXIMUM DIMENSIONS MAY BE REDUCED IF DESIRED.
2. SEE NOTE 7 OF COVER PAGE FOR PANEL SIZES.

3. FOR 4L CONFIGURATIONS WITH ALL THE FOLLOWING CONDTIONS:
   1) LESS THAN 35° TILT
   2) LF PANEL
   3) SMR300 OR HR300 RAIL

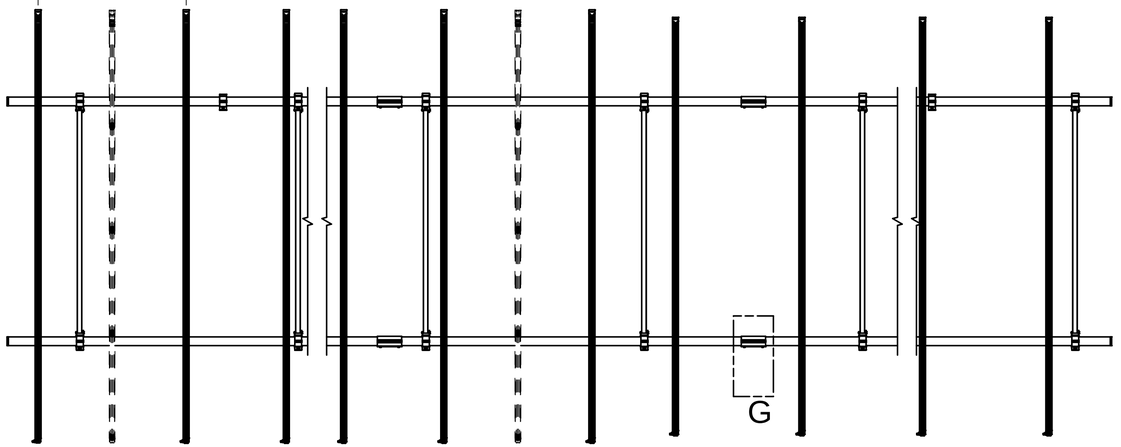
   A THIRD RAIL IS REQUIRED PER PANEL.

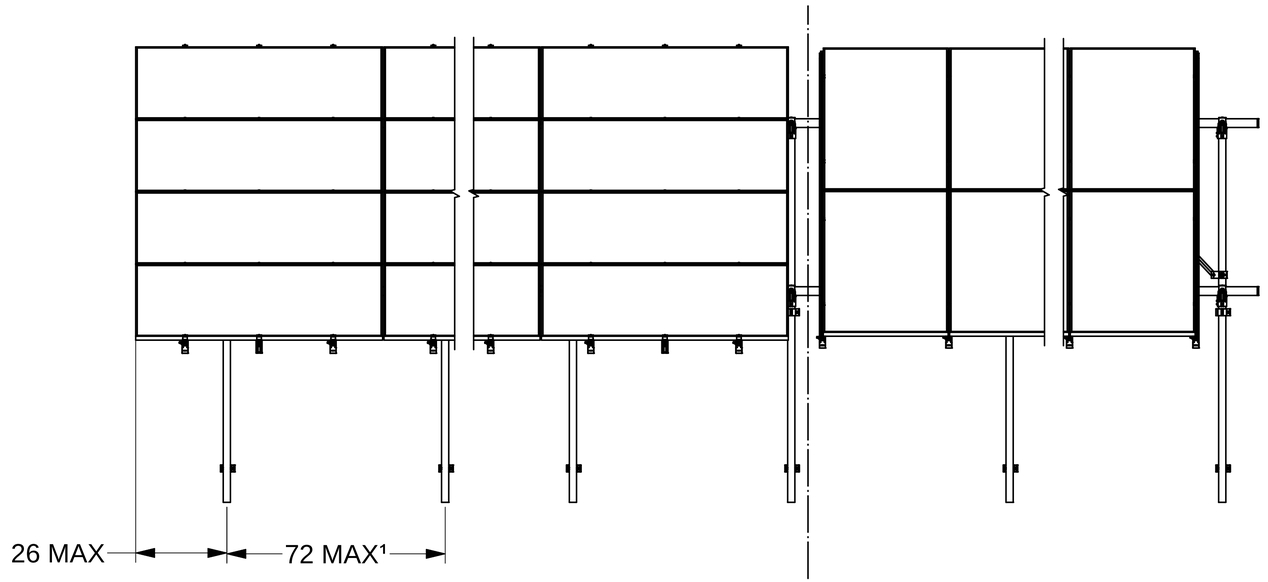


DETAIL G

RAIL SPACING

LANDSCAPE: PER PANEL MANUFACTURER
PORTRAIT: PANEL WIDTH + 0.25"





4L
4-IN-LANDSCAPE

2P
2-IN-PROTRAIT

05/03/2024

VECTOR engineers
851 W. GALENA PARK BLVD, STE. 101 DRAPER, UTAH 84020
PHONE (801) 990-1775
WWW.VECTORSE.COM

VECTOR PROJECT #: U2716.0342.221
WA FIRM LICENSE #: 2202

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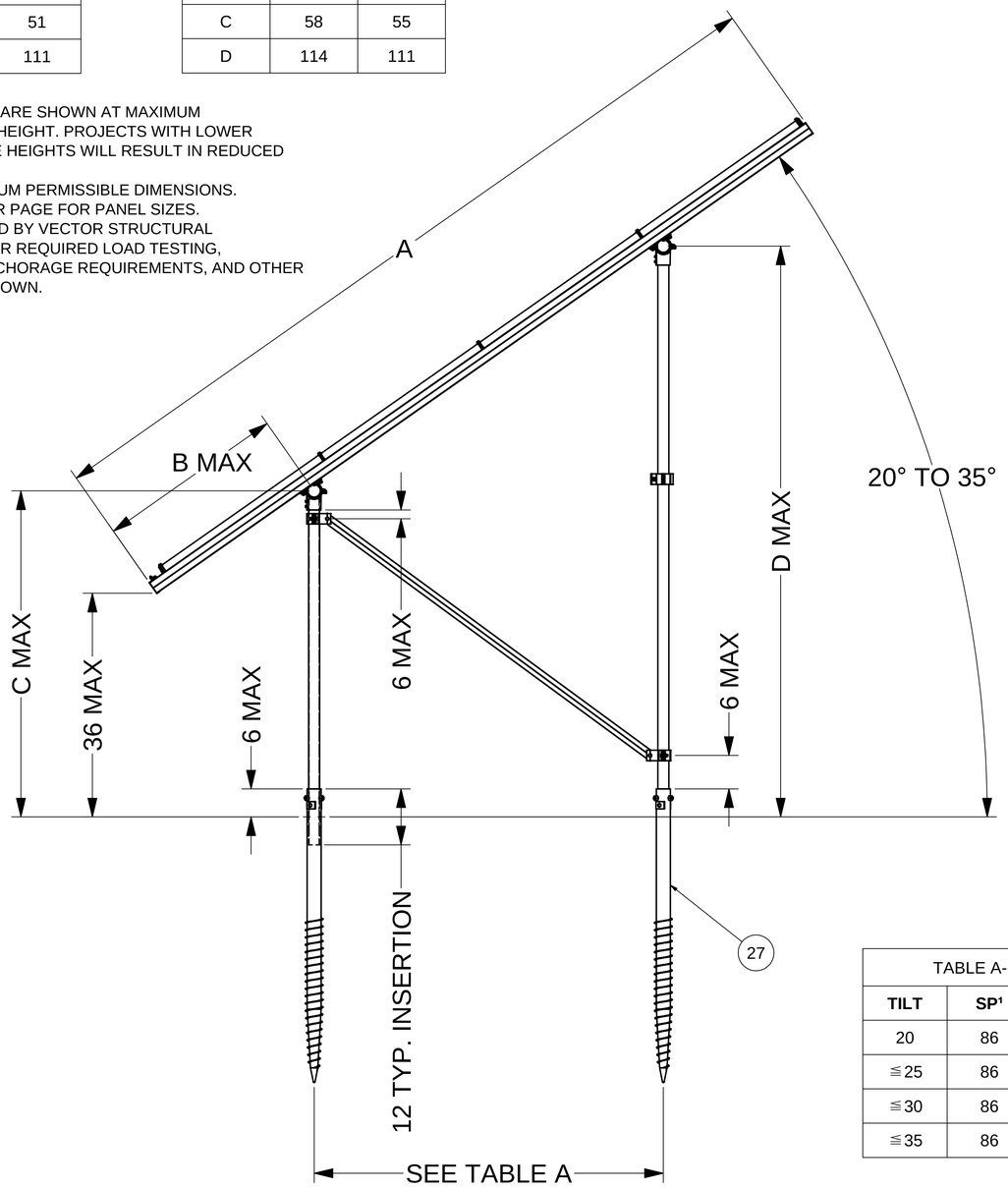
SunModo Corp.	
TITLE	PACKET A13
D	DRAWING NUMBER
SCALE:	SHEET 3 of 5 REV

DIMENSIONS - STANDARD PAN		
ITEM	**4L**	**2P**
A	172	166
B	40	37
C	53	51
D	113	111

DIMENSIONS - LARGE FORMAT		
ITEM	**4L**	**2P**
A	184	172
B	42	40
C	58	55
D	114	111

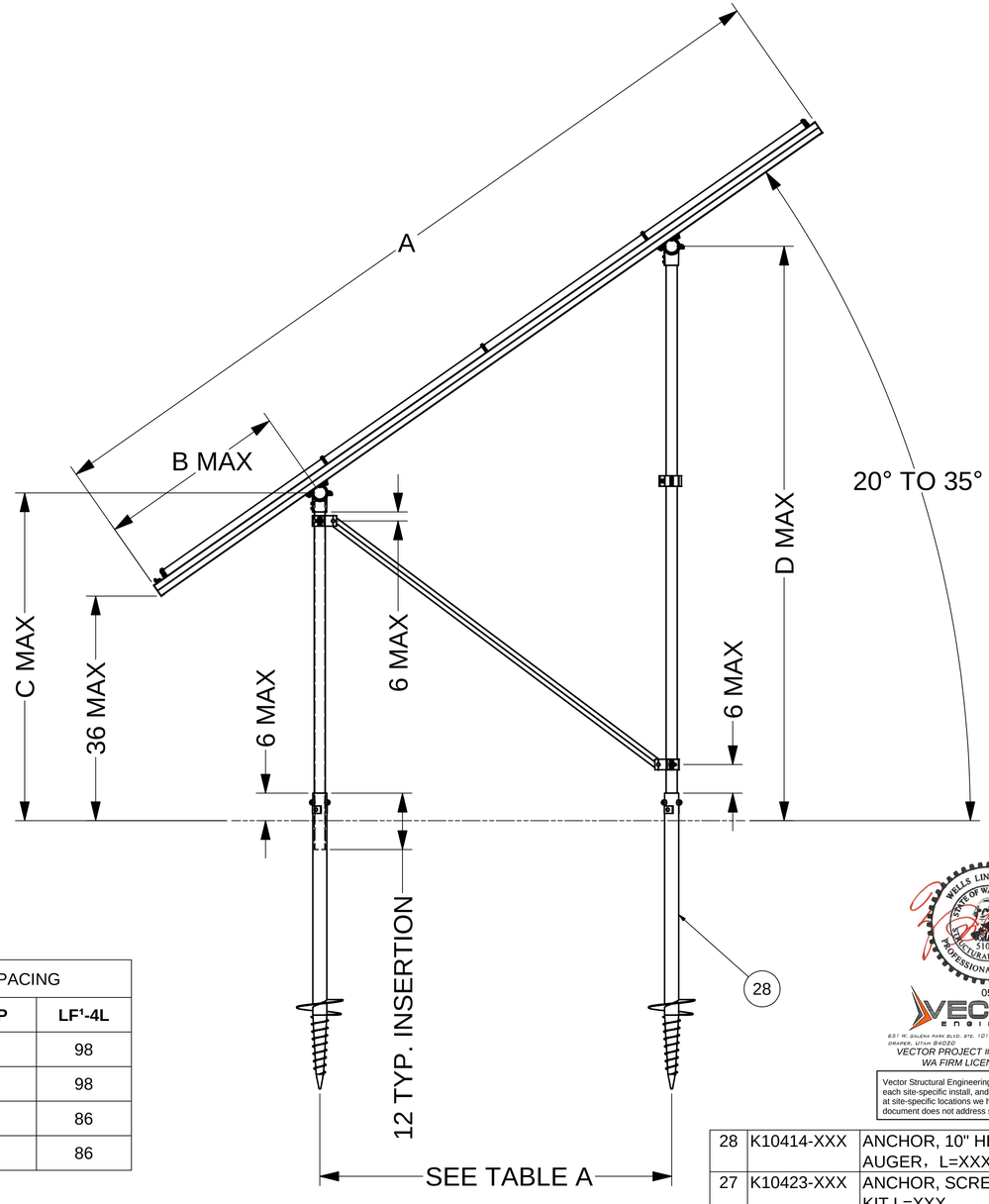
NOTES

1.DIMENSIONS IN TABLE ARE SHOWN AT MAXIMUM TILT & LEADING EDGE HEIGHT. PROJECTS WITH LOWER TILTS & LEADING EDGE HEIGHTS WILL RESULT IN REDUCED DIMENSIONS.
2. MAX DENOTES MAXIMUM PERMISSIBLE DIMENSIONS.
3. SEE NOTE 7 OF COVER PAGE FOR PANEL SIZES.
4. SEE LETTER PROVIDED BY VECTOR STRUCTURAL ENGINEERING, LLC FOR REQUIRED LOAD TESTING, FOUNDATION AND ANCHORAGE REQUIREMENTS, AND OTHER INFORMATION NOT SHOWN.



GROUND SCREW GOUND MOUNT (GSM)[4]

TABLE A-N/S POST SPACING			
TILT	**SP[1]**	**LF[1]-2P**	**LF[1]-4L**
20	86	98	98
≦25	86	86	98
≦30	86	86	86
≦35	86	86	86



AUGER GROUND MOUNT (AGM)[4]

WELLS LIND HOLMES
STATE OF WASHINGTON
21006
PROFESSIONAL ENGINEER

05/03/2024

VECTOR engineers
651 W. GALENA PARK BLVD, STE. 101 DRAPER, UTAH 84020 PHONE (801) 990-1775 www.vectorse.com

VECTOR PROJECT #: U2716.0342.221
WA FIRM LICENSE #: 2202

ITEM	PART NUMBER	DESCRIPTION	QTY
28	K10414-XXX	ANCHOR, 10" HELIX SCREW AUGER，L=XXX	
27	K10423-XXX	ANCHOR, SCREW AUGER KIT,L=XXX	

SunModo Corp.

TITLE: PACKET A13

D — DRAWING NUMBER

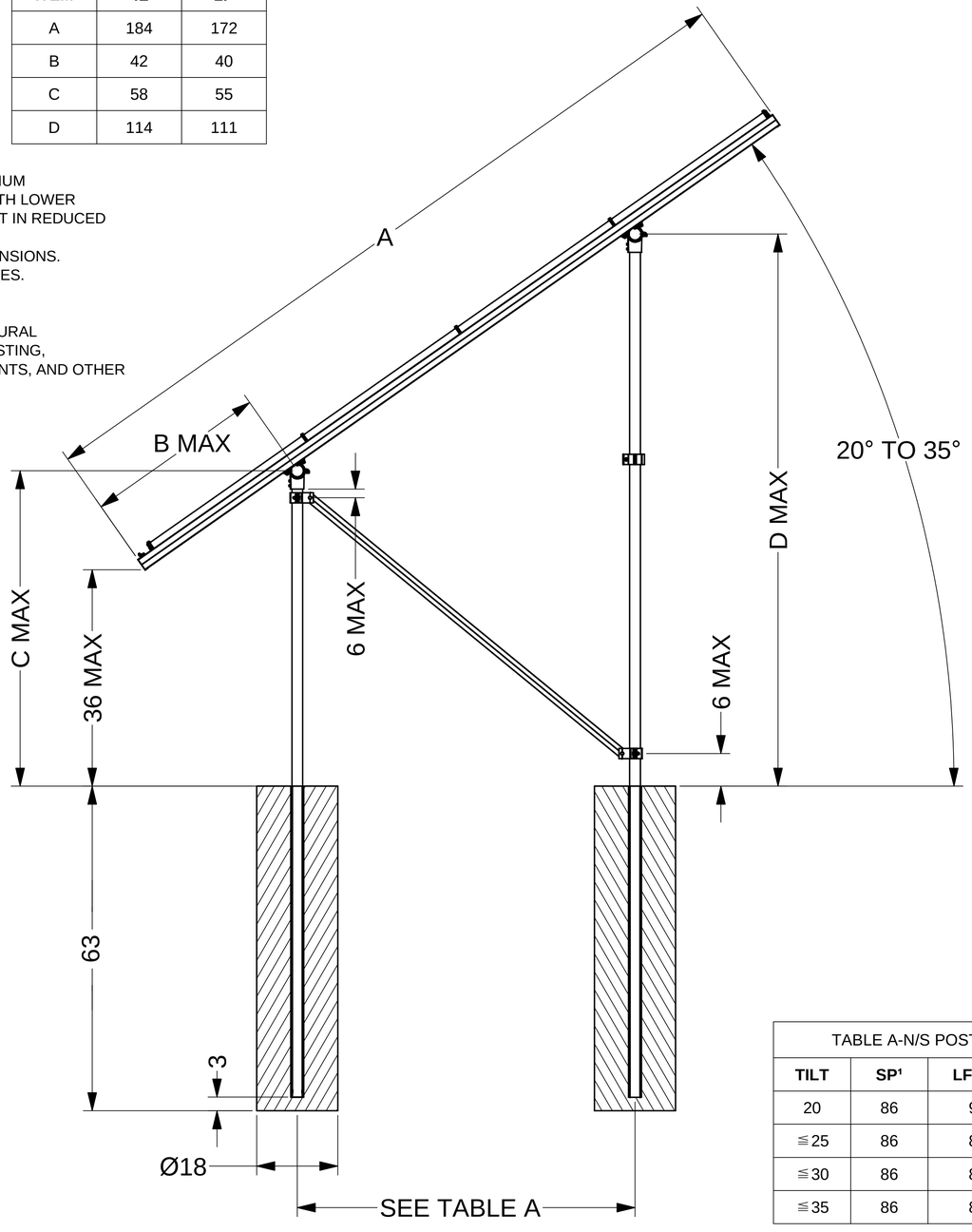
SCALE: | SHEET 4 of 5 | REV

DIMENSIONS - STANDARD PAN		
ITEM	**4L**	**2P**
A	172	166
B	40	37
C	53	51
D	113	111

DIMENSIONS - LARGE FORMAT		
ITEM	**4L**	**2P**
A	184	172
B	42	40
C	58	55
D	114	111

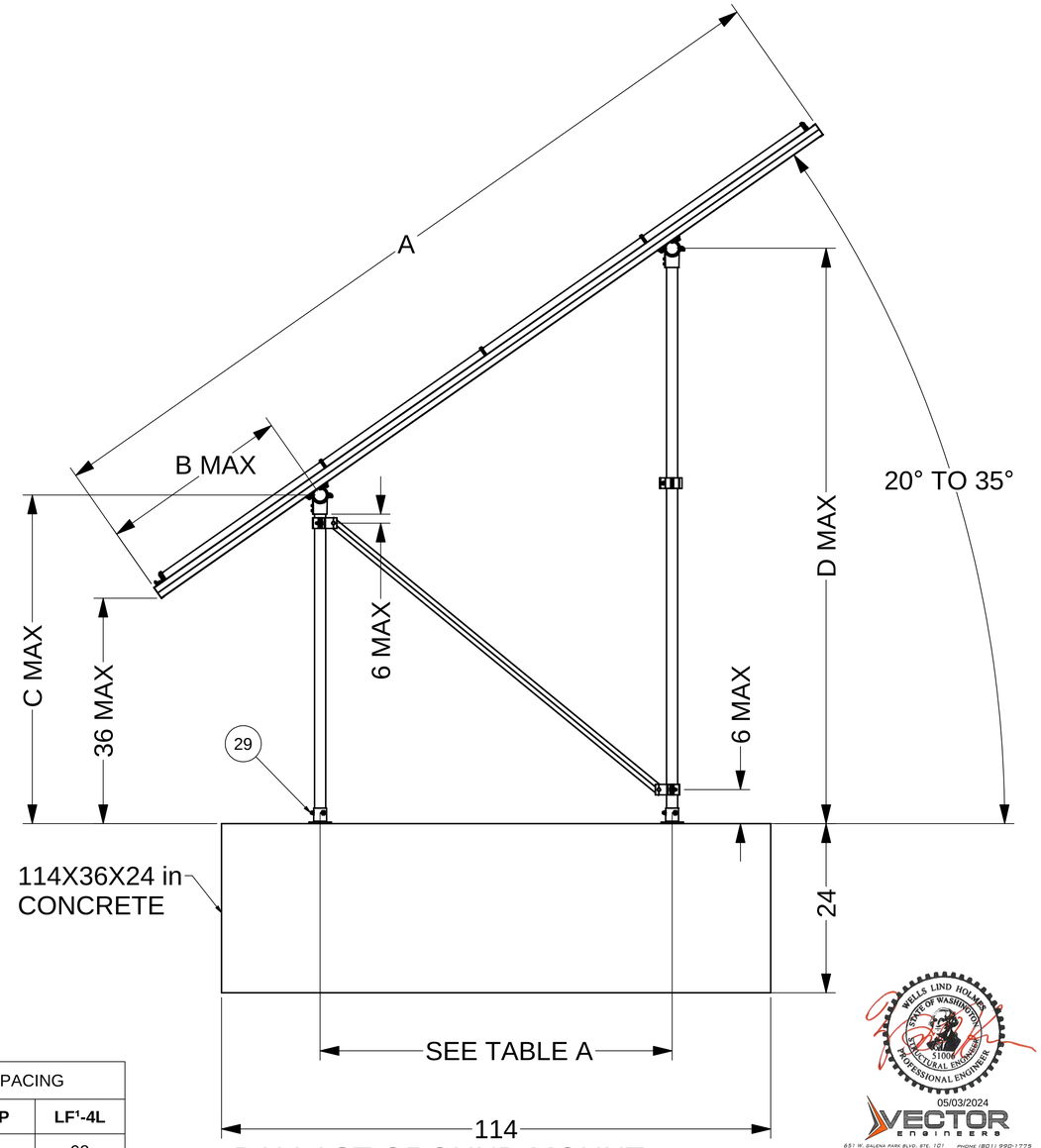
NOTES

1. DIMENSIONS IN TABLE ARE SHOWN AT MAXIMUM TILT & LEADING EDGE HEIGHT. PROJECTS WITH LOWER TILTS & LEADING EDGE HEIGHTS WILL RESULT IN REDUCED DIMENSIONS.
2. MAX DENOTES MAXIMUM PERMISSIBLE DIMENSIONS.
3. SEE NOTE 7 OF COVER PAGE FOR PANEL SIZES.
4. K10268-005 (2" PIPE BASE KIT) OR K10302-001 (2" PIPE BASE KIT)
5. SEE LETTER PROVIDED BY VECTOR STRUCTURAL ENGINEERING, LLC FOR REQUIRED LOAD TESTING, FOUNDATION AND ANCHORAGE REQUIREMENTS, AND OTHER INFORMATION NOT SHOWN.



POST-IN-CONCRETE GROUND MOUNT (PGM)[5]

TABLE A-N/S POST SPACING			
TILT	**SP[1]**	**LF[1]-2P**	**LF[1]-4L**
20	86	98	98
≦25	86	86	98
≦30	86	86	86
≦35	86	86	86



BALLAST GROUND MOUNT (BGM)[5]

05/03/2024

VECTOR ENGINEERS
631 W. DAVA PARK BLVD. STE. 101 PHONE (801) 890-1775
DRAPER, UTAH 84020 WWW.VECTORSE.COM

VECTOR PROJECT #: U2716.0342.221
WA FIRM LICENSE #: 2202

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ITEM	PART NUMBER	DESCRIPTION	QTY
29		POST BASE. VARIES PER NOTE 4	

SunModo Corp.

TITLE: PACKET A13

DRAWING NUMBER: D

SCALE: | SHEET 5 of 5 | REV