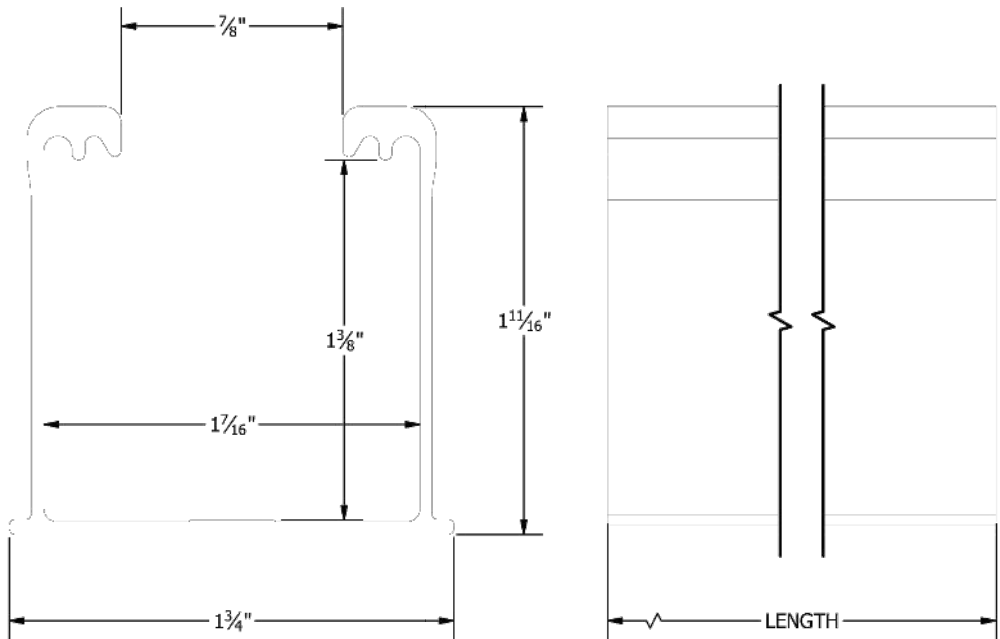
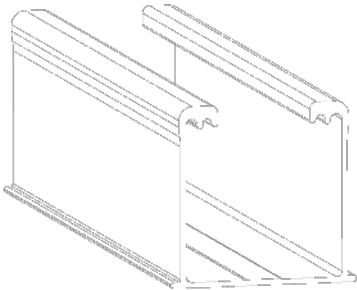


PART # TABLE		
P/N	DESCRIPTION	LENGTH
084RLM1	NXT HORIZON RAIL 84" MILL	84"
084RLD1	NXT HORIZON RAIL 84" DARK	84"
168RLM1	NXT HORIZON RAIL 168" MILL	168"
168RLD1	NXT HORIZON RAIL 168" DARK	168"
208RLM1	NXT HORIZON RAIL 208" MILL	208"
208RLD1	NXT HORIZON RAIL 208" DARK	208"
246RLM1	NXT HORIZON RAIL 246" MILL	246"
246RLD1	NXT HORIZON RAIL 246" DARK	246"



1411 BROADWAY BLVD. NE
ALBUQUERQUE, NM 87102 USA
PHONE: 505.242.6411
WWW.UNIRAC.COM

PRODUCT LINE: NXT HORIZON

DRAWING TYPE: PART DETAIL

DESCRIPTION: RAIL

REVISION DATE: 9/13/2021

DRAWING NOT TO SCALE
ALL DIMENSIONS ARE
NOMINAL

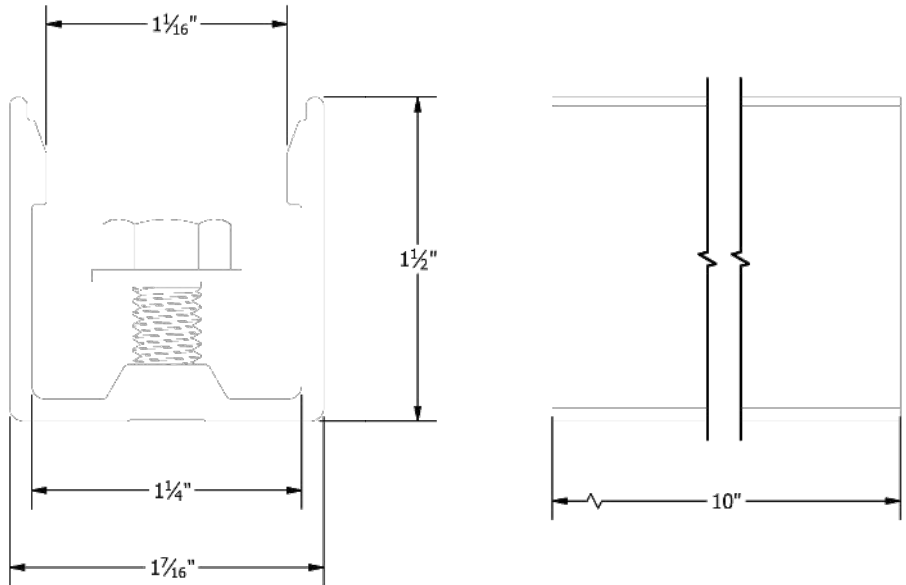
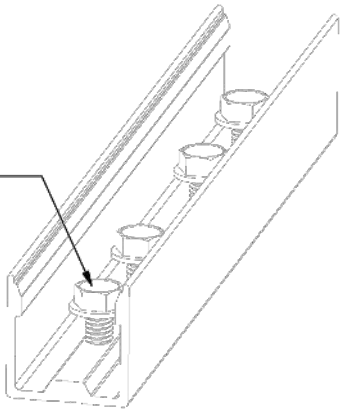
PRODUCT PROTECTED BY
ONE OR MORE US PATENTS
LEGAL NOTICE

NH-P01

SHEET

PART # TABLE		
P/N	DESCRIPTION	LENGTH
RLSPLCM1	NXT HORIZON RAIL SPLICE	10"

4X - 5/16"-18 x 5/8"
HEX FLANGE SCREW - TYPE F



1411 BROADWAY BLVD. NE
ALBUQUERQUE, NM 87102 USA
PHONE: 505.242.6411
WWW.UNIRAC.COM

PRODUCT LINE: NXT HORIZON

DRAWING TYPE: PART DETAIL

DESCRIPTION: RAIL SPLICE

REVISION DATE: 9/22/2021

DRAWING NOT TO SCALE
ALL DIMENSIONS ARE
NOMINAL

PRODUCT PROTECTED BY
ONE OR MORE US PATENTS
LEGAL NOTICE

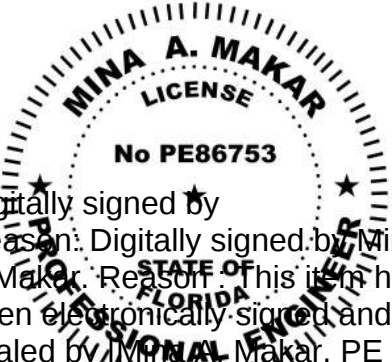
NH-P02

SHEET



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325 HIGH STREET, METUCHEN, NJ 08840
(732) 902-6224
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SOLAR CONTRACTOR

CAMERON CHRISTENSEN
CERTIFIED SOLAR CONTRACTOR LICENSE NUMBER: CVC57036
MOMENTUM SOLAR
5728 MAJOR BLVD. SUITE 307, ORLANDO FL. 32819

CUSTOMER INFORMATION

GLEN MAXWELL - MS145318
1967 SOUTHWEST SISTERS WELCOME
ROAD
LAKE CITY, FL 32025
(386) 406-7579

PV SYSTEM INFORMATION

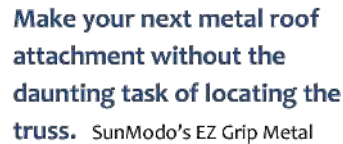
SYSTEM SIZE (DC): 3.2 KW
8 MODULES: HANWHA Q.PEAK DUO BLK
ML-G10+ 400
8 INVERTERS: ENPHASE IQ8PLUS-72-2-US

PROJECT INFORMATION

INITIAL	DATE: 2/19/2024	DESIGNER: AKL
REV:	DATE:	DESIGNER:
REV:	DATE:	DESIGNER:

ATTACHMENT DETAIL

PV-1.1

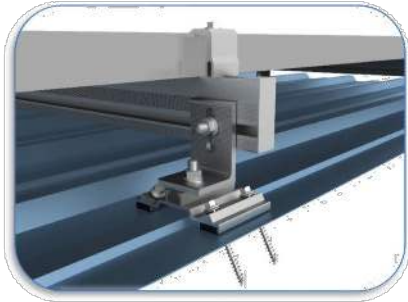


SunDo's EZ Grip Metal Deck Mount installs in just minutes into sheet metal, plywood or OSB roof decking. The four included 1/4 x 3" Hex Washer Head Self-tapping Screws have the length to penetrate through 1-1/2 inches of insulation while still piercing completely through the roof decking. And since the four screws are guided by the aluminum extruded base to penetrate at a 30-degree angle, the Metal Roof Deck Mount Kit offers superior attachment performance. 1/4-20 Self-drilling screws can be used for attachments into 26 gauge minimum thickness metal roofs.

The diagram shows a mechanical assembly. A central vertical component, possibly a valve or actuator, is mounted on a base. Two angled support arms, labeled 1 and 2, extend downwards from the base. The base is connected to a horizontal structure, possibly a pipe or duct, which is labeled 3. The entire assembly is shown in a cross-sectional view.

- Attaches into 1/2 plywood or 7/16 OSB roof decking material using four 1/4 x 3" Hex Washer Head Self-tapping Screws
- Attaches into 26 gauge minimum thickness sheet metal using four 1/4 x 2" Hex Washer Head Self-drilling Screws
- Angled penetrations provide superior attachment performance
- A wide variety of L-velts and attachment options are available
- Passed the High-Velocity Hurricane Zone (HVHZ) – TAS 100(a) Wind-Driven Rain Test

EZ GRIP METAL DECK MOUNT



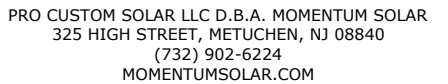
IN 1/2" PLYWOOD		
LOAD DIRECTION	FOS=2	FOS=3
UPLIFT	345	230
LATERAL.PERP. TO SLOT	140	95
LATERAL.PARALLEL TO SLOT	265	175
IN 7/16" OSB		
LOAD DIRECTION	FOS=2	FOS=3
UPLIFT	190	125
LATERAL.PERP. TO SLOT	125	85
LATERAL.PARALLEL TO SLOT	135	90

- * Factor of Safety as shown
- * Torque at 3/8" T-Bolt = 15ft.lbs (20 N.m)
- * All loads in pounds force
- * Values valid only for conditons equal or better than test conditions
- * Values valid only when product is used in accordance with SunModo installation instruction and other technical documentation
- * The kit as shown in the BOM. For alternative configurations, contact SunModo

4 1/4" Deck Screws in Min 7/16" OSB

B	8	B15019-001	SEALING WASHER .26 ID X .50 X .125	4
	7	B15018-001	HEX CAP SCREW 3/8-16 X 3/4	1
	6	C50001-001	GASKET, EPDM, WITH ADHESIVE	2
	5	B15003-001	FLANGE NUT 3/8-16	2
	4	B20007-002	T-BOLT 3/8-16X1.0", 304 SS	1
	3	A20062-001	L FOOT	1
	2	B15039-001	HEX WASHER HEAD LAG BOLT 1/4X3	4
	1	A50224-001	METAL ROOF DECK MOUNT	1
	ITEM PART NUMBER			DESCRIPTION
MATERIAL			SunModo Corp. 14800 NE 65TH STREET, VANCOUVER WA 98682	
SEE NOTES				
Third Angle Projection: 				
GENERAL SPECIFICATIONS All Dimensions in inches (millimeters) Tolerances X-.XXX ±0.01 [0.25mm] X-XX ±0.02 [0.50mm] X-X ±0.039 [1.0mm] Unless otherwise spec'd				
Break all sharp edges .010-.020 unless otherwise specified.				
DRAWN BY LWF		DATE 10/16/2018	TITLE METAL ROOF DECK MOUNT KIT	
CHECKED BY			B	K50532-001 STRUCTURE
APPROVALS			SCALE: NONE	SHEET 1 of 1

ATTACHMENT DETAIL FOR CORRUGATED METAL ROOF



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CAMERON CHRISTENSEN
CERTIFIED SOLAR CONTRACTOR LICENSE NUMBER: CVC57036
MOMENTUM SOLAR
5728 MAJOR BLVD. SUITE 307, ORLANDO FL. 32819

GLEN MAXWELL - MS145318
1967 SOUTHWEST SISTERS WELCOME
ROAD
LAKE CITY, FL 32025

SYSTEM SIZE (DC): 3.2 KW
8 MODULES: HANWHA Q.PEAK DUO BLK
ML-G10+ 400
8 INVERTERS: ENPHASE IQ8PLUS-72-2-US

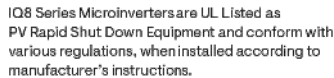
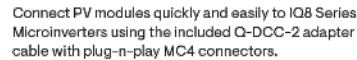
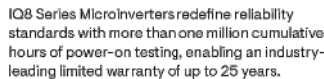
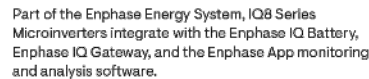
INITIAL	DATE: 2/19/2024	DESIGNER: AKL
REV:	DATE:	DESIGNER:
REV:	DATE:	DESIGNER:

ATTACHMENT DETAIL

PV-1.1 (2)



Our newest IQ8 Microinverters are the industry's first microgrid-forming, software-defined microinverters with split-phase power conversion capability to convert DC power to AC power efficiently. The brain of the semiconductor-based microinverter is our proprietary application-specific integrated circuit (ASIC) which enables the microinverter to operate in grid-tied or off-grid modes. This chip is built in advanced 55nm technology with high speed digital logic and has super-fast response times to changing loads and grid events, alleviating constraints on battery sizing for home energy systems.



IQ8SP-DS-0002-01-EN-US-2022-03-17

- Lightweight and compact with plug-n-play connectors
- Power Line Communication (PLC) between components
- Faster installation with simple two-wire cabling

- Produce power even when the grid is down*
- More than one million cumulative hours of testing
- Class II double-insulated enclosure
- Optimized for the latest high-powered PV modules

- Complies with the latest advanced grid support**
- Remote automatic updates for the latest grid requirements
- Configurable to support a wide range of grid profiles
- Meets CA Rule 21 (UL 1741-SA) requirements

** IQ8 and IQ8Plus supports split phase, 240V installations only.

INPUT DATA (DC)		IQ8-60-2-US		IQ8PLUS-72-2-US	
Commonly used module pairings ¹	W	235 – 350		235 – 440	
Module compatibility		60-cell/120 half-cell		60-cell/120 half-cell, 66-cell/132 half-cell and 72-cell/144 half-cell	
MPPT voltage range	V	27 – 37		29 – 45	
Operating range	V	25 – 48		25 – 58	
Min/max start voltage	V	30 / 48		30 / 58	
Max input DC voltage	V	50		60	
Max DC current ² [module Isc]	A	15			
Overvoltage class DC port		II			
DC port backfeed current	mA	0			
PV array configuration		1x1 Ungrounded array; No additional DC side protection required; AC side protection requires max 20A per branch circuit			
OUTPUT DATA (AC)		IQ8-60-2-US		IQ8PLUS-72-2-US	
Peak output power	VA	245		300	
Max continuous output power	VA	240		290	
Nominal (L-L) voltage/range ³	V	240 / 211 – 264			
Max continuous output current	A	1.0		1.21	
Nominal frequency	Hz	60			
Extended frequency range	Hz	50 – 68			
AC short circuit fault current over 3 cycles	A _{rms}	2			
Max units per 20 A (L-L) branch circuit ⁴		16		13	
Total harmonic distortion		<5%			
Overvoltage class AC port		III			
AC port backfeed current	mA	30			
Power factor setting		1.0			
Grid-tied power factor (adjustable)		0.85 leading – 0.85 lagging			
Peak efficiency	%	97.5		97.6	
CEC weighted efficiency	%	97		97	
Night-time power consumption	mW	60			
MECHANICAL DATA					
Ambient temperature range		-40°C to +60°C (-40°F to +140°F)			
Relative humidity range		4% to 100% (condensing)			
DC Connector type		MC4			
Dimensions (HxWxD)		212 mm (8.3") x 175 mm (6.9") x 30.2 mm (1.2")			
Weight		1.08 kg (2.38 lbs)			
Cooling		Natural convection – no fans			
Approved for wet locations		Yes			
Pollution degree		PD3			
Enclosure		Class II double-insulated, corrosion resistant polymeric enclosure			
Environ. category / UV exposure rating		NEMA Type 6 / outdoor			
COMPLIANCE					
Certifications		CA Rule 21 (UL 1741-SA), UL 62109-1, UL1741/IEEE1547, FCC Part 15 Class B, ICES-0003 Class B, CAN/CSA-C22.2 NO. 107.1-01 This product is UL Listed as PV Rapid Shut Down Equipment and conforms with NEC 2014, NEC 2017, and NEC 2020 section 690.12 and C22.1-2018 Rule 64-218 Rapid Shutdown of PV Systems, for AC and DC conductors, when installed according to manufacturer's instructions.			

IQ8SP-DS-0002-01-EN-US-2022-03-17



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CAMERON CHRISTENSEN
CERTIFIED SOLAR CONTRACTOR LICENSE NUMBER: CVC57036
MOMENTUM SOLAR
5728 MAJOR BLVD. SUITE 307, ORLANDO FL. 32819

GLEN MAXWELL - MS145318
1967 SOUTHWEST SISTERS WELCOME
ROAD
LAKE CITY, FL 32025
(386) 406-7579

SYSTEM SIZE (DC): 3.2 KW
8 MODULES: HANWHA Q.PEAK DUO BLK
ML-G10+ 400
8 INVERTERS: ENPHASE IQ8PLUS-72-2-US

INITIAL	DATE: 2/19/2024	DESIGNER: AKL
REV:	DATE:	DESIGNER:
REV:	DATE:	DESIGNER:

PV-1.2

PV-1.3

SCALE: 3/32" = 1'-0"



NOTE:

1. ROOF COVERING MATERIAL IS COMPOSED OF CORRUGATED METAL.
2. EXACT ATTACHMENT LOCATION AND QUANTITY OF ATTACHMENTS ARE BASED ON EXISTING RAFTER LOCATIONS OBTAINED FROM FIELD MEASUREMENTS. THE LOCATION AND QUANTITY OF ATTACHMENTS MAY VARY BASED ON RAFTER LAYOUT START POINT, SPACING VARIATIONS AND ROOFING TYPE. VERIFY IN THE FIELD ALL RAFTER LOCATIONS AND ADJUST LAYOUT AS REQUIRED. A TILE ROOF WILL PRODUCE A STAGGERED ATTACHMENT LAYOUT BECAUSE OF EXISTING STAGGERED TILE JOINT LOCATIONS.

ROOF	PANEL COUNT	TILT	AZIMUTH	SHADING	LANDSCAPE MAX SPAN (ROOF AREA 1/2/3)	PORTRAIT MAX SPAN (ROOF AREA 1/2/3)	LANDSCAPE MAX CANTILEVER	PORTRAIT MAX CANTILEVER
R1	8	15°	96°	91%	48 /48 /48	48 /48 /48	16 /10 /10	16 /10 /10



PRO CUSTOM SOLAR LLC D.B.A. MOMENTUM SOLAR
325 HIGH STREET, METUCHEN, NJ 08840
(732) 902-6224
MOMENTUMSOLAR.COM

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CUSTOMER INFORMATION

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LAKE CITY, FL 32025

PV SYSTEM INFORMATION

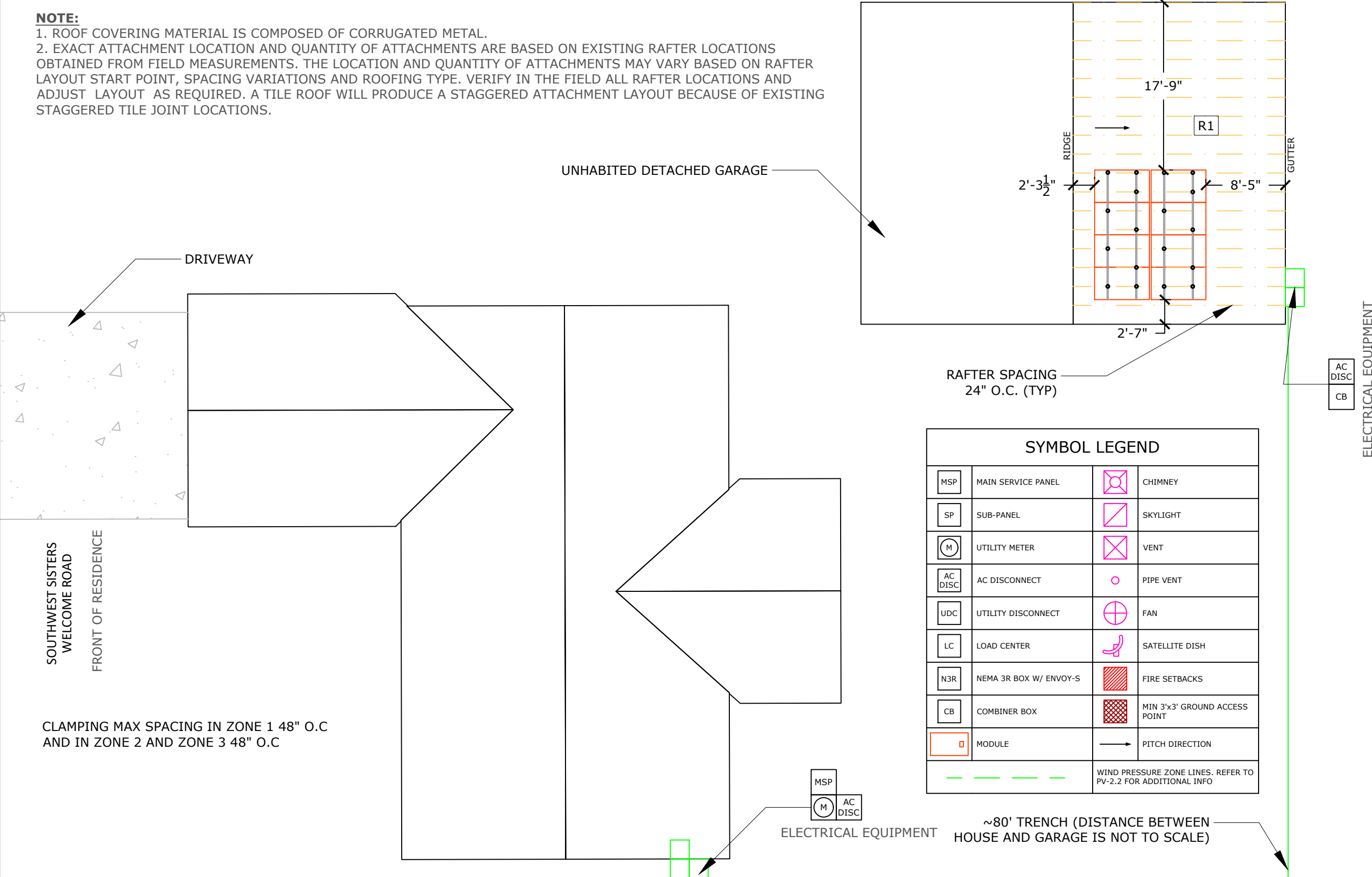
SYSTEM SIZE (DC): 3.2 KW
8 MODULES: HANWHA Q.PEAK DUO BLK
ML-G10+ 400
8 INVERTERS: ENPHASE IQ8PLUS-72-2-US

PROJECT INFORMATION

INITIAL	DATE: 2/19/2024	DESIGNER: AKL
REV:	DATE:	DESIGNER:
REV:	DATE:	DESIGNER:

ROOF LAYOUT

PV-2



UNHABITED DETACHED GARAGE

DRIVEWAY

SOUTHWEST SISTERS
WELCOME ROAD
FRONT OF RESIDENCE

CLAMPING MAX SPACING IN ZONE 1 48" O.C
AND IN ZONE 2 AND ZONE 3 48" O.C

RAFTER SPACING
24" O.C. (TYP)

RIDGE

GUTTER

ELECTRICAL EQUIPMENT

SYMBOL LEGEND

MSP	MAIN SERVICE PANEL		CHIMNEY
SP	SUB-PANEL		SKYLIGHT
M	UTILITY METER		VENT
AC DISC	AC DISCONNECT		PIPE VENT
UDC	UTILITY DISCONNECT		FAN
LC	LOAD CENTER		SATELLITE DISH
N3R	NEMA 3R BOX W/ ENVOY-S		FIRE SETBACKS
CB	COMBINER BOX		MIN 3'x3' GROUND ACCESS POINT
	MODULE		PITCH DIRECTION
		WIND PRESSURE ZONE LINES. REFER TO PV-2.2 FOR ADDITIONAL INFO	

ELECTRICAL EQUIPMENT

~80' TRENCH (DISTANCE BETWEEN
HOUSE AND GARAGE IS NOT TO SCALE)

PV MODULE RATINGS	
MODULE MAKE	HANWHA
MODEL	Q.PEAK DUO BLK ML-G10+ 400
MAX POWER	400W
OPEN CIRCUIT VOLTAGE	45.3V
MPP VOLTAGE	37.13V
SHORT CIRCUIT CURRENT	11.14A
MPP CURRENT	10.77A
NUMBER OF MODULES	8
UL1703 COMPLIANT	YES

INVERTER RATINGS	
INVERTER MAKE	ENPHASE
MODEL	IQ8PLUS-72-2-US
MAX OUTPUT POWER	290W
OPEN DC VOLTAGE	60V
NOMINAL AC VOLTAGE	240V
MAX AC CURRENT	1.21A
CEC INVERTER EFFICIENCY	97%
NUMBER OF INVERTERS	8
UL1703 COMPLIANT	YES

VOLTAGE DROP CALCULATIONS											
FORMULA USED PER NEC HANDBOOK 215.2(A)(4) WHERE APPLICABLE											
WIRE RUN	V _{mp}	I _{mp}	R	L (FT)	V _o	% V _o	WIRE SIZE				
BRANCH TO J-BOX	240.00	9.68	1.98	52.67	2.019	0.84%	12 AWG				
J-BOX TO LOAD CENTER	240.00	9.68	1.24	50.00	1.200	0.50%	10 AWG				
LOAD CENTER TO AC DISCONNECT	240.00	12.1	0.778	3.00	0.056	0.02%	08 AWG				
AC DISCONNECT TO INTERCONNECTION	240.00	12.1	0.778	10.00	0.188	0.08%	08 AWG				

1

NEC 705.12(B)(2)(3)(b) 120% RULE
(1.25 x INVERTER OUTPUT) + MAIN OCPD ≤ BUS RATING x 1.20
(1.25 x 9.68) + 200 ≤ 200 x 1.20

FSEC CERTIFICATION STATEMENT:
PER FL. STATUE 377.705 , I, MINA A. MAKAR PE# 86753, CERTIFICATE OF AUTHORIZATION #33404, AN ENGINEER LICENSED PURSUANT TO CHAPTER 471,CERTIFY THAT THE PV ELECTRICAL SYSTEM AND ELECTRICAL COMPONENTS ARE DESIGNED AND APPROVED USING THE STANDARDS CONTAINED IN THE MOST RECENT VERSION OF THE FLORIDA BUILDING CODE. FBC 2023

1

EXISTING WESTING HOUSE
200A MAIN SERVICE PANEL
240 V
MAIN BREAKER: 200A

8 HANWHA Q.PEAK DUO BLK ML-G10+ 400 400W MODULES PAIRED WITH
8 ENPHASE IQ8PLUS-72-2-US MICRO-INVERTERS

BRANCH CIRCUIT A
8 MICRO-INVERTERS

TERMINATION CAP
INSTALLED ON
END OF CABLE

1 2 3 3 3

~80' TRENCH

GRID
UTILITY METER

Wire Tag	Conduit	Wire Qty	Wire Gauge	Wire Type	Temp. Rating	Wire Ampacity (A)	Temp. Derate	Conduit Fill Derate	Derated Ampacity (A)	Inverter Qty	NOC (A)	NEC Correction	Design Current (A)	Ground Size	Ground Wire Type
1	OPEN AIR	1	12 AWG	Trunk Cable	90°C	30	0.96	1	28.80	8	1.21	1.25	12.10	12 AWG	Trunk Cable
2	3/4" PVC	2	10 AWG	THWN-2	75°C	35	0.96	1	33.60	8	1.21	1.25	12.10	08 AWG	THWN-2
3	3/4" PVC	3 + G	08 AWG	THWN-2	75°C	50	0.96	1	48.00	8	1.21	1.25	12.10	08 AWG	THWN-2

NOTE: LETTER "G" IN WIRE QTY TAB STANDS FOR GROUNDING CONDUCTOR.

momentum
SOLAR

PRO CUSTOM SOLAR LLC D.B.A. MOMENTUM SOLAR
325 HIGH STREET, METUCHEN, NJ 08840
(732) 902-6224
MOMENTUMSOLAR.COM

**PROFESSIONAL
ENGINEERING**

MINA A. MAKAR

LICENSE

No PE86753

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GLEN MAXWELL - MS145318
1967 SOUTHWEST SISTERS WELCOME ROAD
LAKE CITY, FL 32025
(386) 406-7578

PV SYSTEM INFORMATION
SYSTEM SIZE (DC): 3.2 KW
8 MODULES: HANWHA Q.PEAK DUO BLK ML-G10+ 400
8 INVERTERS: ENPHASE IQ8PLUS-72-2-US

1

PROJECT INFORMATION

INITIAL	DATE: 2/19/2024	DESIGNER: AKL
REV:	DATE: 2/19/2024	DESIGNER: GP
REV:	DATE:	DESIGNER:

THREE LINE DIAGRAM

PV-3

ELECTRICAL NOTES:

1. ALL CALCULATIONS FOR VOC, VMAX, IMP AND ISC HAVE BEEN CALCULATED USING THE MANUFACTURED STRING CALCULATOR BASED ON ASHRAE 2% HIGH AND EXTREME MINIMUM TEMPERATURE COEFFICIENTS.
2. THE ENTIRE ARRAY IS BONDED ACCORDING TO (NEC 690.46 - 250.120 PARAGRAPH C). THE GROUND IS CARRIED AWAY FROM THE GROUNDING LUG USING #6 BARE COPPER WIRE OR #8 THWN-2 COPPER WIRE.
3. THIS SYSTEM COMPLIES WITH NEC 2020
4. BRANCH CIRCUIT CALCULATION FOR WIRE TAG 1 DISPLAYS THE LARGEST BRANCH CIRCUIT IN SYSTEM. OTHER BRANCH CIRCUITS SHALL HAVE LOWER DESIGN CURRENT THAN THE ONE SHOWN. IN ADDITION, VOLTAGE DROP CALCULATIONS FROM PANELS TO THE COMBINER BOX SHALL BE SHOWN IN A SIMILAR FASHION
5. ALL CONDUCTORS ARE SIZED BASED ON NEC 2020 ARTICLE 310
6. ALL EQUIPMENT INSTALLED IS RATED AT 75°C
7. INVERTER NOC (NOMINAL OPEN CURRENT) OBTAINED FROM EQUIPMENT DATASHEET
8. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL LOCAL AND NATIONAL CODE REQUIREMENTS.
9. EACH MODULE MUST BE GROUNDED ACCORDING TO USER INSTRUCTIONS
10. ALL EQUIPMENT SHALL BE LISTED PER NEC 690.4(B)
11. PER NEC 690.13, 690.15, PROVIDE A WARNING SIGN AT ALL LOCATIONS WHERE TERMINALS OF THE DISCONNECTING MEANS MAY BE ENERGIZED IN THE OPEN POSITION> SIGN SHALL READ *WARNING - ELECTRIC SHOCK HAZARD - DO NOT TOUCH TERMINALS - OR EQUIVALENT.
12. PER NEC 705.10, PROVIDE A PERMANENT PLAQUE OR DIRECTORY SHOWING ALL ELECTRIC POWER SOURCES ON THE PREMISES AT SERVICE ENTRANCE.
13. INTERCONNECTION METHOD SHALL COMPLY WITH NEC 705.12
14. AND OPTION FOR A SINGLE CIRCUIT BRANCH TO BE SPLIT INTO TWO SUB-CIRCUIT BRANCHES IS ACCEPTABLE.
15. ALL CONDUCTORS MUST BE COPPER.
16. NEUTRAL AND EQUIPMENT GROUNDING CONDUCTOR BONDED AS PER NEC 250.24(C).
17. EQUIPMENT GROUNDING CONDUCTOR IS CONNECTED TO A GROUNDING ELECTRODE SYSTEM PER 250.54(D).
18. FUSES FOR PV DISCONNECT HAVE AIC RATINGS OF 200KA AC AND 20KA DC.
19. SUPPLY SIDE CONNECTION SHALL BE MADE USING ILSKO INSULATION PIERCING CONNECTORS (IPC). MAKE, MODEL, AND RATING OF INTERCONNECTION CAN BE SEEN ON TABLE 1 BELOW.
20. METHOD OF INTERCONNECTION CAN BE SEEN IN FIGURE 1.
21. UTILITY HAS 24-HR UNRESTRICTED ACCESS TO ALL PHOTOVOLTAIC SYSTEM COMPONENTS LOCATED AT THE SERVICE ENTRANCE.

22. WORKING CLEARANCES AROUND THE EXISTING AND NEW ELECTRICAL EQUIPMENT SHALL BE MAINTAINED IN ACCORDANCE WITH NEC ARTICLE 110.26.
23. CONDUCTORS EXPOSED TO SUNLIGHT SHALL BE LISTED AS SUNLIGHT RESISTANT PER NEC ARTICLE 300.6 (C)(1) AND ARTICLE 310.8 (D).
24. CONDUCTORS EXPOSED TO WET LOCATIONS SHALL BE SUITABLE FOR USE IN WET LOCATIONS PER NEC ARTICLE 310.10 (C).
25. TOTAL AREA OF ALL CONDUCTORS, SPLICES, AND TAPS INSTALLED AT ANY CROSS SECTION OF THE WIRING DOES NOT EXCEED 75% OF THE CROSS SECTIONAL AREA OF THE SPACE. NEC 312.8(A)(2).
26. SYSTEM IS CONSIDERED AN AC MODULE SYSTEM. NO DC CONDUCTORS ARE PRESENT IN CONDUIT, COMBINER, JUNCTION BOX, DISCONNECT. AND COMPLIES WITH 690.6 - NO DC DISCONNECT AND ASSOCIATED DC LABELING ARE REQUIRED.
27. SYSTEM COMPLIES WITH 690.12 RAPID SHUTDOWN AND ASSOCIATED LABELING AS PER 690.56(C). AC VOLTAGE AND SYSTEM OPERATING CURRENT SHALL BE PROVIDED 690.52.
28. CONDUCTORS IN CONDUIT ARE AC CONDUCTORS BRANCH CIRCUITS AND NOT PV SOURCE CIRCUITS. 690.6.
29. ALL GROUNDING SHALL COMPLY WITH 690.47(A) IN THAT THE AC MODULES WILL COMPLY WITH 250.64.
30. NO TERMINALS SHALL BE ENERGIZED IN THE OPEN POSITION IN THIS AC MODULE SYSTEM 690.13, 690.15, 690.6.
31. WHERE APPLICABLE: INTERCONNECTION SHALL COMPLY WITH 705.12(A) OR 705.12(B)
32. ALL WARNING SIGN(S) OR LABEL(S) SHALL COMPLY WITH 2020 NEC ARTICLE 110.21(B). LABEL WARNINGS SHALL ADEQUATELY WARN OF THE HAZARD. LABELS SHALL BE PERMANENTLY AFFIXED TO THE EQUIPMENT, AND LABELS REQUIRED SHALL BE SUITABLE FOR THE ENVIRONMENT.
33. PV POWER CIRCUIT LABELS SHALL APPEAR ON EVERY SECTION OF THE WIRING SYSTEM THAT IS SEPARATED BY ENCLOSURES, WALLS, PARTITIONS, CEILINGS, OR FLOORS.

TABLE 1:

MAKE	MODEL	VOLTAGE RATING	CONDUCTOR RANGE MAIN	CONDUCTOR RANGE TAP
ILSCO	IPC 4006	600 V	4/0-4 AWG	6-14 AWG
ILSCO	IPC 4020	600 V	4/0-2 AWG	2/0-6 AWG

INSTRUCTIONS FOR LINE TAPS

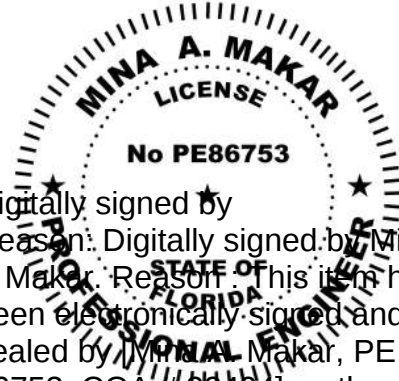
FIGURE 1:

1. ADJUST THE CONNECTOR NUT TO SUITABLE LOCATION
2. PUT THE BRANCH WIRE INTO THE CAP SHEATH FULLY
3. INSERT THE MAIN WIRE, IF THERE ARE TWO LAYS OF INSULATED LAY IN THE MAIN CABLE, SHOULD STRIP A CERTAIN LENGTH OF THE FIRST INSULATED LAY FROM INSERTED END
4. TURN THE NUT BY HAND, AND FIX THE CONNECTOR IN SUITABLE LOCATION.
5. SCREW THE NUT WITH THE SLEEVE SPANNER.
6. SCREW THE NUT CONTINUALLY UNTIL THE TOP PART IS CRACKED AND DROPPED DOWN



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PROFESSIONAL ENGINEERING



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SOLAR CONTRACTOR

CAMERON CHRISTENSEN
CERTIFIED SOLAR CONTRACTOR LICENSE NUMBER: CVC57036
MOMENTUM SOLAR
5728 MAJOR BLVD. SUITE 307, ORLANDO FL. 32819

CUSTOMER INFORMATION

GLEN MAXWELL - MS145318
1967 SOUTHWEST SISTERS WELCOME
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(386) 406-7578

PV SYSTEM INFORMATION

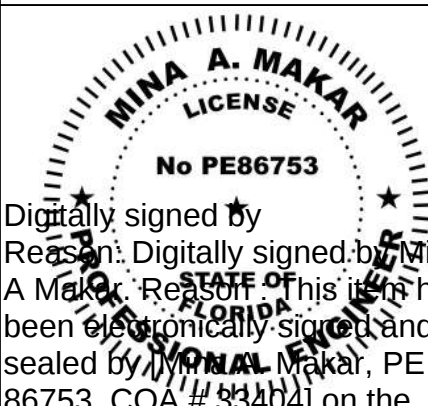
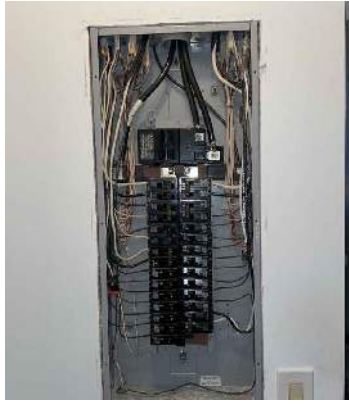
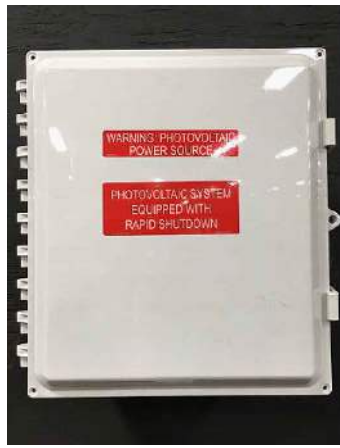
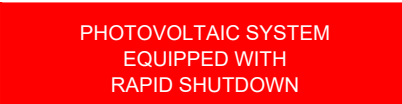
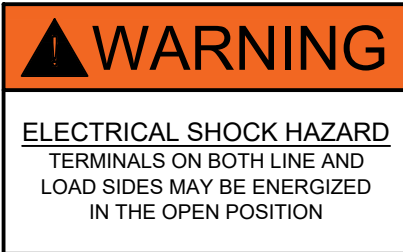
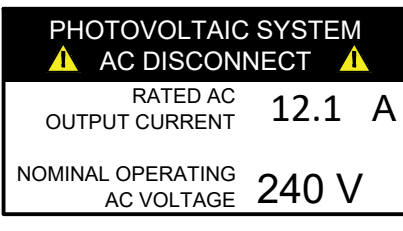
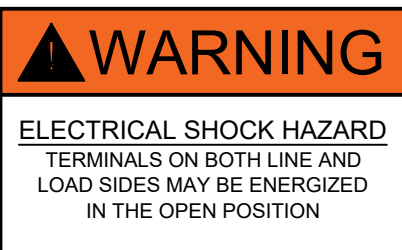
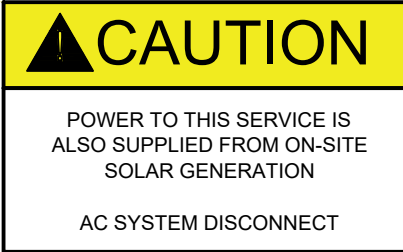
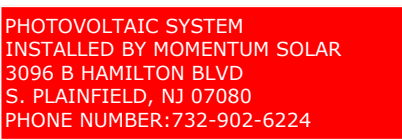
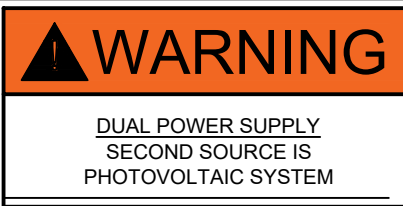
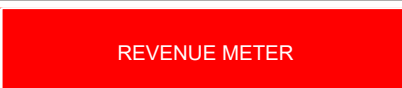
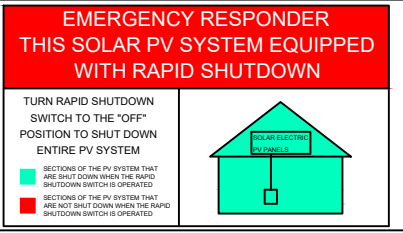
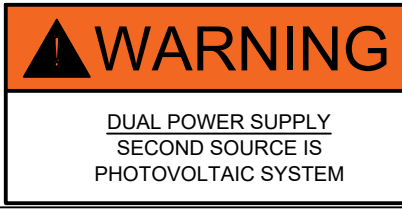
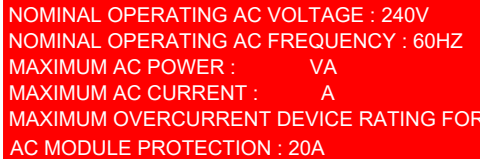
SYSTEM SIZE (DC): 3.2 KW
8 MODULES: HANWHA Q.PEAK DUO BLK
ML-G10+ 400
8 INVERTERS: ENPHASE IQ8PLUS-72-2-US

PROJECT INFORMATION

INITIAL	DATE: 2/19/2024	DESIGNER: AKL
REV:	DATE:	DESIGNER:
REV:	DATE:	DESIGNER:

ELECTRICAL CONT.

PV-3.1

ALL WARNING SIGN(S) OR LABEL(S) SHALL COMPLY WITH NEC ARTICLE 110.21(B). LABEL WARNINGS SHALL ADEQUATELY WARN OF THE HAZARD. LABELS SHALL BE PERMANENTLY AFFIXED TO THE EQUIPMENT, AND LABELS REQUIRED SHALL BE SUITABLE FOR THE ENVIRONMENT.						 PRO CUSTOM SOLAR LLC D.B.A. MOMENTUM SOLAR 325 HIGH STREET, METUCHEN, NJ 08840 (732) 902-6224 MOMENTUMSOLAR.COM PROFESSIONAL ENGINEERING  Digitally signed by Reason: Digitally signed by Mina A Makar Reason: This item has been electronically signed and sealed by Mina A Makar, PE 86753, COA # 53404] on the Date and Time Stamp shown using a digital signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies. Date: 2024.02.21 06:02:22 -05:00 SOLAR CONTRACTOR CAMERON CHRISTENSEN CERTIFIED SOLAR CONTRACTOR LICENSE NUMBER: CVC57036 MOMENTUM SOLAR 5728 MAJOR BLVD. SUITE 307, ORLANDO FL. 32819 CUSTOMER INFORMATION GLEN MAXWELL - MS145318 1967 SOUTHWEST SISTERS WELCOME ROAD LAKE CITY, FL 32025 (386) 496-7578 PV SYSTEM INFORMATION SYSTEM SIZE (DC): 3.2 KW 8 MODULES: HANWHA Q.PEAK DUO BLK ML-G10+ 400 8 INVERTERS: ENPHASE IQ8PLUS-72-2-US PROJECT INFORMATION <table><tr><td>INITIAL</td><td>DATE: 2/19/2024</td><td>DESIGNER: AKL</td></tr><tr><td>REV:</td><td>DATE:</td><td>DESIGNER:</td></tr><tr><td>REV:</td><td>DATE:</td><td>DESIGNER:</td></tr></table> EQUIPMENT LABELS PV-3.2		INITIAL	DATE: 2/19/2024	DESIGNER: AKL	REV:	DATE:	DESIGNER:	REV:	DATE:	DESIGNER:
INITIAL	DATE: 2/19/2024	DESIGNER: AKL														
REV:	DATE:	DESIGNER:														
REV:	DATE:	DESIGNER:														
A			12	AC CONDUITS	1 AT EVERY SEPARATION BY ENCLOSURES / WALLS / PARTITIONS / CEILINGS / FLOORS OR NO MORE THAN 10'	     										
B			1	COMBINER BOX	1 AT ANY COMBINER BOX											
C			1	JUNCTION BOX	1 AT ANY JUNCTION BOX											
D			1	AC DISCONNECT (RSD SWITCH)	1 OF EACH AT FUSED AC DISCONNECT COMPLETE VOLTAGE AND CURRENT VALUES ON DISCONNECT LABEL											
E		 														
F			1	UTILITY METER	1 AT UTILITY METER AND ONE DIRECTORY PLACARD											
G			1	INTERCONNECTION POINT	1 OF EACH AT BUILDING INTERCONNECTION POINT AND ONE DIRECTORY PLACARD											
			1	BACKFEED PANEL												
H			1	AC CURRENT PV MODULES												