

ROOF TOP PV MOUNTING SYSTEM WITH TILT

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 2023 (8TH EDITION) FLORIDA BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

THIS PRODUCT APPROVAL IS FOR THE ROOF TOP PV MOUNTING SYSTEM AS SHOWN ON THESE DRAWINGS. ROOF DETAILS, UPLIFT, SLOPE, ROOF TRUSSES AND OTHER ELEMENTS SHALL BE DESIGNED BY A FLORIDA REGISTERED ENGINEER AND REVIEWED BY THE STRUCTURAL PLANS EXAMINER OF THE CORRESPONDING BUILDING DEPARTMENT. ENGINEER OF RECORD TO VERIFY THAT ROOF MEMBERS CAN SUPPORT THE PV MODULE ARRAY UNDER ALL CODE LEVEL LOADING CONDITIONS. INSTALLER TO MAINTAIN THE WATERPROOF INTEGRITY OF THE ROOF.

INSTALLATION OF PV PANEL ACCESSORIES SHALL BE DONE IN ACCORDANCE WITH THE CURRENT EDITION OF FLORIDA BUILDING CODE AND THE MANUFACTURER’S INSTALLATION INSTRUCTIONS.

ANCHORS SHALL BE CORROSION RESISTANT, SPACED AS SHOWN ON DETAILS AND INSTALLED PER MANUF’S INSTRUCTIONS. SPECIFIED EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND ROOF COVERING.

DESIGN LOADS SHOWN ARE BASED ON ‘ALLOWABLE STRESS DESIGN (ASD)’.

CONDITIONS NOT SHOWN IN THIS DRAWING ARE TO BE ANALYZED SEPARATELY, AND TO BE REVIEWED BY BUILDING OFFICIAL.

PV PANELS, PANEL CLAMPS AND RAILS NOT PART OF THIS APPROVAL. FOR PANEL DETAILS, GENERAL NOTES, COMPONENT SIZES, FIRE AND ELECTRICAL SAFETY STANDARDS, PANEL CONNECTION TO MOUNTS AND INSTALLATION REQUIREMENTS/LIMITATIONS SEE CORRESPONDING FLA. APPROVAL DWGS.

NOTE:
THE DESIGN CHARTS CORRESPONDING TO INSTALLATION CAPACITY OF PANELS PARALLEL TO ROOF SURFACE DO NOT DIRECTLY COMBINE WITH THIS APPROVAL.

Sealed: 5/2/24

FL #41396

- A- CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION OF THIS PRODUCT BASED ON THIS PRODUCT EVALUATION PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT.
- B- THIS PRODUCT EVALUATION DOCUMENT WILL BE CONSIDERED INVALID IF ALTERED BY ANY MEANS.
- C- SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD (E.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.E.D. ENGINEER OF RECORD, ACTING AS A DELEGATED ENGINEER TO THE P.E.D. ENGINEER SHALL SUBMIT TO THIS LATTER THE SITE SPECIFIC DRAWINGS FOR REVIEW.
- D- THIS P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.



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AL-FAROOQ CORPORATION
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FBPE #3538
SOLAR-RACK\24-14F-PS

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Pegasus Solar Inc.
506 West Ohio Avenue
Richmond CA. 94804
Phone: (510) 210-3797
www.pegasussolar.com

Revisions:

no	date	by	description

date: 04-10-24

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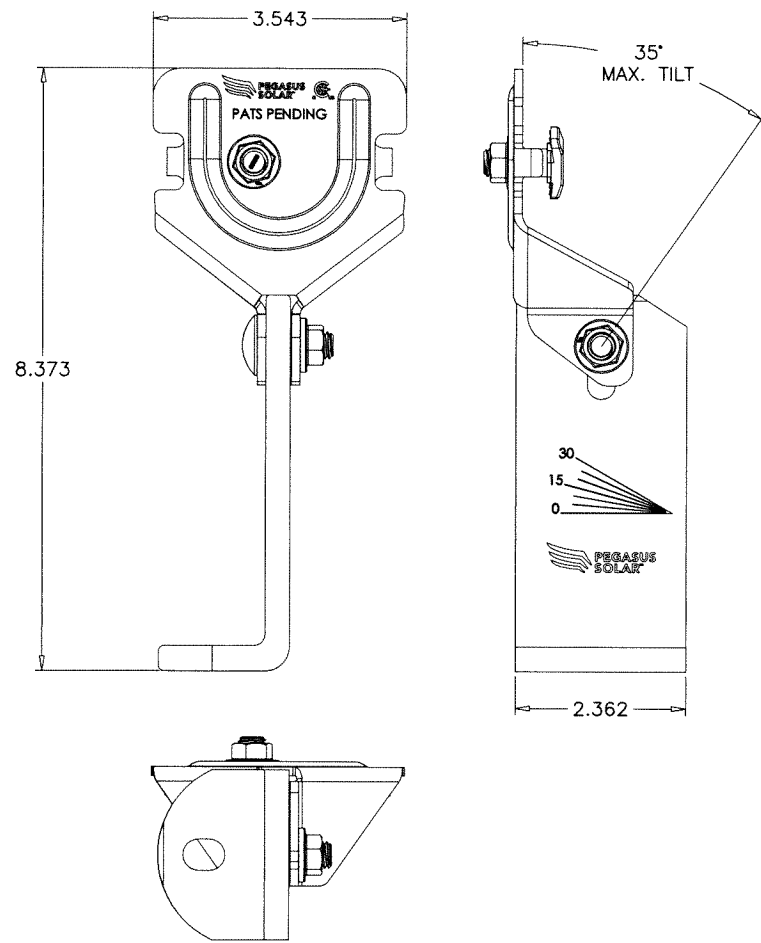
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chk. by:

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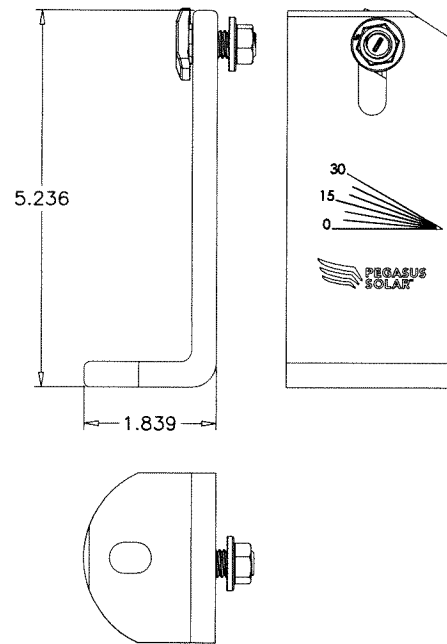
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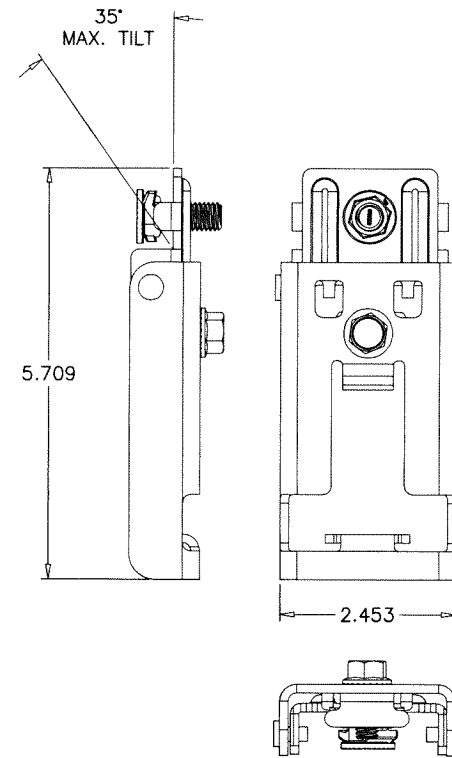
LOWER ASSEMBLY TILT LEG & L-FOOT MOUNT

ALUMINUM
(Fy MIN. = 19 KSI)
(Fu MIN. = 30 KSI)



L-FOOT MOUNT

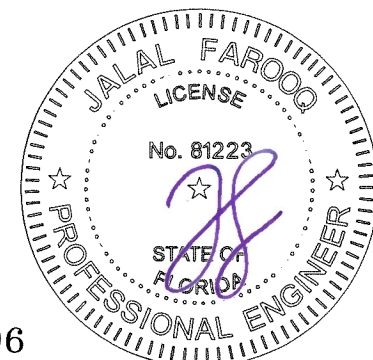
ALUMINUM
(Fy MIN. = 19 KSI)
(Fu MIN. = 30 KSI)



UPPER ASSEMBLY TILT LEG

ALUMINUM
(Fy MIN. = 19 KSI)
(Fu MIN. = 30 KSI)

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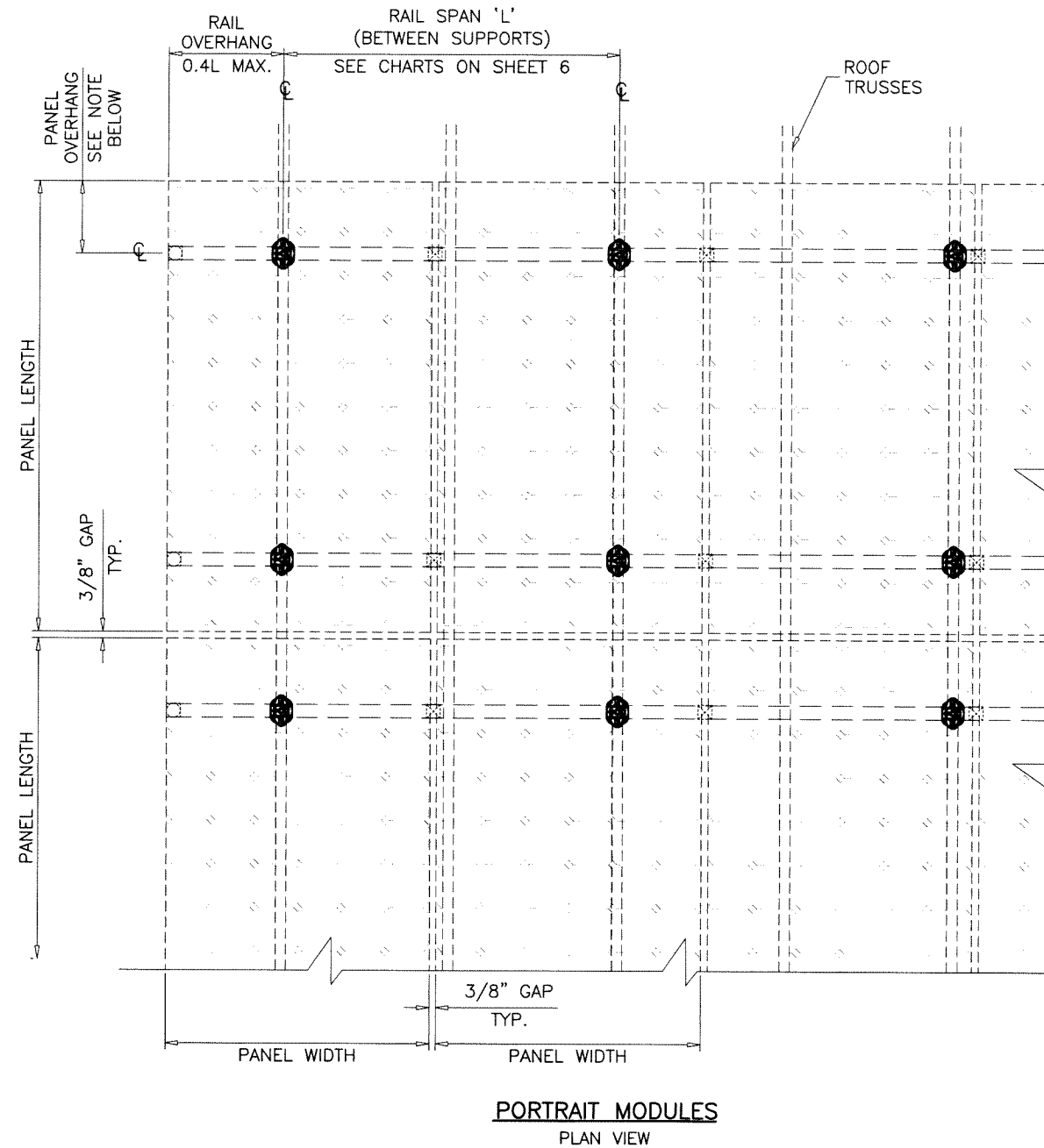
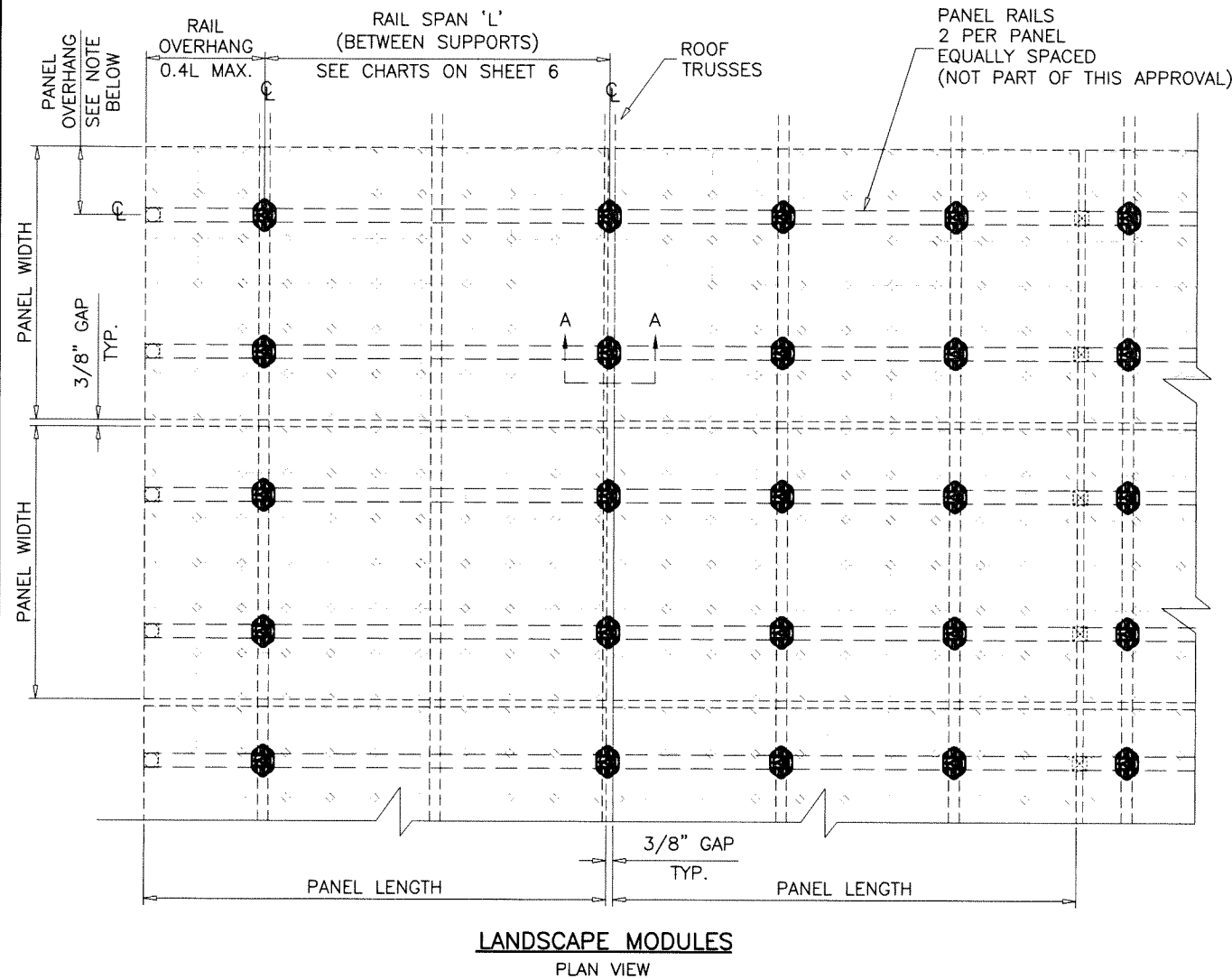
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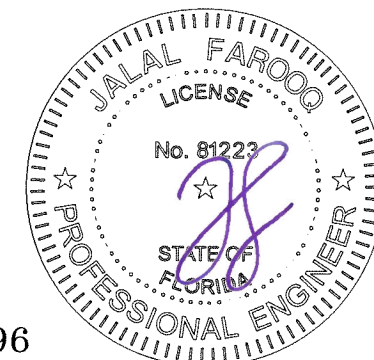
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sheet 3 of 8



NOTES:
PANEL OVERHANG AS PER PANEL MANUFACTURER'S INSTRUCTIONS.
SHOULD BE EQUAL ON BOTH SIDES OF PANELS

Sealed: 5/2/24



INSTAFLASH MOUNT WITH INSTATILT

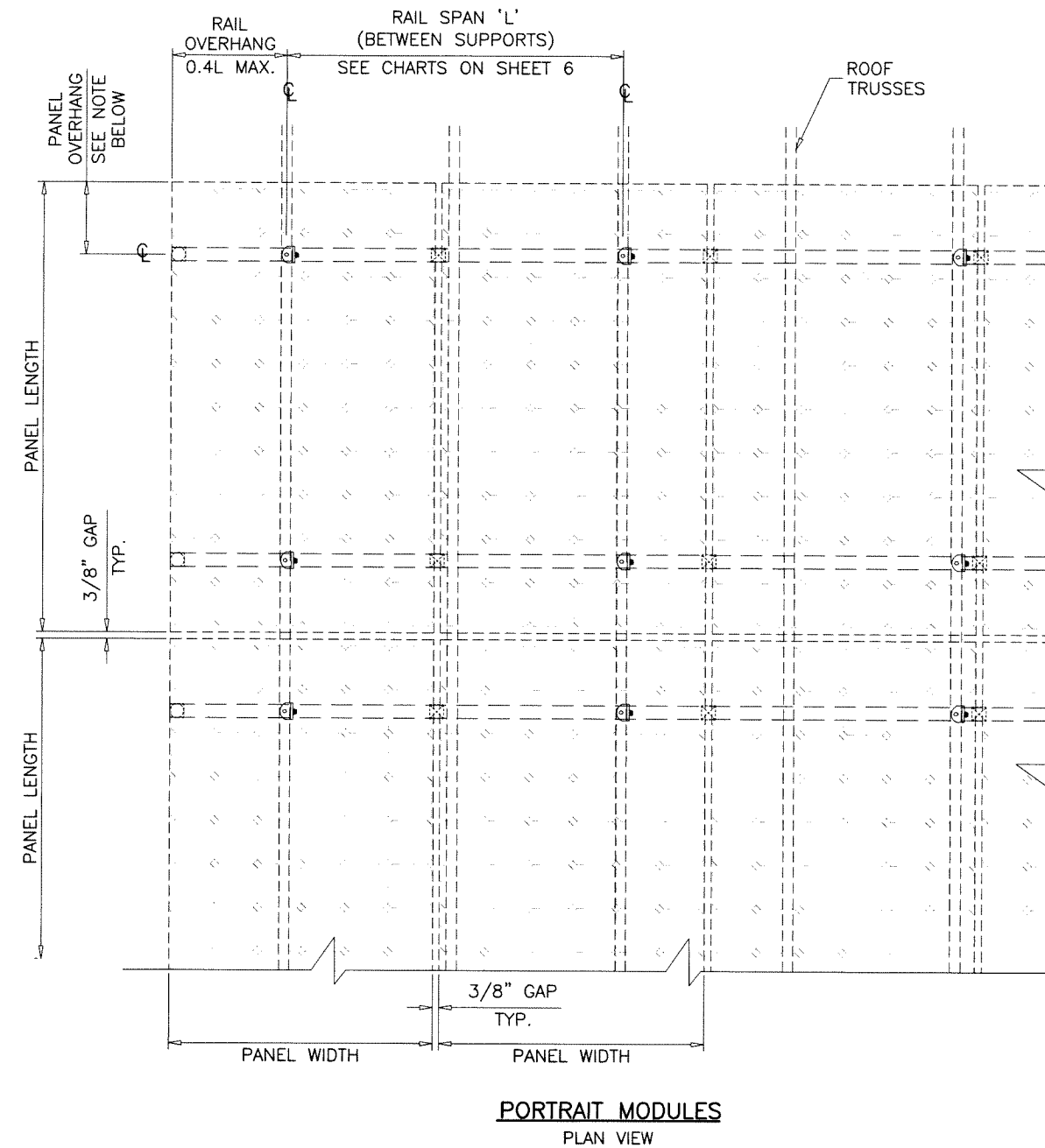
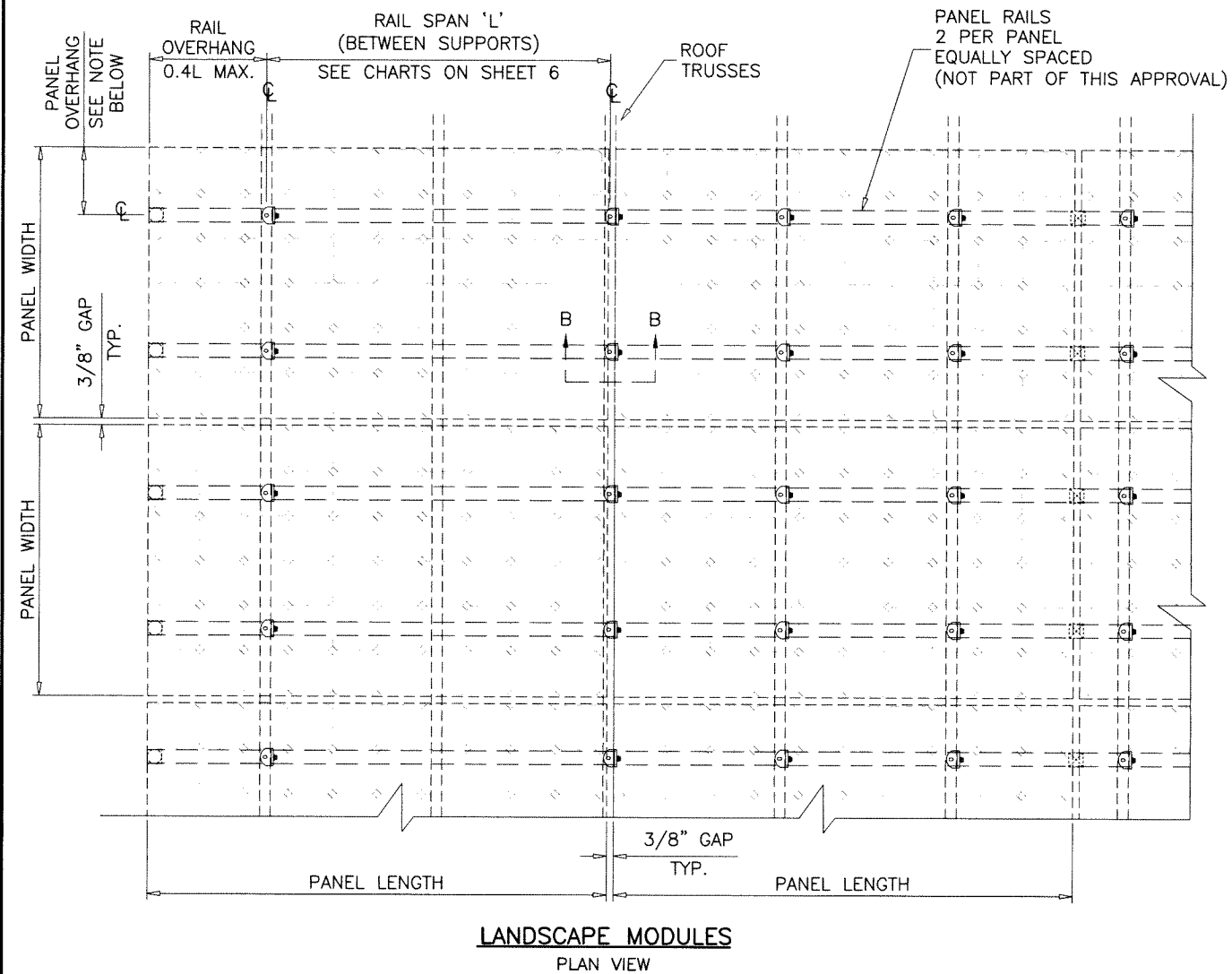
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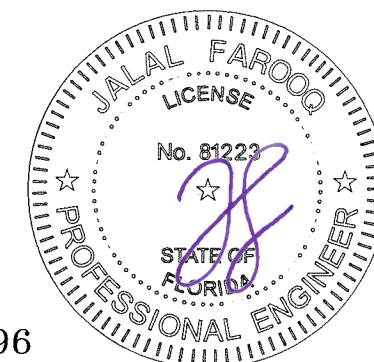
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sheet 4 of 8



NOTES:
PANEL OVERHANG AS PER PANEL MANUFACTURER'S INSTRUCTIONS.
SHOULD BE EQUAL ON BOTH SIDES OF PANELS

Sealed: 5/2/24



L-FOOT MOUNT WITH TILT LEG

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ROOF MOUNTS DESIGN LOAD CAPACITY – PSF (PORTRAIT MODULES)				
PANEL LENGTH	SPAN 'L'	TILT ANGLE UP TO 5°	TILT ANGLE BETWEEN 5°–15°	TILT ANGLE BETWEEN 15°–35°
69–1/2"	16"	35.2	23.8	15.2
	24"	23.6	16.0	10.3
	32"	17.9	12.2	–
	48"	12.1	–	–
	64"	–	–	–
	72"	–	–	–
80"	16"	30.6	20.8	13.3
	24"	20.6	14.0	–
	32"	15.6	10.6	–
	48"	10.6	–	–
	64"	–	–	–
	72"	–	–	–

ROOF MOUNTS DESIGN LOAD CAPACITY – PSF (PORTRAIT MODULES)				
PANEL LENGTH	SPAN 'L'	TILT ANGLE UP TO 5°	TILT ANGLE BETWEEN 5°-15°	TILT ANGLE BETWEEN 15°-35°
69-1/2"	16"	51.5	42.8	34.2
	24"	35.1	29.2	23.3
	32"	26.9	22.4	17.8
	48"	18.7	15.6	12.4
	64"	14.7	12.2	—
	72"	13.3	11.0	—
80"	16"	45.1	37.4	29.9
	24"	30.8	25.6	20.4
	32"	23.7	19.7	15.7
	48"	16.6	13.8	10.9
	64"	13.0	10.8	—
	72"	11.9	—	—

ROOF MOUNTS DESIGN LOAD CAPACITY – PSF (LANDSCAPE MODULES)				
PANEL LENGTH	SPAN 'L'	TILT ANGLE UP TO 5°	TILT ANGLE BETWEEN 5°-15°	TILT ANGLE BETWEEN 15°-35°
80"	16"	59.1	39.9	25.3
	24"	39.6	26.8	17.0
	32"	29.8	20.2	12.9
	48"	20.1	13.6	–
	64"	15.2	10.4	–
	72"	13.6	–	–

ROOF MOUNTS DESIGN LOAD CAPACITY – PSF (LANDSCAPE MODULES)				
PANEL LENGTH	SPAN 'L'	TILT ANGLE UP TO 5°	TILT ANGLE BETWEEN 5°-15°	TILT ANGLE BETWEEN 15°-35°
80"	16"	85.5	69.3	50.9
	24"	57.8	46.8	34.3
	32"	43.9	35.6	26.0
	48"	30.1	24.4	17.8
	64"	23.1	18.7	13.6
	72"	20.8	16.9	12.2

A circular professional engineer seal for Jalal Farooq. The outer ring contains the text "JALAL FAROOQ" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. Inside the ring, the word "LICENSE" is at the top, "No. 81223" is in the center, and "STATE OF FLORIDA" is at the bottom, also separated by two stars. A purple signature is written over the center of the seal.

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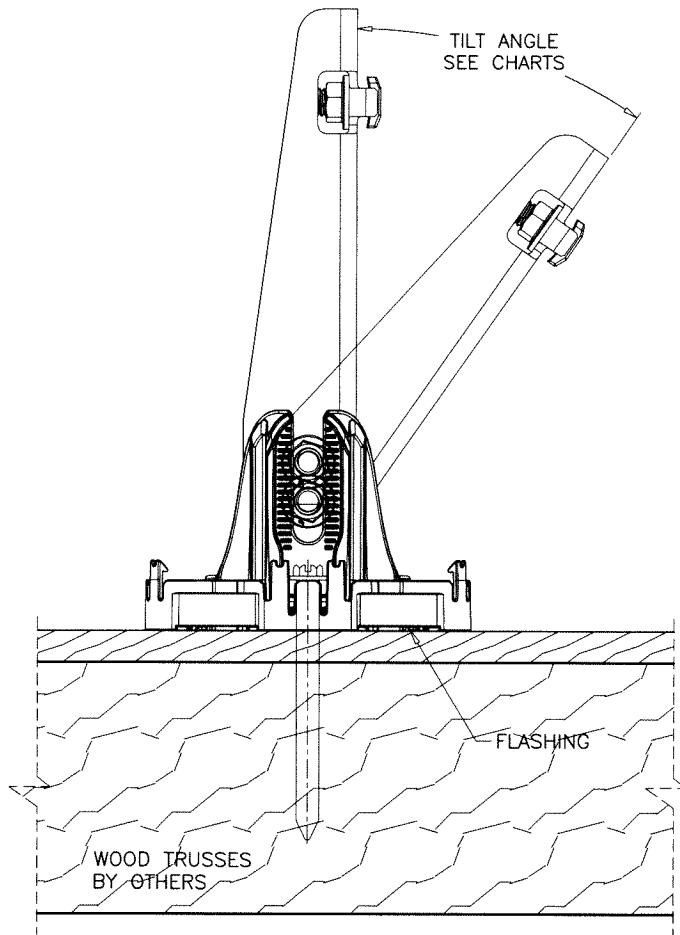
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ROOF TOP PV MOUNTING SYSTEM WITH TILT

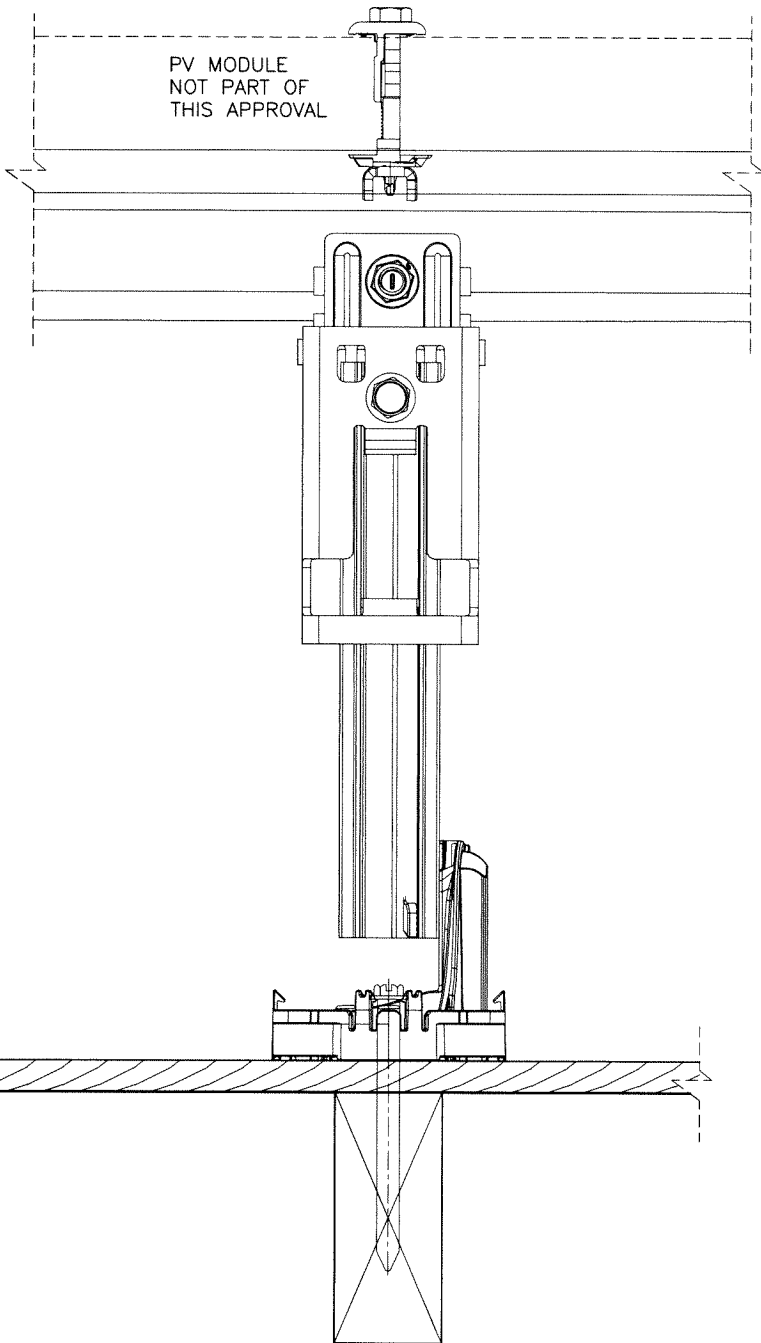
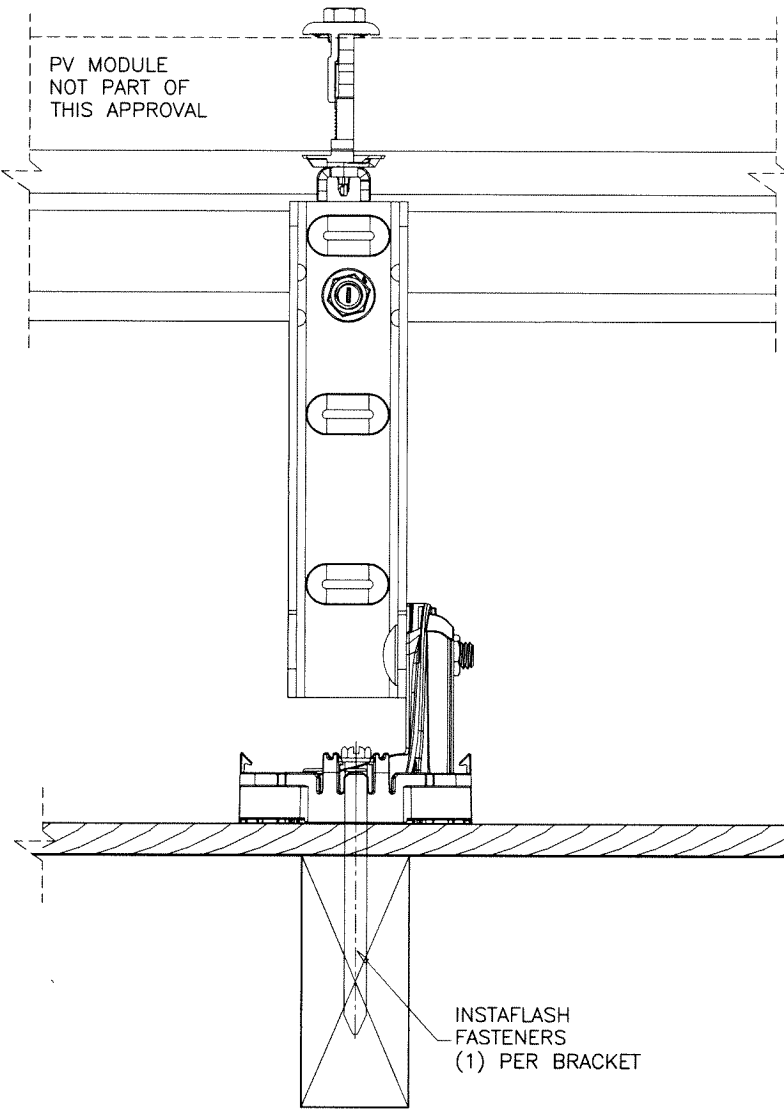
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INSTAFLASH MOUNT W/ INSTATILT



SECTION A-A

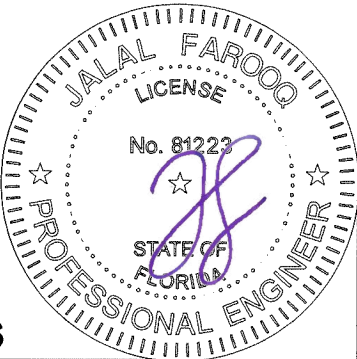


INSTAFLASH MOUNT FASTENERS:

5/16" X 4" ST/ST LAG SCREWS (Fy = 65 KSI MIN.)
2-1/2" MIN. THREAD PENETRATION INTO WOOD TRUSSES
CENTERED AT WOOD TRUSSES (SG = 0.50 MIN.)

WIND LOAD UPLIFT RESISTANCE (PERPENDICULAR TO ROOF)	
Ta (UPTO 5 DEGREES TILT) =	352.7 Lbs MAX.
Ta (5-15 DEGREES TILT) =	317.6 Lbs MAX.
Ta (15 TO 35 DEGREES TILT) =	247.3 Lbs MAX.
SHEAR RESISTANCE (PERPENDICULAR TO RAFTER)	
Va (UPTO 15 DEGREES TILT) =	61.2 Lbs MAX.
Va (15 TO 35 DEGREES TILT) =	61.6 Lbs MAX.

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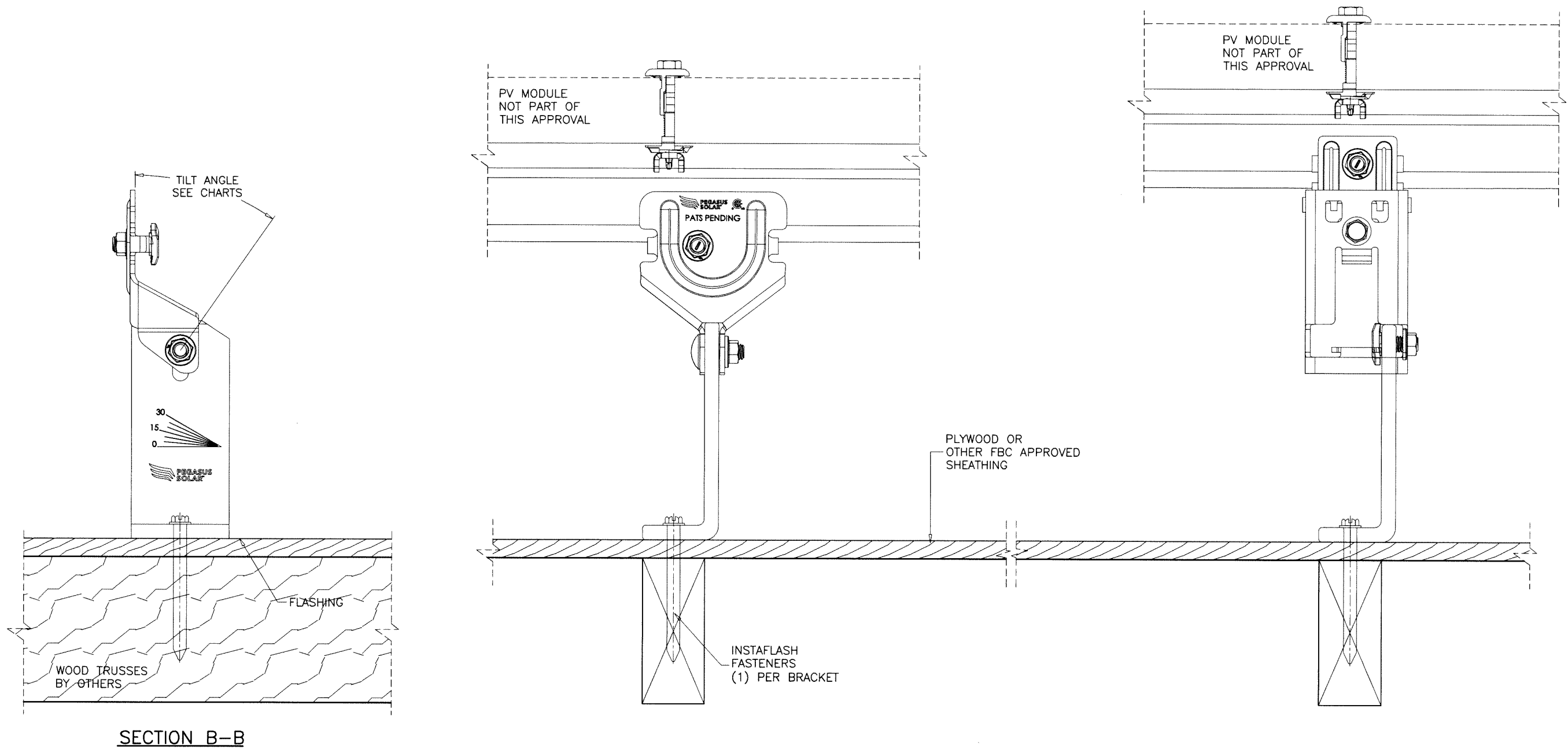
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L-FOOT MOUNT W/ TILT LEG KIT



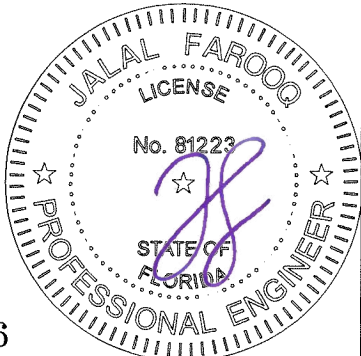
SECTION B-B

Sealed: 5/2/24

INSTAFLASH MOUNT FASTENERS:

5/16" X 3-1/2" ST/ST LAG SCREWS (Fy = 65 KSI MIN.)
2-1/2" MIN. THREAD PENETRATION INTO WOOD TRUSSES
CENTERED AT WOOD TRUSSES (SG = 0.50 MIN.)

WIND LOAD UPLIFT RESISTANCE (PERPENDICULAR TO ROOF)	
Ta (UPTO 15 DEGREES TILT)	= 307.5 Lbs MAX.
Ta (15 TO 35 DEGREES TILT)	= 330.1 Lbs MAX.
SHEAR RESISTANCE (PERPENDICULAR TO RAFTER)	
Va (UPTO 5 DEGREES TILT)	= 182.9 Lbs MAX.
Va (5 TO 15 DEGREES TILT)	= 172.3 Lbs MAX.
Va (15 TO 35 DEGREES TILT)	= 151.2 Lbs MAX.



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sheet 8 of 8