

ROOF TOP PV MOUNTING SYSTEM

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

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)'.

SOLAR PANELS TO BE INSTALLED PARALLEL TO THE ROOF SURFACE WITH A TOLERANCE OF LESS THAN 2 DEGREES.

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

INSTRUCTIONS:

USE CHARTS AS FOLLOWS.

- STEP 1

DETERMINE DESIGN WIND LOAD REQUIREMENT BASED ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE USING APPLICABLE ASCE 7 STANDARD.
- STEP 2

SELECT LIGHT RAIL OR MAX. RAIL FOR REQUIRED LOADS FROM LANDSCAPE OR PORTRAIT RAIL CAPACITY CHARTS SHOWN ON SHEET 6.
- STEP 3

VERIFY HIDDEN & MULTI-CLAMP CAPACITY USING CHART ON SHEET 6.
- STEP 4

SELECT ROOF MOUNT CAPACITY FOR LANDSCAPE OR PORTRAIT INSTALLATIONS USING CHARTS ON SHEETS 7 THRU 9 WITH RATING MORE THAN DESIGN LOAD SPECIFIED IN STEP 1 ABOVE.
- STEP 5

THE LOWEST VALUE RESULTING FROM STEPS 2, 3 AND 4 SHALL APPLY TO ENTIRE SYSTEM.

Sealed: 8/14/2024

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.

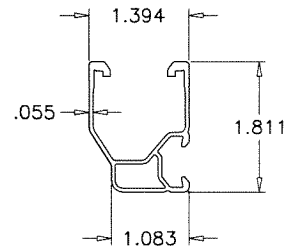


PV PANELS NOT PART OF THIS APPROVAL. FOR PANEL DETAILS, GENERAL NOTES, COMPONENT SIZES, FIRE AND ELECTRICAL SAFETY STANDARDS, PANEL CONNECTION TO MOUNTS AND INSTALLATION REQUIREMENTS/LIMITATIONS SEE CORRESPONDING FLA. APPROVAL DWGS.

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100
WWW.AFCENG.COM
FBPE #3538
SOLAR-RACK\23-37F-PS

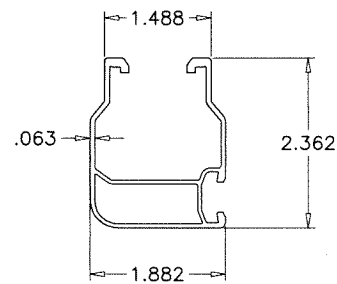
ROOF TOP PV MOUNTING SYSTEM
Pegasus Solar Inc.
506 West Ohio Avenue
Richmond CA. 94804
Phone: (510) 210-3797
www.pegasussolar.com

revisions:	no	date	by	description
	A	10.12.23		SCISSOR MOUNT ADDED
	B	07.10.24		INSTAFASH 2 ADDED
date:	08-08-23	scale:	1/2"=1'-0"	
dr. by:	TARIQ	chk. by:		
drawing no.	23-37F			
sheet	1 of 12			



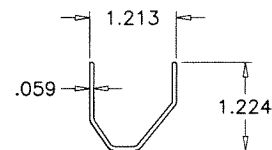
LIGHT RAIL

6000 SERIES ALUMINUM
(Fy MIN. = 35.0 KSI)
(Fu MIN. = 38.0 KSI)
(Kt = 1.0)



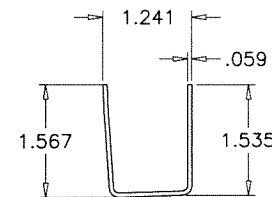
MAX. RAIL

6000 SERIES ALUMINUM
(Fy MIN. = 35.0 KSI)
(Fu MIN. = 38.0 KSI)
(Kt = 1.0)



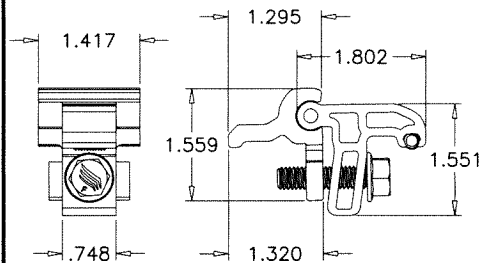
LIGHT RAIL SPLICE

300 SERIES ST. STEEL OR EQUIVALENT
(Fy MIN. = 110.0 KSI)
(Fu MIN. = 150.0 KSI)



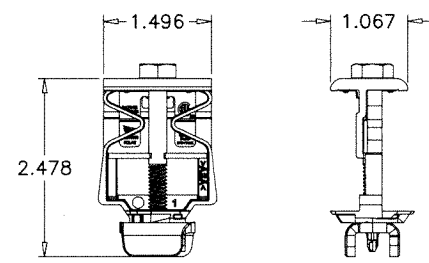
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300 SERIES ST. STEEL OR EQUIVALENT
(Fy MIN. = 110.0 KSI)
(Fu MIN. = 150.0 KSI)



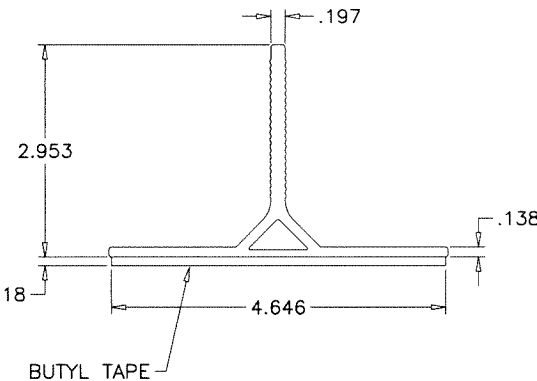
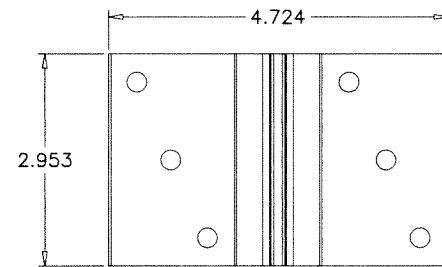
HIDDEN END CLAMP

6000 SERIES ALUMINUM
(Fy MIN. = 35.0 KSI)
(Fu MIN. = 38.0 KSI)



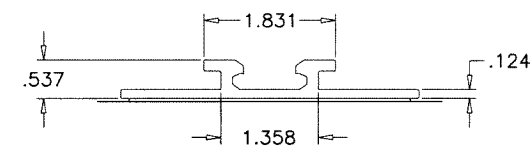
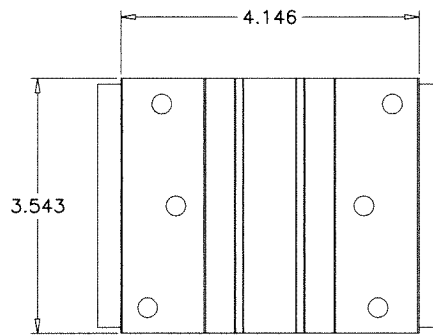
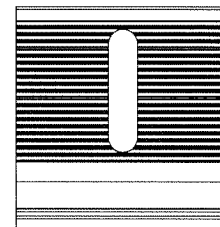
MULTI-CLAMP

6000 SERIES ALUMINUM
(Fy MIN. = 35.0 KSI)
(Fu MIN. = 38.0 KSI)



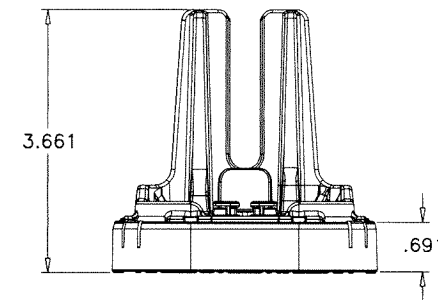
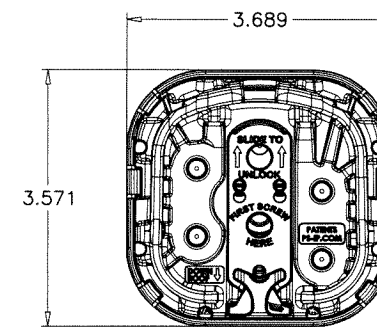
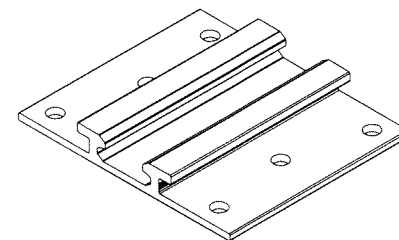
Butyl-Foot MOUNT

6000 SERIES ALUMINUM
(Fy MIN. = 35.0 KSI)
(Fu MIN. = 38.0 KSI)



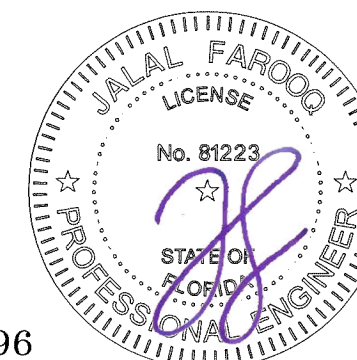
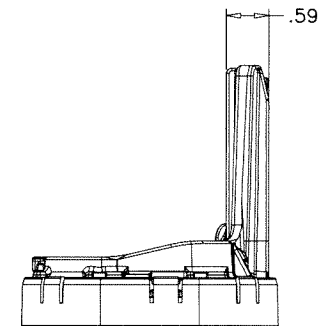
SCISSOR MOUNT ASSEMBLY

6000 SERIES ALUMINUM
(Fy MIN. = 35.0 KSI)
(Fu MIN. = 38.0 KSI)



INSTAFLASH 2 MOUNT

CAST ALUMINUM
(Fy MIN. = 23 KSI)
(Fu MIN. = 47 KSI)



Sealed: 8/14/2024

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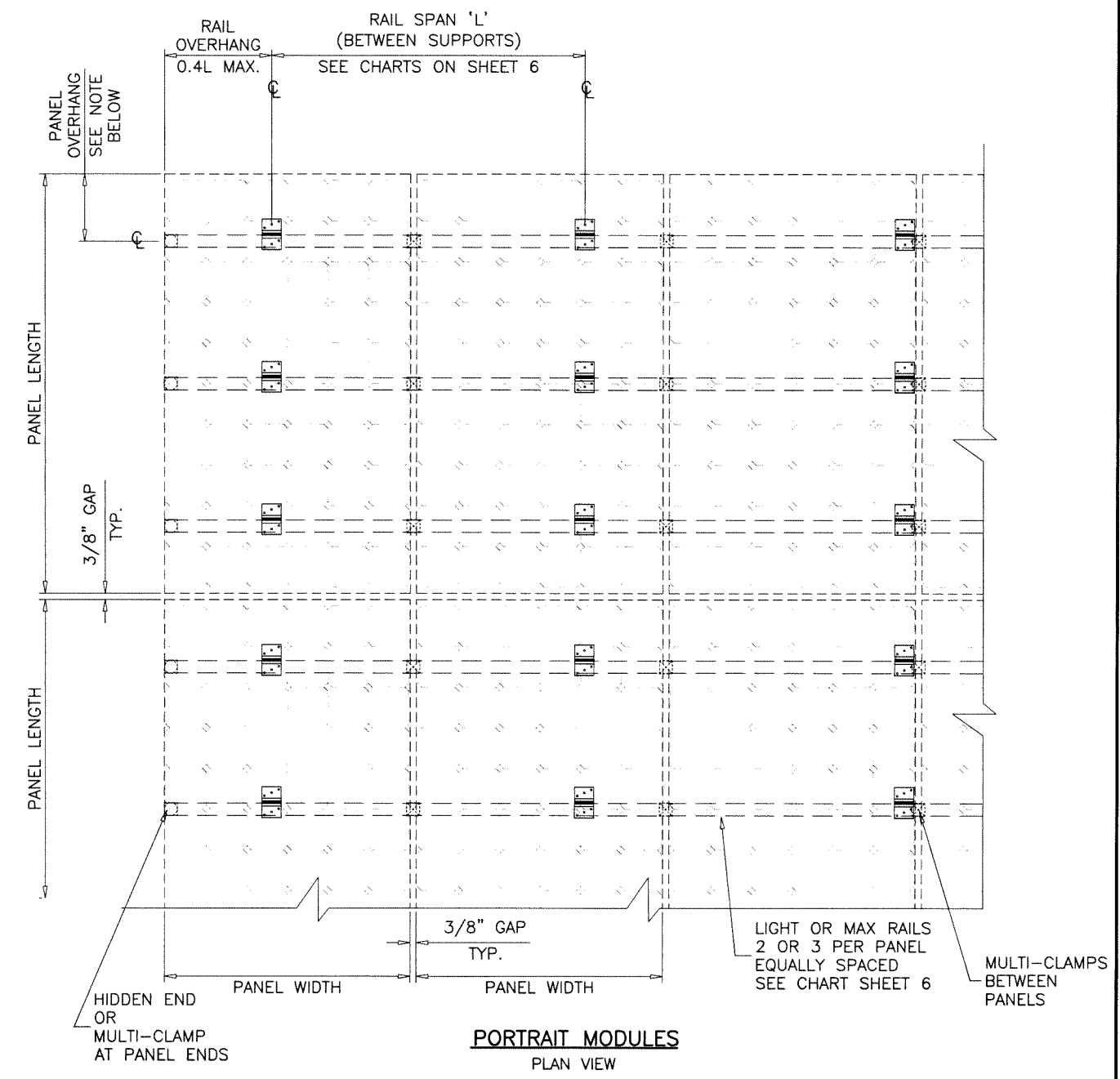
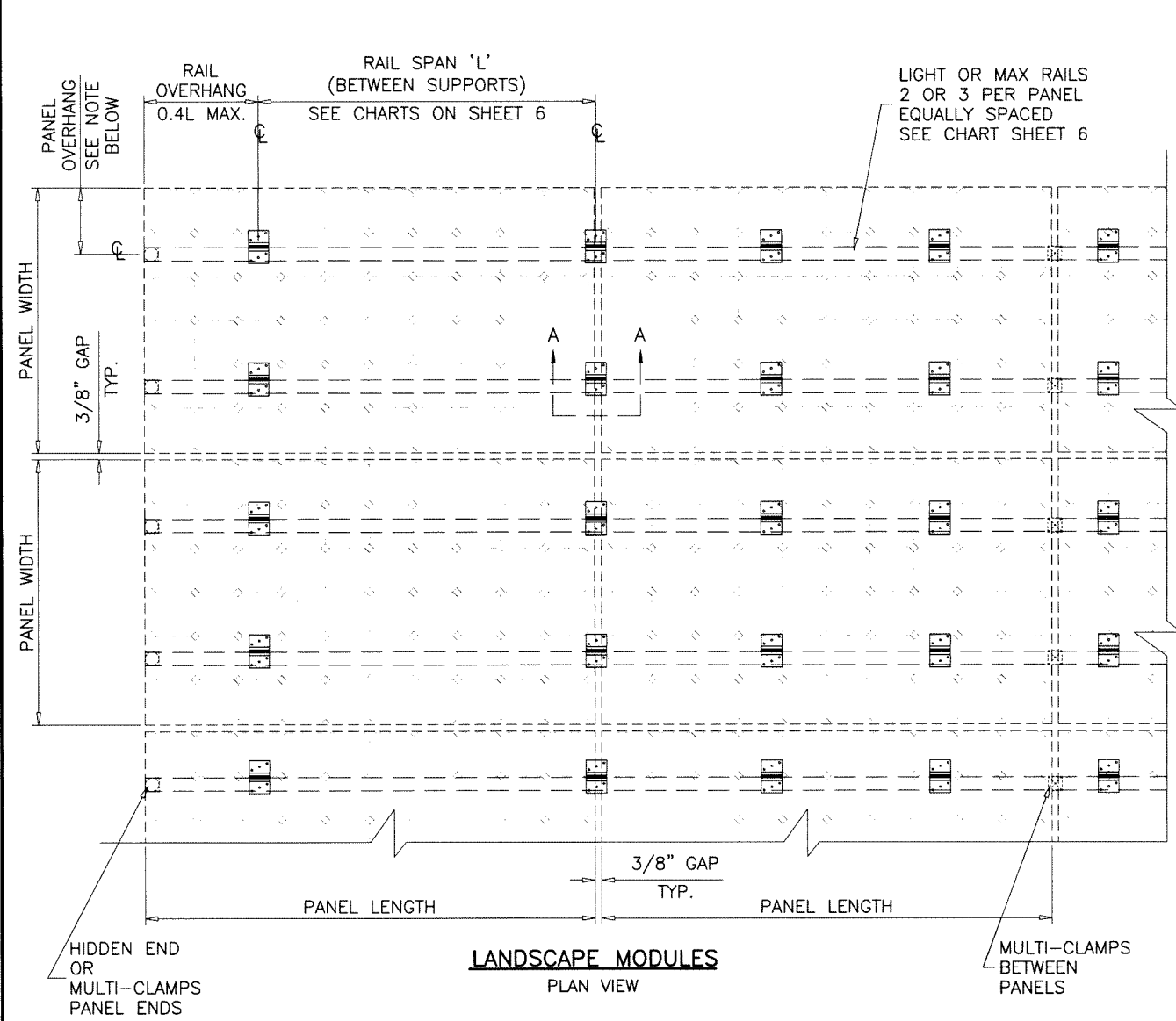
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revisions:		by description	
no	date	no	date

date: 08-08-23
scale: 3/8" = 1"
dr. by: TARIQ
chk. by:

drawing no.
23-37F
sheet 2 of 12



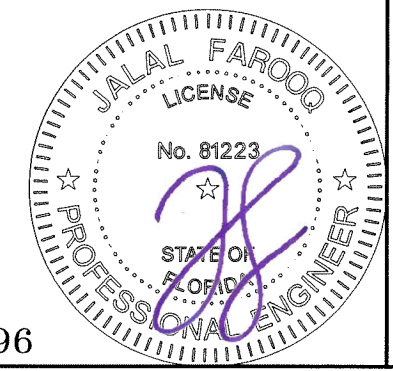
NOTES:
 PANEL OVERHANG AS PER PANEL MANUFACTURER'S INSTRUCTIONS.
 SHOULD BE EQUAL ON BOTH SIDES OF PANELS
 FOR 3 RAILS SUPPORTED PANELS, OVERHANGS TO BE
 BETWEEN 12-20% OF PANEL LENGTH OR WIDTH.

RAILS CAN BE JOINED WITH 6.9" LONG SPLICE TO ACHIEVE REQUIRED LENGTHS.
 SPLICE JOINTS TO BE ANYWHERE ALONG THE RAIL EXCEPT NO PART OF THE
 SPLICE SHOULD BE WITHIN THE RAIL CANTILEVER.

Butyl-Foot MOUNT

Sealed: 8/14/2024

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revisions:	
no	date by description

date: 08-08-23

scale: 1/2"=1'-0"

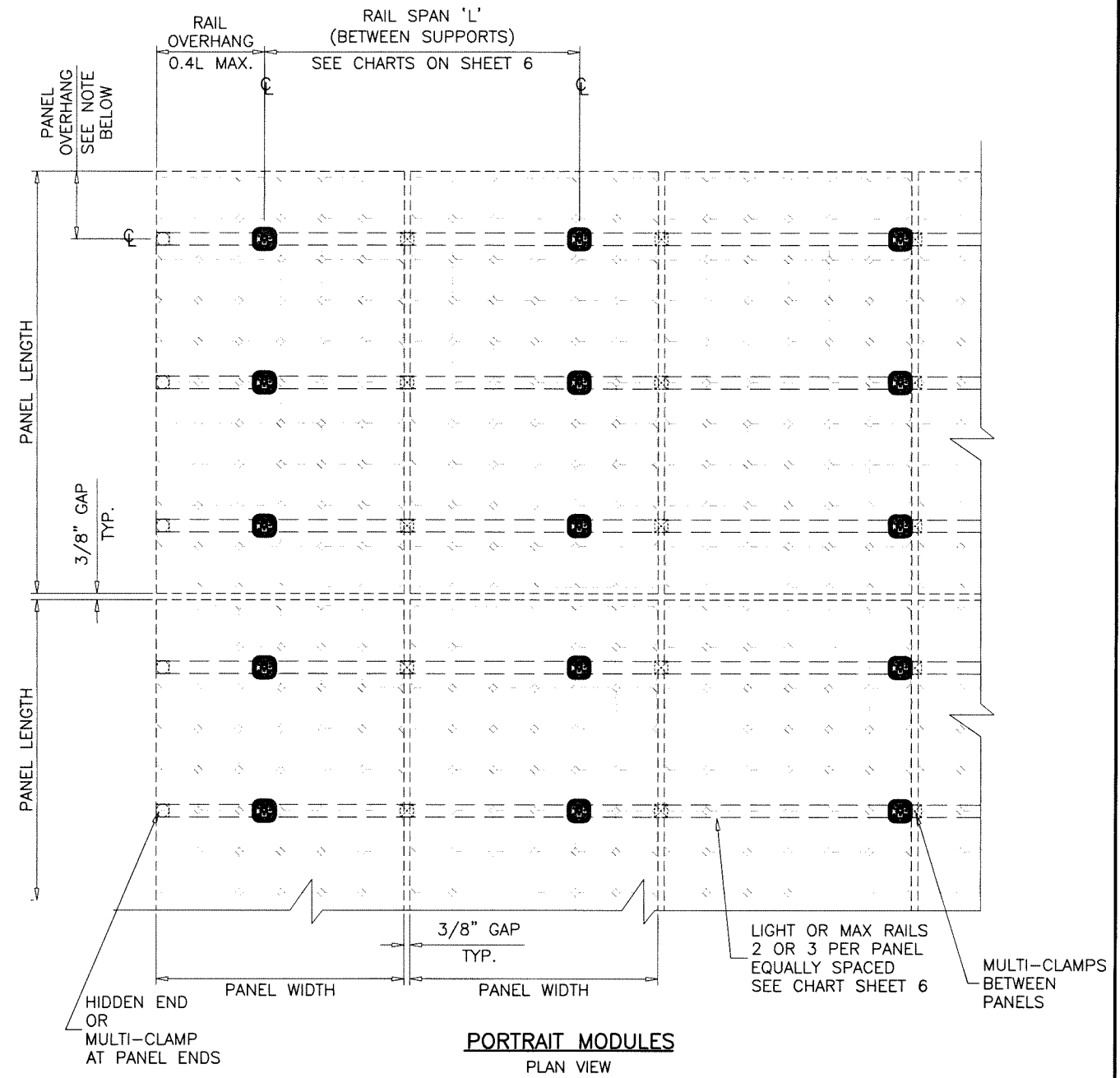
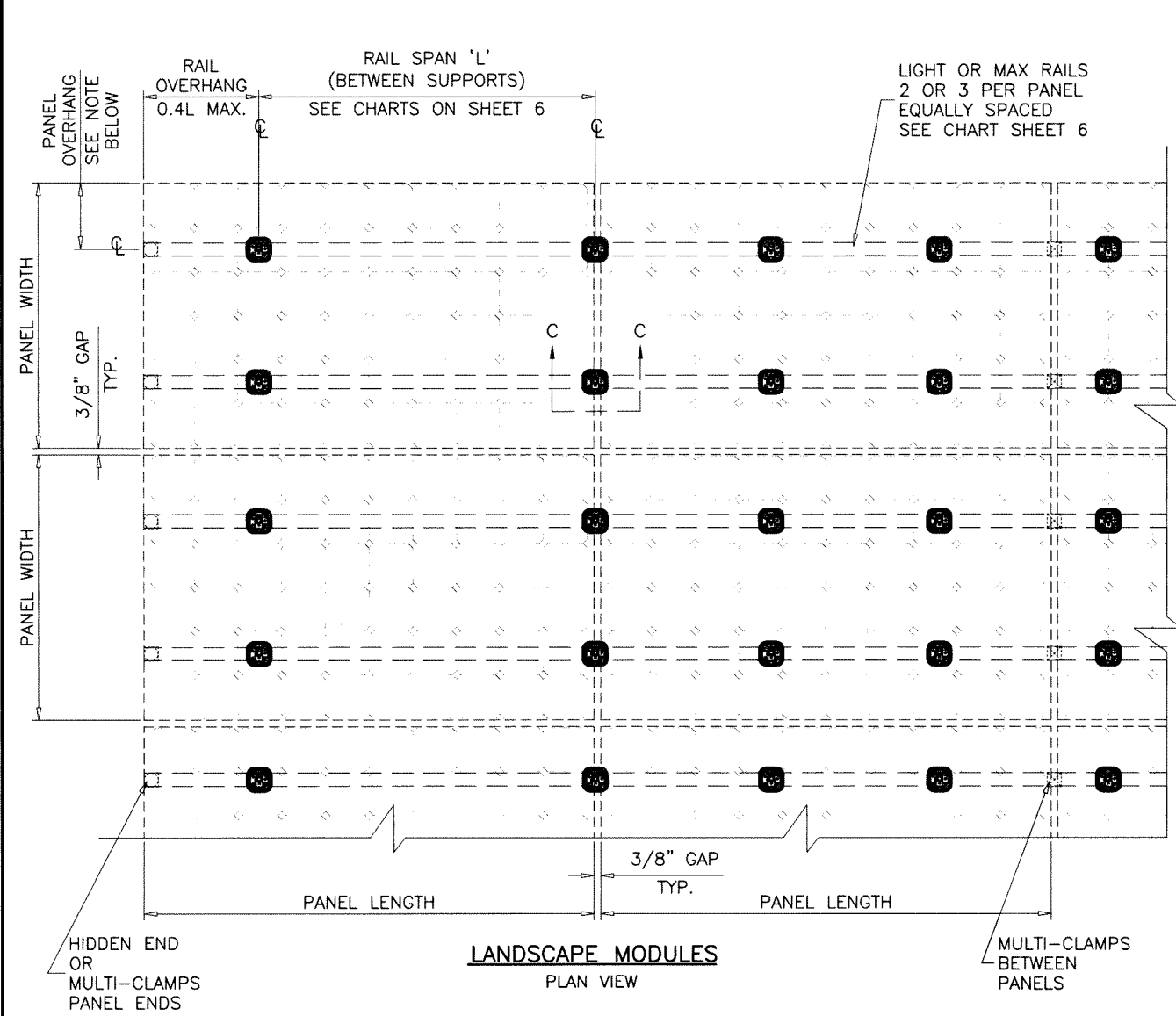
dr. by: TARIQ

chk. by:

drawing no.

23-37F

sheet 3 of 12

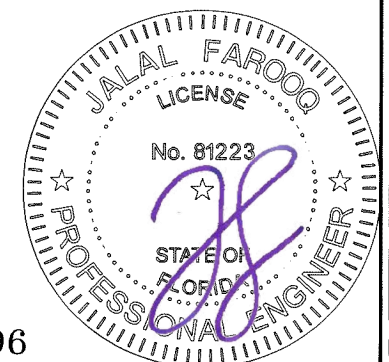


NOTES:
 PANEL OVERHANG AS PER PANEL MANUFACTURER'S INSTRUCTIONS.
 SHOULD BE EQUAL ON BOTH SIDES OF PANELS
 FOR 3 RAILS SUPPORTED PANELS, OVERHANGS TO BE
 BETWEEN 12-20% OF PANEL LENGTH OR WIDTH.
 RAILS CAN BE JOINED WITH 6.9" LONG SPLICE TO ACHIEVE REQUIRED LENGTHS.
 SPLICE JOINTS TO BE ANYWHERE ALONG THE RAIL EXCEPT NO PART OF THE
 SPLICE SHOULD BE WITHIN THE RAIL CANTILEVER.

INSTAFLASH 2 MOUNT

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drawing no.
23-37F
 sheet 5 of 12

LIGHT RAIL & MAX. RAIL

RAILS DESIGN LOAD CAPACITY – PSF (LANDSCAPE MODULES)												
PANEL LENGTH	NUMBER OF RAILS	SPAN 'L'	FLAT ROOFS		ROOF SLOPES UP TO 7°		ROOF SLOPES 8° TO 20°		ROOF SLOPES 21° TO 27°		ROOF SLOPES 28° TO 45°	
			LIGHT RAIL	MAX. RAIL	LIGHT RAIL	MAX. RAIL	LIGHT RAIL	MAX. RAIL	LIGHT RAIL	MAX. RAIL	MAX. RAIL	LIGHT RAIL
69–1/2"	2	16"	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0
		24"	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0
		32"	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0
		48"	64.0	112.0	63.5	111.5	62.4	110.6	61.7	110.0	59.9	108.4
		64"	37.7	64.7	37.2	64.3	36.1	63.3	35.5	62.7	33.7	61.1
		72"	30.7	52.0	30.1	51.5	29.0	50.6	28.4	50.0	26.6	48.4
	3	16"	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0
		24"	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0
		32"	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0
		48"	75.7	115.0	75.2	115.0	74.1	115.0	73.4	115.0	71.7	115.0
		64"	44.4	76.6	43.8	76.2	42.7	75.2	42.1	74.6	40.3	73.0
		72"	35.9	61.4	35.4	60.9	34.2	60.0	33.6	59.4	31.8	57.8
80"	2	16"	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
		24"	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
		32"	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
		48"	64.0	76.7	63.5	76.7	62.4	76.7	61.7	76.7	59.9	76.7
		64"	37.7	64.7	37.2	64.3	36.1	63.3	35.5	62.7	33.7	61.1
		72"	30.7	52.0	30.1	51.5	29.0	50.6	28.4	50.0	26.6	48.4
	3	16"	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0
		24"	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0
		32"	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0
		48"	75.7	115.0	75.2	115.0	74.1	115.0	73.4	115.0	71.7	115.0
		64"	44.4	76.6	43.8	76.2	42.7	75.2	42.1	74.6	40.3	73.0
		72"	35.9	61.4	35.4	60.9	34.2	60.0	33.6	59.4	31.8	57.8

LIMIT MAXIMUM POSITIVE(+) LOADS TO 75.0 PSF

LIGHT RAIL & MAX. RAIL

RAILS DESIGN LOAD CAPACITY – PSF (PORTRAIT MODULES)												
PANEL LENGTH	NUMBER OF RAILS	SPAN 'L'	FLAT ROOFS		ROOF SLOPES UP TO 7°		ROOF SLOPES 8° TO 20°		ROOF SLOPES 21° TO 27°		ROOF SLOPES 28° TO 45°	
			LIGHT RAIL	MAX. RAIL	LIGHT RAIL	MAX. RAIL	LIGHT RAIL	MAX. RAIL	LIGHT RAIL	MAX. RAIL	LIGHT RAIL	MAX. RAIL
69–1/2"	2	16"	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0
		24"	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0
		32"	83.8	115.0	83.3	115.0	82.2	115.0	81.5	115.0	79.8	115.0
		48"	39.5	67.9	38.9	67.4	37.8	66.4	37.2	65.8	35.4	64.2
		64"	24.0	39.9	23.4	39.5	22.3	38.5	21.7	37.9	19.9	36.3
		72"	19.8	32.4	19.2	31.9	18.1	31.0	17.5	30.4	15.7	28.8
	3	16"	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0
		24"	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0
		32"	99.5	115.0	98.9	115.0	97.8	115.0	97.2	115.0	95.4	115.0
		48"	46.4	80.4	45.9	79.9	44.8	78.9	44.1	78.4	42.4	76.7
		64"	27.9	47.0	27.3	46.5	26.2	45.5	25.6	44.9	23.8	43.3
		72"	22.9	37.9	22.3	37.5	21.2	36.5	20.6	35.9	18.8	34.3
80"	2	16"	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
		24"	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
		32"	73.3	76.7	72.8	76.7	71.7	76.7	71.1	76.7	69.3	76.7
		48"	34.8	59.5	34.3	59.0	33.2	58.0	32.5	57.5	30.8	55.9
		64"	21.3	35.2	20.8	34.8	19.7	33.8	19.0	33.2	17.3	31.6
		72"	17.7	28.7	17.2	28.2	16.1	27.2	15.4	26.6	13.6	25.0
	3	16"	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0
		24"	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0
		32"	86.9	115.0	86.4	115.0	85.3	115.0	84.6	115.0	82.9	115.0
		48"	40.9	70.3	40.3	69.9	39.2	68.9	38.6	68.3	36.8	66.7
		64"	24.7	41.3	24.2	40.9	23.1	39.9	22.4	39.3	20.7	37.7
		72"	20.4	33.5	19.9	33.0	18.7	32.1	18.1	31.5	16.3	29.9

LIMIT MAXIMUM POSITIVE(+) LOADS TO 75.0 PSF

HIDDEN CLAMP & MULTI-CLAMP

CLAMP DESIGN LOAD CAPACITY – PSF (LANDSCAPE & PORTRAIT MODULES)							
PANEL LENGTH	NUMBER OF RAILS	SPAN 'L'	FLAT ROOFS	ROOF SLOPES UP TO 7°	ROOF SLOPES 8° TO 20°	ROOF SLOPES 21° TO 27°	ROOF SLOPES 28° TO 45°
69–1/2"	2	16" TO 72"	72.2	71.2	69.4	68.3	65.7
	3	16" TO 72"	85.5	84.6	82.7	81.7	79.1
80"	2	16" TO 72"	63.2	62.3	60.4	59.4	56.8
	3	16" TO 72"	74.8	73.9	72.0	71.0	68.4

LOADS SHOWN IN CHARTS ABOVE ARE FOR 60 CELLS PANEL (41.1" X 69.5") AND 72 CELLS PANEL (41.1" X 80").

Sealed: 8/14/2024

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drawing no.
23-37F
sheet 6 of 12

a f c

SOLAR-RACK\23-37F-PS

Butyl-Foot MOUNT

ROOF MOUNT DESIGN LOAD CAPACITY – PSF (LANDSCAPE MODULES)							
PANEL LENGTH	NUMBER OF RAILS	SPAN 'L'	FLAT ROOFS	ROOF SLOPES UP TO 7°	ROOF SLOPES 8° TO 20°	ROOF SLOPES 21° TO 27°	ROOF SLOPES 28° TO 45°
69–1/2"	2	16"	67.9	67.7	67.1	66.7	65.5
		24"	46.6	46.4	45.8	45.4	44.2
		32"	36.0	35.7	35.1	34.7	33.5
		48"	25.3	25.1	24.5	24.1	22.9
		64"	20.0	19.7	19.1	18.7	17.5
		72"	18.2	18.0	17.4	17.0	15.8
	3	16"	80.5	80.2	79.6	79.2	78.0
		24"	55.0	54.7	54.1	53.7	52.5
		32"	42.2	42.0	41.4	41.0	39.8
		48"	29.5	29.2	28.6	28.2	27.0
		64"	23.1	22.9	22.3	21.9	20.7
		72"	21.0	20.7	20.1	19.7	18.6
80"	2	16"	67.9	67.7	67.1	66.7	65.5
		24"	46.6	46.4	45.8	45.4	44.2
		32"	36.0	35.7	35.1	34.7	33.5
		48"	25.3	25.1	24.5	24.1	22.9
		64"	20.0	19.7	19.1	18.7	17.5
		72"	18.2	18.0	17.4	17.0	15.8
	3	16"	80.5	80.2	79.6	79.2	78.0
		24"	55.0	54.7	54.1	53.7	52.5
		32"	42.2	42.0	41.4	41.0	39.8
		48"	29.5	29.2	28.6	28.2	27.0
		64"	23.1	22.9	22.3	21.9	20.7
		72"	21.0	20.7	20.1	19.7	18.6

LIMIT MAXIMUM POSITIVE(+) LOADS TO 75.0 PSF

SEE SHEET 10 FOR Butyl-Foot MOUNT INSTALLATION

LOADS SHOWN IN CHARTS ABOVE ARE FOR 60 CELLS PANEL (41.1" X 69.5") AND 72 CELLS PANEL (41.1" X 80").

Butyl-Foot MOUNT

ROOF MOUNT DESIGN LOAD CAPACITY – PSF (PORTRAIT MODULES)							
PANEL LENGTH	NUMBER OF RAILS	SPAN 'L'	FLAT ROOFS	ROOF SLOPES UP TO 7°	ROOF SLOPES 8° TO 20°	ROOF SLOPES 21° TO 27°	ROOF SLOPES 28° TO 45°
69–1/2"	2	16"	41.8	41.6	41.0	40.6	39.4
		24"	29.2	29.0	28.4	28.0	26.8
		32"	22.9	22.7	22.1	21.7	20.5
		48"	16.6	16.4	15.7	15.4	–
	3	16"	49.2	49.0	48.4	48.0	46.8
		24"	34.1	33.9	33.3	32.9	31.7
		32"	26.6	26.4	25.8	25.4	24.2
		48"	19.1	18.8	18.2	17.8	16.6
		64"	15.3	15.1	–	–	–
	2	16"	36.9	36.6	36.0	35.6	34.4
		24"	25.9	25.7	25.0	24.6	23.5
		32"	20.4	20.2	19.6	19.2	18.0
80"		48"	15.0	–	–	–	–
	3	16"	43.3	43.0	42.4	42.0	40.8
		24"	30.2	29.9	29.3	28.9	27.7
		32"	23.6	23.4	22.8	22.4	21.2
		48"	17.1	16.8	16.2	15.8	–

LIMIT MAXIMUM POSITIVE(+) LOADS TO 75.0 PSF

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ROOF TOP PV MOUNTING SYSTEM

Pegasus Solar Inc.
506 West Ohio Avenue
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23-37F

sheet 7 of 12

SOLAR-RACK\23-37F-PS

SCISSOR MOUNT ASSEMBLY

ROOF MOUNT DESIGN LOAD CAPACITY – PSF (LANDSCAPE MODULES)							
PANEL LENGTH	NUMBER OF RAILS	SPAN 'L'	FLAT ROOFS	ROOF SLOPES UP TO 7°	ROOF SLOPES 8° TO 20°	ROOF SLOPES 21° TO 27°	ROOF SLOPES 28° TO 45°
69–1/2"	2	16"	60.4	60.0	59.1	58.5	56.9
		24"	41.6	41.2	40.3	39.7	38.1
		32"	32.2	31.8	30.9	30.3	28.7
		48"	22.8	22.4	21.4	20.9	19.3
		64"	18.1	17.7	16.7	16.2	14.6
		72"	16.5	16.1	15.2	14.6	13.1
	3	16"	71.5	71.0	70.1	69.6	68.0
		24"	49.0	48.6	47.6	47.1	45.5
		32"	37.7	37.3	36.4	35.8	34.3
		48"	26.5	26.1	25.1	24.6	23.0
		64"	20.9	20.4	19.5	18.9	17.4
		72"	19.0	18.6	17.6	17.1	15.5
80"	2	16"	60.4	60.0	59.1	58.5	56.9
		24"	41.6	41.2	40.3	39.7	38.1
		32"	32.2	31.8	30.9	30.3	28.7
		48"	22.8	22.4	21.4	20.9	19.3
		64"	18.1	17.7	16.7	16.2	14.6
		72"	16.5	16.1	15.2	14.6	13.1
	3	16"	71.5	71.0	70.1	69.6	68.0
		24"	49.0	48.6	47.6	47.1	45.5
		32"	37.7	37.3	36.4	35.8	34.3
		48"	26.5	26.1	25.1	24.6	23.0
		64"	20.9	20.4	19.5	18.9	17.4
		72"	19.0	18.6	17.6	17.1	15.5

LIMIT MAXIMUM POSITIVE(+) LOADS TO 75.0 PSF

SCISSOR MOUNT ASSEMBLY

ROOF MOUNT DESIGN LOAD CAPACITY – PSF (PORTRAIT MODULES)							
PANEL LENGTH	NUMBER OF RAILS	SPAN 'L'	FLAT ROOFS	ROOF SLOPES UP TO 7°	ROOF SLOPES 8° TO 20°	ROOF SLOPES 21° TO 27°	ROOF SLOPES 28° TO 45°
69–1/2"	2	16"	37.4	36.9	36.0	35.4	33.9
		24"	26.2	25.8	24.9	24.3	22.8
		32"	20.7	20.3	19.3	18.8	17.2
		48"	15.1	14.7	13.8	13.2	11.6
		64"	12.3	11.9	11.0	10.4	8.9
		72"	11.4	11.0	10.1	9.5	7.9
	3	16"	43.9	43.5	42.5	42.0	40.4
		24"	30.6	30.2	29.2	28.7	27.1
		32"	24.0	23.5	22.6	22.0	20.5
		48"	17.3	16.9	15.9	15.4	13.8
		64"	14.0	13.5	12.6	12.1	10.5
		72"	12.9	12.4	11.5	10.9	9.4
80"	2	16"	33.0	32.6	31.6	31.1	29.5
		24"	23.3	22.9	22.0	21.4	19.8
		32"	18.5	18.1	17.1	16.6	15.0
		48"	13.7	13.2	12.3	11.7	10.2
		64"	11.2	10.8	9.9	9.3	7.8
		72"	10.4	10.0	9.1	8.5	7.0
	3	16"	38.7	38.2	37.3	36.7	35.2
		24"	27.1	26.7	25.7	25.2	23.6
		32"	21.3	20.9	20.0	19.4	17.8
		48"	15.6	15.1	14.2	13.6	12.1
		64"	12.7	12.2	11.3	10.7	9.2
		72"	11.7	11.3	10.3	9.8	8.2

LIMIT MAXIMUM POSITIVE(+) LOADS TO 75.0 PSF

SEE SHEET 11 FOR SCISSOR MOUNT ASSEMBLY INSTALLATION

LOADS SHOWN IN CHARTS ABOVE ARE FOR 60 CELLS PANEL (41.1" X 69.5") AND 72 CELLS PANEL (41.1" X 80").

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ROOF TOP PV MOUNTING SYSTEM

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chk. by:

drawing no.
23-37F

sheet 8 of 12

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INSTAFLASH 2 MOUNT

ROOF MOUNT DESIGN LOAD CAPACITY – PSF (LANDSCAPE MODULES)							
PANEL LENGTH	NUMBER OF RAILS	SPAN 'L'	FLAT ROOFS	ROOF SLOPES UP TO 7°	ROOF SLOPES 8° TO 20°	ROOF SLOPES 21° TO 27°	ROOF SLOPES 28° TO 45°
69–1/2"	2	16"	40.0	39.7	39.1	38.6	37.4
		24"	28.0	27.7	27.1	26.6	25.4
		32"	22.0	21.7	21.1	20.6	19.4
		48"	16.0	15.7	15.1	14.6	13.4
		64"	13.0	12.7	12.1	11.6	10.4
		72"	12.0	11.7	11.1	10.7	9.4
	3	16"	47.0	46.8	46.1	45.7	44.4
		24"	32.7	32.4	31.8	31.3	30.1
		32"	25.5	25.2	24.6	24.2	22.9
		48"	18.3	18.1	17.4	17.0	15.8
		64"	14.8	14.5	13.8	13.4	12.2
		72"	13.6	13.3	12.6	12.2	11.0
80"	2	16"	40.0	39.7	39.1	38.6	37.4
		24"	28.0	27.7	27.1	26.6	25.4
		32"	22.0	21.7	21.1	20.6	19.4
		48"	16.0	15.7	15.1	14.6	13.4
		64"	13.0	12.7	12.1	11.6	10.4
		72"	12.0	11.7	11.1	10.7	9.4
	3	16"	47.0	46.8	46.1	45.7	44.4
		24"	32.7	32.4	31.8	31.3	30.1
		32"	25.5	25.2	24.6	24.2	22.9
		48"	18.3	18.1	17.4	17.0	15.8
		64"	14.8	14.5	13.8	13.4	12.2
		72"	13.6	13.3	12.6	12.2	11.0

LIMIT MAXIMUM POSITIVE(+) LOADS TO 75.0 PSF

INSTAFLASH 2 MOUNT

ROOF MOUNT DESIGN LOAD CAPACITY – PSF (PORTRAIT MODULES)							
PANEL LENGTH	NUMBER OF RAILS	SPAN 'L'	FLAT ROOFS	ROOF SLOPES UP TO 7°	ROOF SLOPES 8° TO 20°	ROOF SLOPES 21° TO 27°	ROOF SLOPES 28° TO 45°
69–1/2"	2	16"	25.3	25.0	24.4	23.9	22.7
		24"	18.2	17.9	17.3	16.8	15.6
		32"	14.6	14.4	13.7	13.3	12.1
		48"	11.1	10.8	10.2	9.7	8.5
		64"	9.3	9.0	8.4	8.0	6.7
		72"	8.7	8.5	7.8	7.4	6.1
	3	16"	29.4	29.2	28.5	28.1	26.9
		24"	21.0	20.7	20.0	19.6	18.4
		32"	16.7	16.4	15.8	15.4	14.1
		48"	12.5	12.2	11.6	11.1	9.9
		64"	10.4	10.1	9.4	9.0	7.8
		72"	9.7	9.4	8.7	8.3	7.1
80"	2	16"	22.5	22.2	21.6	21.1	19.9
		24"	16.3	16.1	15.4	15.0	13.7
		32"	13.2	13.0	12.3	11.9	10.7
		48"	10.2	9.9	9.2	8.8	7.6
		64"	8.6	8.3	7.7	7.3	6.0
		72"	8.1	7.8	7.2	6.8	5.5
	3	16"	26.1	25.8	25.2	24.8	23.5
		24"	18.7	18.5	17.8	17.4	16.1
		32"	15.1	14.8	14.1	13.7	12.5
		48"	11.4	11.1	10.4	10.0	8.8
		64"	9.5	9.3	8.6	8.2	6.9
		72"	8.9	8.6	8.0	7.6	6.3

LIMIT MAXIMUM POSITIVE(+) LOADS TO 75.0 PSF

SEE SHEET 12 FOR INSTAFLASH 2 MOUNT INSTALLATION

LOADS SHOWN IN CHARTS ABOVE ARE FOR 60 CELLS PANEL (41.1" X 69.5") AND 72 CELLS PANEL (41.1" X 80").

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ROOF TOP PV MOUNTING SYSTEM

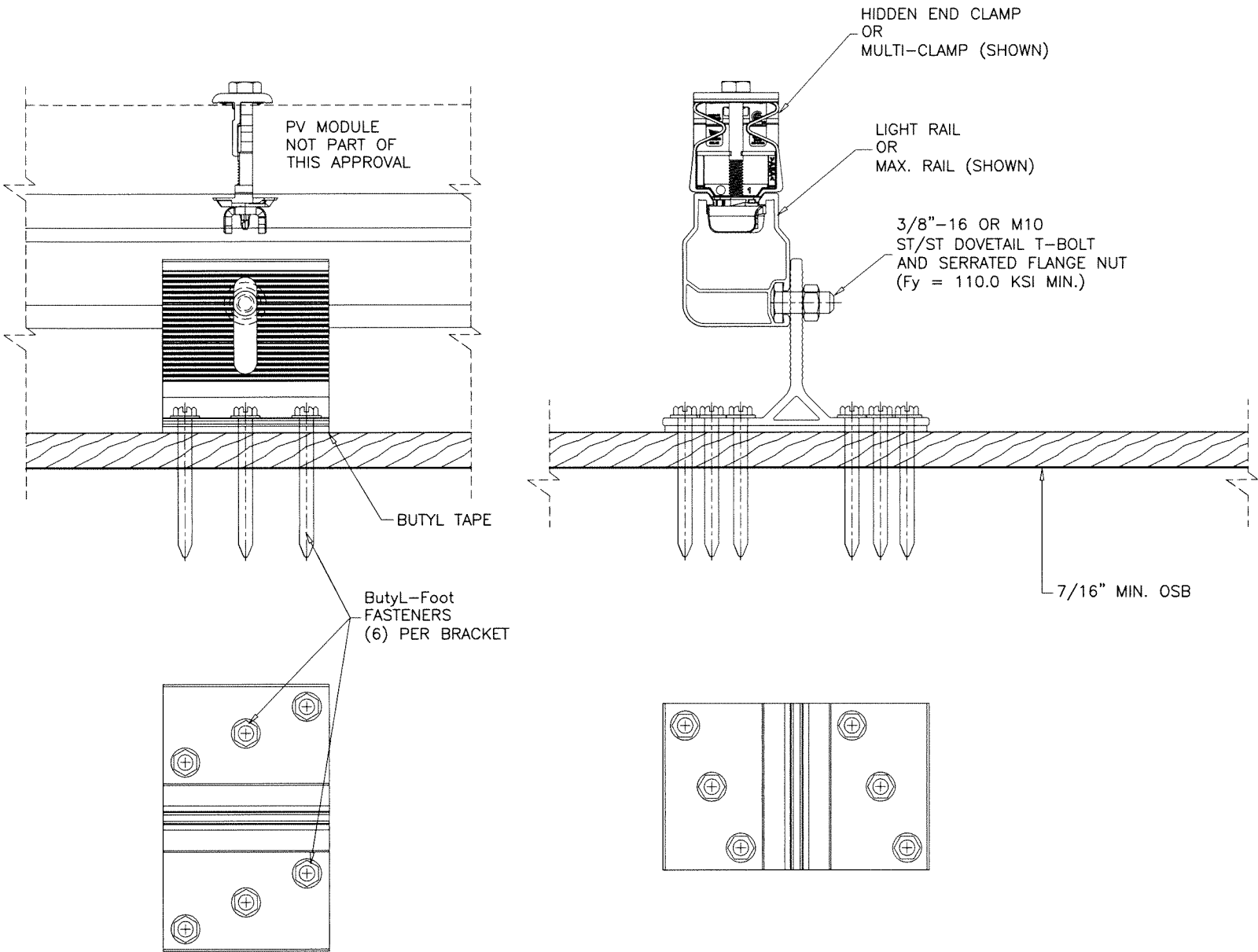
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drawing no.
23-37F
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ButyL-Foot MOUNT



SECTION A-A

ButyL-Foot MOUNT FASTENERS:

#14 X 60mm WOOD SCREWS (Fy = 65 KSI MIN.)

WIND LOAD UPLIFT RESISTANCE (PERPENDICULAR TO ROOF) = 175.2 Lbs MAX.
SHEAR RESISTANCE = 390.6 Lbs MAX.

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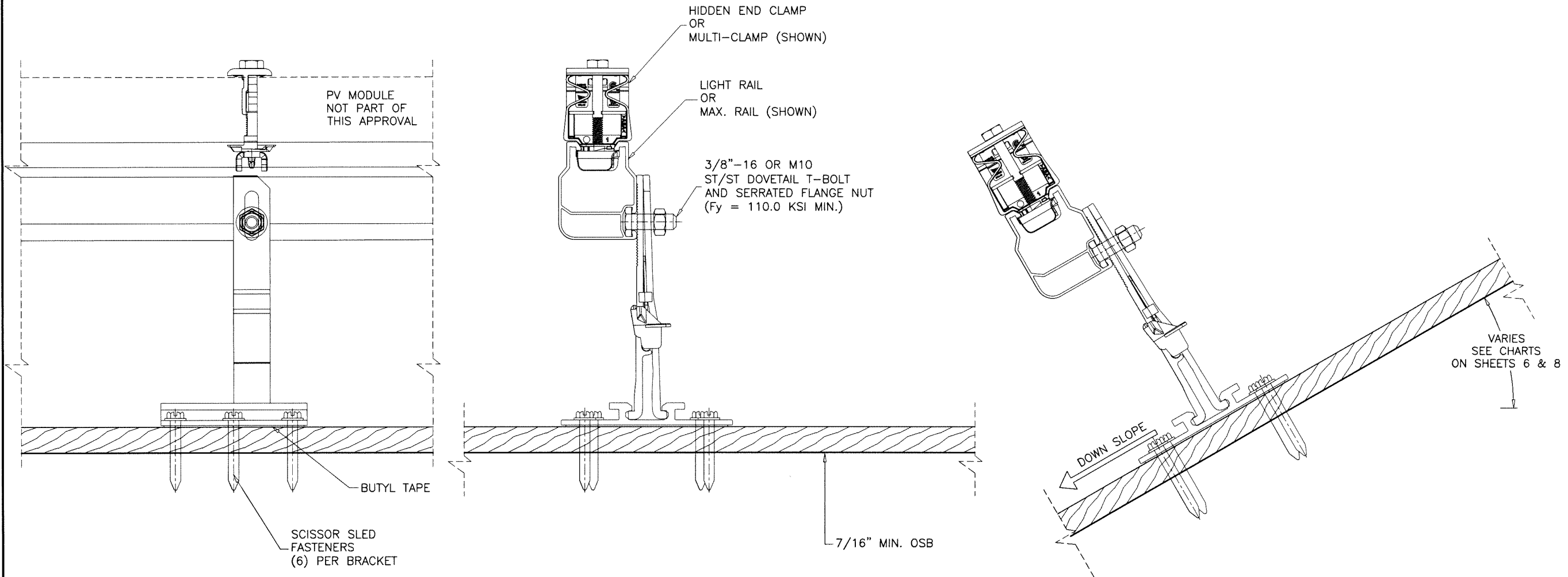


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drawing no.		drawing no.		drawing no.	
23-37F		23-37F		23-37F	
sheet 10 of 12		sheet 10 of 12		sheet 10 of 12	

SCISSOR MOUNT ASSEMBLY



SECTION B-B

SCISSOR SLED FASTENERS:
#14 X 39mm WOOD SCREWS (Fy = 65 KSI MIN.)

WIND LOAD UPLIFT RESISTANCE (PERPENDICULAR TO ROOF) = 154.6 Lbs MAX.
SHEAR RESISTANCE = 189.0 Lbs MAX.

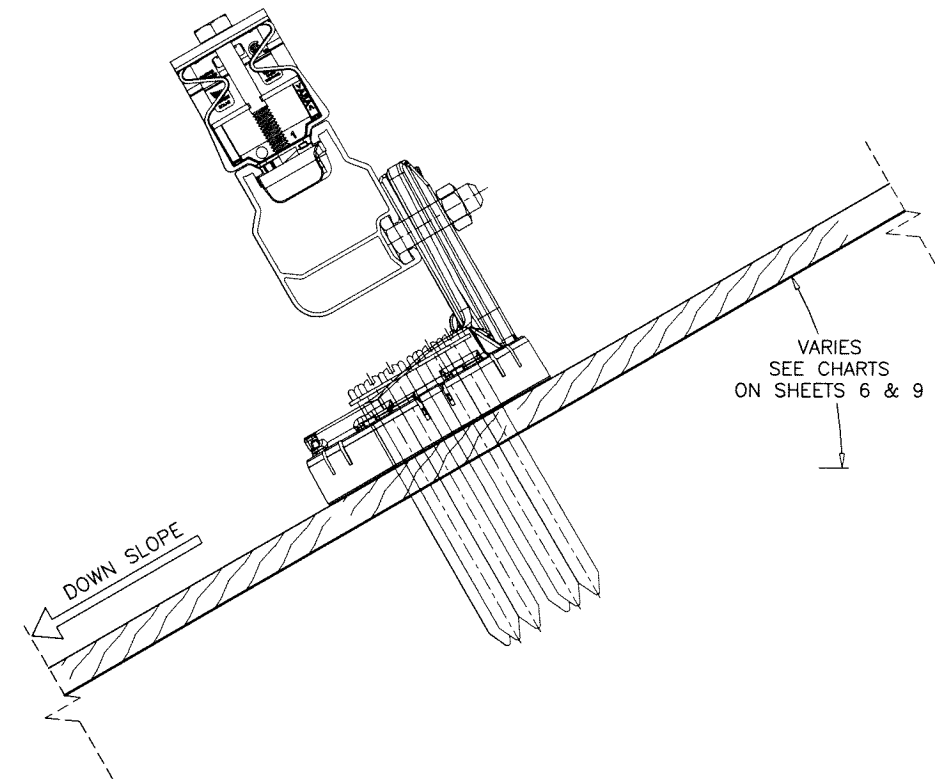
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WIND LOAD UPLIFT RESISTANCE (PERPENDICULAR TO ROOF) = 98.6 Lbs MAX.
SHEAR RESISTANCE (PERPENDICULAR TO RAFTER) = 196.6 Lbs MAX.

FL #41396



JALAL FAROOQ
LICENSE
No. 81223
STATE OF FLORIDA
PROFESSIONAL ENGINEER

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23-37F

sheet
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