
FERGUSON MALONE ARCHITECTURE

January 03, 2022

Ed Marron,
Building Inspector
Village of Irvington
Village Hall
85 Main Street
Irvington, NY 10533

Parganos Residence
BP No. 361 (90 Fargo Lane, Irvington NY)
Revisions to ARB Approved Roof Plan

Mr. Marron & Members of the Architectural Review Board,

Attached please find a proposed modification to the project at 90 Fargo Lane which is currently under construction and was submitted and approved by ARB in February of 2021. This submission is limited to the proposed addition of solar panels to the flat roofs.

We have placed the collectors in an organized way according to the village's current guidelines. The racking system with panels installed at a 5 degree angle, will extend above the surface of the roof by 7 1/2" at its tallest point. In locations where there is no parapet or where the installation will extend slightly above the parapet, units have been offset from the edge of the roof or the parapet at a ratio of 1:4 as per the guidelines. Other than the collectors and the associated racking system, there will be no solar energy equipment, cabling or conduit on the exterior of the building.

We have included renderings east side of the proposed project from Fargo lane. The solar panels are not visible from these vantage points.

Please let me know if you or your consultants have any questions or concerns, and feel free to contact me at (914) 591-5066 or via email at jmalone@fergusonmalone.com.

Sincerely,



John Malone, AIA LEED AP

Enc: A -2.03.1 Solar Panel Plan – dated 01/03/2022
Solar Panel Specification Information
Rendering of Exterior Elevations
Mailing Notice and Proof of Mailing

cc: ETA Fargo, LLC - Sara Parganos-Account Manager
File

FERGUSON MALONE ARCHITECTURE

January 03, 2022

To: Neighbors of 90 Fargo Lane
Via: Certified Mail
**RE: Application for Architectural Review Board Approval
90 Fargo Lane**

PLEASE TAKE NOTICE that the applicant named below is requesting the Architectural Review Board of the Village of Irvington to grant, in accordance with Section 9-12 of the Village Code for improvements to be made on property identified by parcel identification #: 2.20-3-5 and 2.20-3-6. This property is located at 90 Fargo Ln, Irvington. The site adjoins property owned by or the current resident:

- | | |
|-------------------------|--------------------------|
| - Deroos, Barbara M. | (88 Fargo Ln.; 2.20-3-3) |
| - Kim, Inok | (92 Fargo Ln; 2.20-3-4) |
| - Silverberg, Shonni J. | (95 Fargo Ln; 2.20-3-7) |
| - Franks, Jason | (95 Fargo Ln; 2.20-4-24) |
| - Schoenfarber, Jay | (96 Fargo Ln; 2.20-4-22) |

The following is a brief description of the property development for which Site Development Plan Approval is being requested.

Installation of solar equipment

A copy of the Application, together with the plans or details of the proposed work has been deposited in the office of the Village Clerk and in the Irvington Public Library and may be examined by the public during regular business hours one week prior to the scheduled meeting.

It is expected that the Application will be considered by the Architectural Review Board at a meeting which begins at 8:00 PM on January 24, 2022. Due to Covid-19 precautions, the meetings are being conducted virtually. A link will be available in the calendar entry for the meeting on the village website.

This notice is given pursuant to Section 9-12 of the Village of Irvington.



John Malone, AIA LEED AP

ETA FARGO LLC
90 FARGO LN
IRVINGTON, NY 10533

SILVERBERG, SHONNI J
95 FARGO LN
IRVINGTON, NY 10533

ETA FARGO LLC
FARGO LN
IRVINGTON, NY 10533

KIM, INOK
92 FARGO LN
IRVINGTON, NY 10533

DEROOS, BARBARA M
88 FARGO LN
IRVINGTON, NY 10533



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From:

FERGUSON MALONE ARCHITECTURE

1 BRIDGE ST STE. 29
IRVINGTON, NY 10533

To:

ETA FARGO LLC
FARGO LN
IRVINGTON, NY 10533

PS Form 3817, April 2007 PSN 7530-02-000-9065



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IRVINGTON, NY 10533

DEROOS, BARBARA M
88 FARGO LN
IRVINGTON, NY 10533

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1 BRIDGE ST STE. 29
IRVINGTON, NY 10533

To:

SILVERBERG, SHONNI J
95 FARGO LN
IRVINGTON, NY 10533

PS Form 3817, April 2007 PSN 7530-02-000-9065



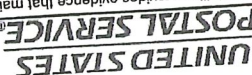
ETA FARGO LLC
90 FARGO LN
IRVINGTON, NY 10533

1 BRIDGE ST STE. 29
IRVINGTON, NY 10533

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From:

FERGUSON MALONE ARCHITECTURE
1 BRIDGE ST STE. 29
IRVINGTON, NY 10533

To:

KIMI, INOK
92 FARGO LN
IRVINGTON, NY 10533

PS Form 3817, April 2007 PSN 7530-02-000-9065







powered by

Q.ANTUM DUO

Q.PEAK DUO L-G5.2 380-395

Q.ANTUM SOLAR MODULE

The new high-performance module **Q.PEAK DUO L-G5.2** is the ideal solution for commercial and utility applications thanks to a combination of its innovative cell technology **Q.ANTUM** and cutting edge cell interconnection. This 1500V IEC/UL solar module with its 6 busbar cell design ensures superior yields with up to 395 Wp while having a very low LCOE.



LOW ELECTRICITY GENERATION COSTS

Higher yield per surface area, lower BOS costs, higher power classes, and an efficiency rate of up to 19.9%.



INNOVATIVE ALL-WEATHER TECHNOLOGY

Optimal yields, whatever the weather with excellent low-light and temperature behavior.



ENDURING HIGH PERFORMANCE

Long-term yield security with Anti LID Technology, Anti PID Technology¹, Hot-Spot Protect and Traceable Quality Tra.Q™.



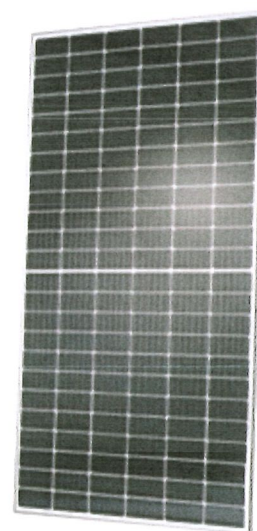
EXTREME WEATHER RATING

High-tech aluminum alloy frame, certified for high snow (5400 Pa) and wind loads (2400 Pa).



A RELIABLE INVESTMENT

Inclusive 12-year product warranty and 25-year linear performance warranty².



Q CELLS
Best polycrystalline solar module 2014
Q.PRO-G2 235
174 modules tested

THE IDEAL SOLUTION FOR:



Rooftop arrays on commercial/industrial buildings



Ground-mounted solar power plants

Engineered in **Germany**

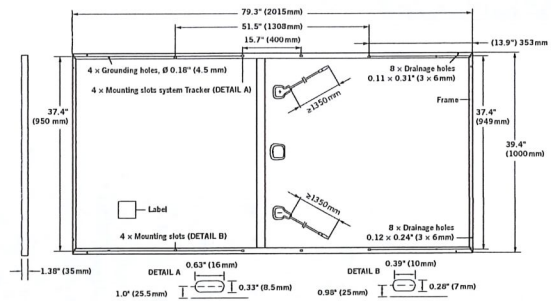
Q CELLS

¹ APT test conditions according to IEC/TS 62804-1:2015, method B (-1500V, 168h)

² See data sheet on rear for further information.

MECHANICAL SPECIFICATION

Format	79.3 in × 39.4 in × 1.38 in (including frame) (2015 mm × 1000 mm × 35 mm)
Weight	51.8 lbs (23.5 kg)
Front Cover	0.13 in (3.2 mm) thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Anodized aluminum
Cell	6 × 24 monocrystalline Q.ANTUM solar half-cells
Junction box	2.76-3.35 in × 1.97-2.76 in × 0.51-0.83 in (70-85 mm × 50-70 mm × 13-21 mm), Protection class IP67, with bypass diodes
Cable	4 mm ² Solar cable; (+) ≥ 53.1 in (1350 mm), (−) ≥ 53.1 in (1350 mm)
Connector	Multi-Contact MC4-EVO2, JMTHY PV-JM601A, IP68 or Renhe Q5-6, IP67

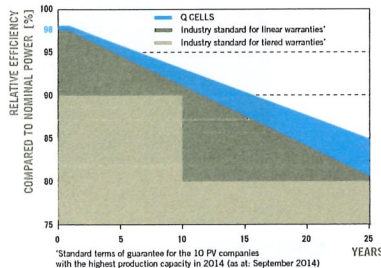


ELECTRICAL CHARACTERISTICS

POWER CLASS			380	385	390	395
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC ¹ (POWER TOLERANCE +5 W / −0 W)						
Minimum	Power at MPP ¹	P _{MPP} [W]	380	385	390	395
	Short Circuit Current ¹	I _{SC} [A]	10.05	10.10	10.14	10.19
	Open Circuit Voltage ¹	V _{OC} [V]	47.95	48.21	48.48	48.74
	Current at MPP	I _{MPP} [A]	9.57	9.61	9.66	9.70
	Voltage at MPP	V _{MPP} [V]	39.71	40.05	40.38	40.71
	Efficiency ¹	η [%]	≥ 18.9	≥ 19.1	≥ 19.4	≥ 19.6
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT ²						
Minimum	Power at MPP	P _{MPP} [W]	283.9	287.6	291.3	295.1
	Short Circuit Current	I _{SC} [A]	8.10	8.14	8.17	8.21
	Open Circuit Voltage	V _{OC} [V]	45.12	45.37	45.62	45.87
	Current at MPP	I _{MPP} [A]	7.53	7.57	7.60	7.64
	Voltage at MPP	V _{MPP} [V]	37.69	38.01	38.33	38.64

¹Measurement tolerances P_{MPP} ± 3%; I_{SC}, V_{OC} ± 5% at STC: 1000 W/m², 25 ± 2°C, AM 1.5G according to IEC 60904-3 · ²800 W/m², NMOT, spectrum AM 1.5G

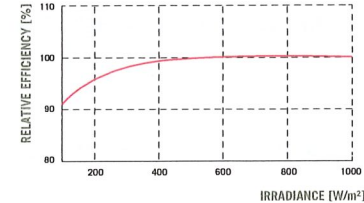
Q CELLS PERFORMANCE WARRANTY



At least 98% of nominal power during first year. Thereafter max. 0.54% degradation per year. At least 93.1% of nominal power up to 10 years. At least 85% of nominal power up to 25 years.

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Q CELLS sales organization of your respective country.

PERFORMANCE AT LOW IRRADIANCE



Typical module performance under low irradiance conditions in comparison to STC conditions (25°C, 1000 W/m²).

TEMPERATURE COEFFICIENTS

Temperature Coefficient of I _{SC}	α	[%/K]	+0.04	Temperature Coefficient of V _{OC}	β	[%/K]	−0.28
Temperature Coefficient of P _{MPP}	γ	[%/K]	−0.37	Normal Operating Module Temperature	NMOT	[°F]	109 ± 5.4 (43 ± 3°C)

PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage V _{sys}	[V]	1500 (IEC) / 1500 (UL)	Safety Class	II
Maximum Series Fuse Rating	[A DC]	20	Fire Rating	C (IEC) / TYPE 1 (UL)
Max. Design Load, Push / Pull (UL) ²	[lbs/ft ²]	75 (3600 Pa) / 33 (1600 Pa)	Permitted module temperature on continuous duty	−40°F up to +185°F (−40°C up to +85°C)
Max. Test Load, Push / Pull (UL) ²	[lbs/ft ²]	113 (5400 Pa) / 50 (2400 Pa)	² see installation manual	

QUALIFICATIONS AND CERTIFICATES

UL 1703; CE-compliant;
IEC 61215:2016, IEC 61730:2016 application class A

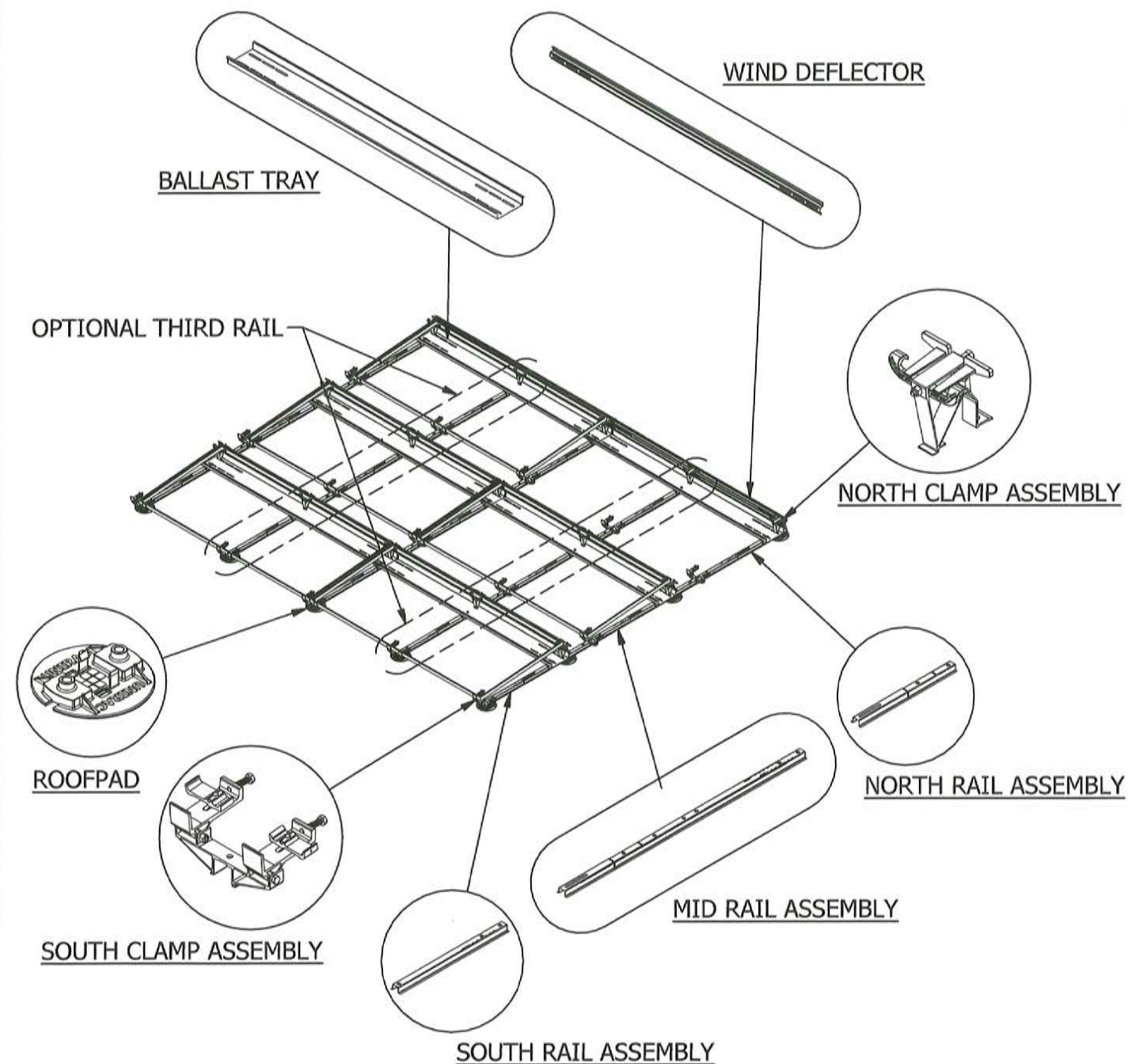


PACKAGING INFORMATION

Number of Modules per Pallet	29
Number of Pallets per 53' Trailer	26
Number of Pallets per 40' High Cube Container	22
Pallet Dimensions (L × W × H)	81.9 in × 45.3 in × 46.7 in (2080 mm × 1150 mm × 1185 mm)
Pallet Weight	1635 lbs (742 kg)

NOTE: Installation instructions must be followed. See the installation and operating manual or contact our technical service department for further information on approved installation and use of this product.

Hanwha Q CELLS America Inc.
300 Spectrum Center Drive, Suite 1250, Irvine, CA 92618, USA | TEL +1 949 748 59 96 | EMAIL inquiry@us.q-cells.com | WEB www.q-cells.us



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

PRODUCT LINE:	GRIDFLEX
DRAWING TYPE:	ASSEMBLY
DESCRIPTION:	MODULE ASSEMBLY
REVISION DATE:	9/15/2021

DRAWING NOT TO SCALE
ALL DIMENSIONS ARE
NOMINAL

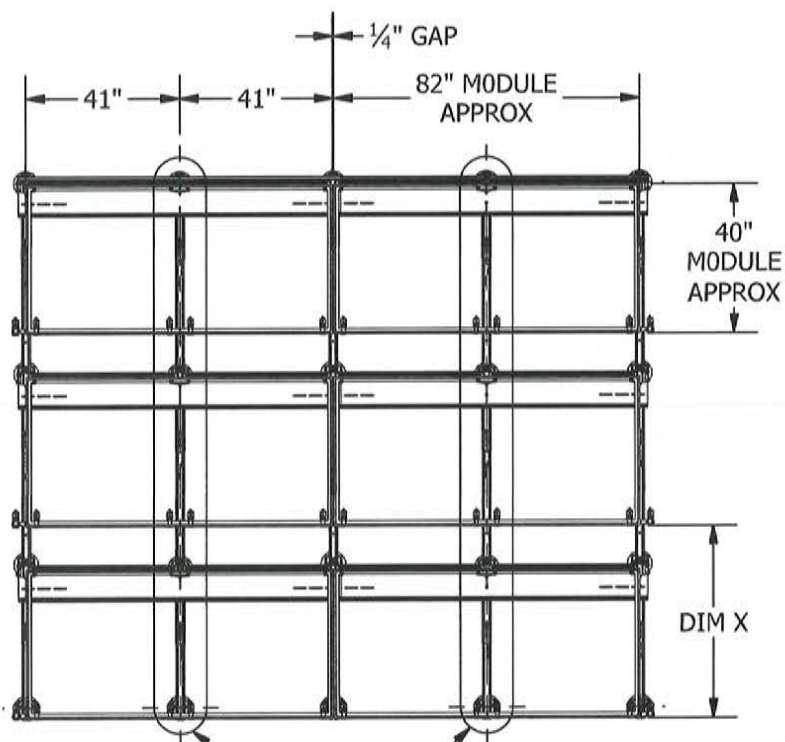
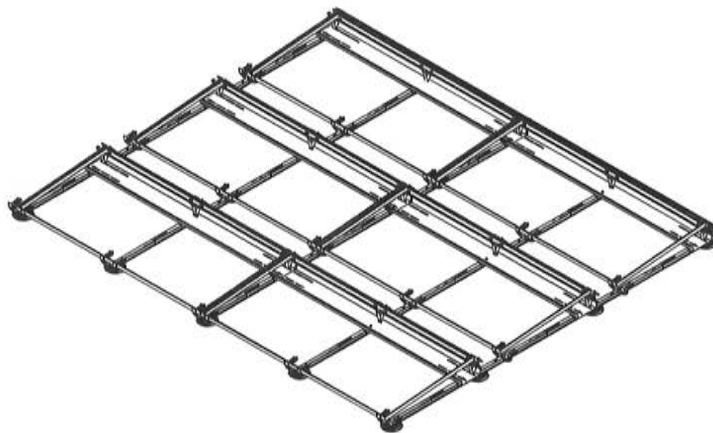
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ONE OR MORE US PATENTS
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GF-A01

SHEET

NOTE:

1. ARRAY DIMENSIONS WILL VARY BASED ON MODULE WIDTH & LENGTH.



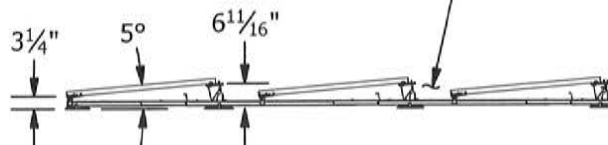
MODULE WIDTH	SCALE SETTING	DIM "X"	
		8" ROW SPACING	11" ROW SPACING
38-38.5"	38.5	46.42	49.42
38.51-39"	39	46.92	49.92
39.01-39.5"	39.5	47.42	50.42
39.51-40"	40	47.92	50.92
40.01-40.5"	40.5	48.42	51.42
40.51-41"	41	48.92	51.92
41.01-41.5"	41.5	49.42	52.42
41.51-42"	42	49.92	52.92
42.01-42.5"	42.5	50.42	53.42
42.51-43"	43	50.92	53.92
43.01-43.5"	43.5	51.42	54.42
43.51-44.65"	44	51.92	54.92

TOP
OPTIONAL THIRD RAIL



FRONT

8" OR 11" SPACING



RIGHT SIDE



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

PRODUCT LINE:	GRIDFLEX
DRAWING TYPE:	ASSEMBLY
DESCRIPTION:	MODULE ASSEMBLY
REVISION DATE:	3/18/2021

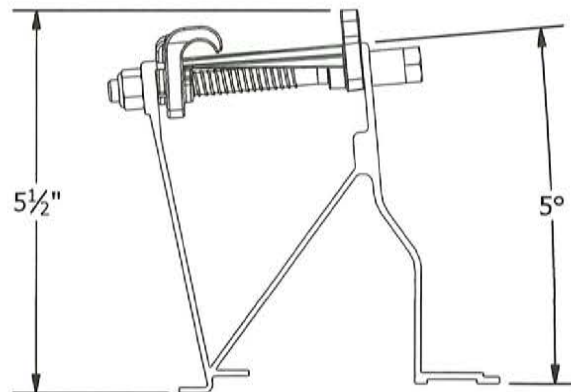
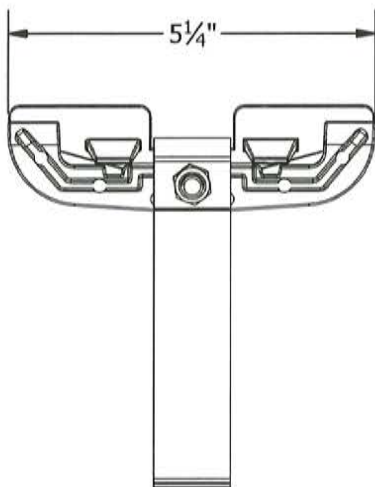
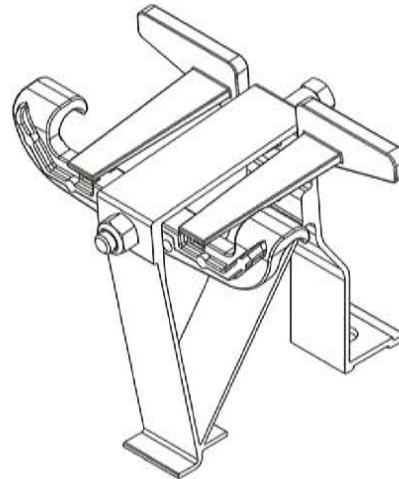
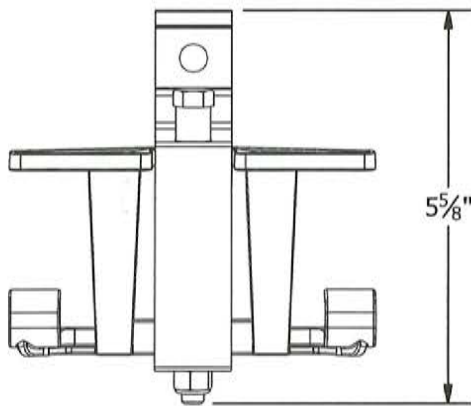
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GF-A02

SHEET

PART # TABLE	
P/N	DESCRIPTION
360041	NORTH CLAMP ASSEMBLY



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

PRODUCT LINE:	GRIDFLEX
DRAWING TYPE:	ASSEMBLY
DESCRIPTION:	NORTH CLAMP
REVISION DATE:	9/15/2021

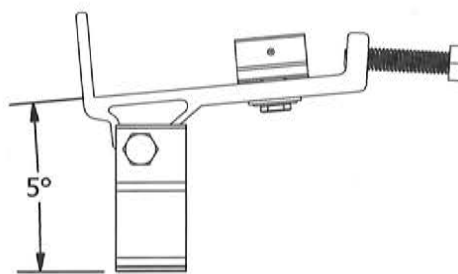
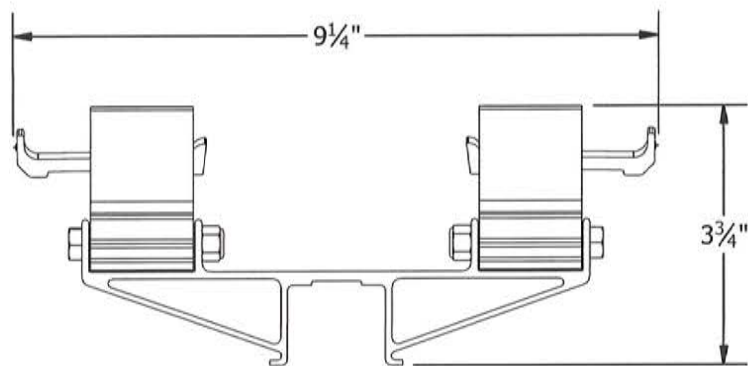
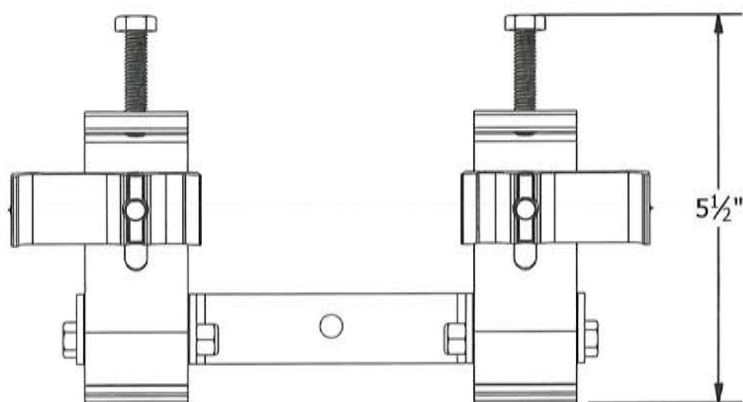
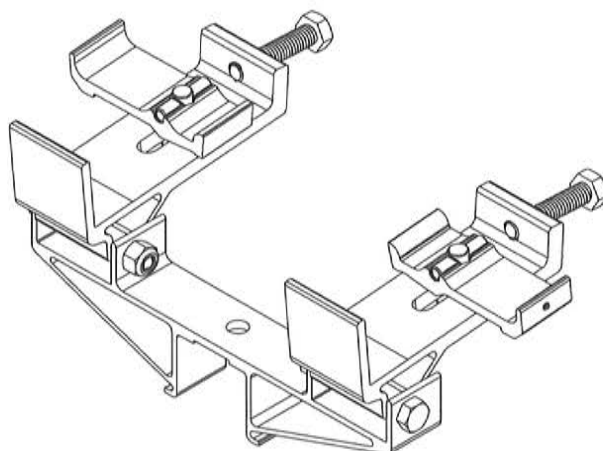
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GF-A03

SHEET

PART # TABLE	
P/N	DESCRIPTION
360050	SOUTH CLAMP ASSEMBLY



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ALBUQUERQUE, NM 87102 USA
PHONE: 505.242.6411
WWW.UNIRAC.COM

PRODUCT LINE:	GRIDFLEX
DRAWING TYPE:	ASSEMBLY
DESCRIPTION:	SOUTH CLAMP
REVISION DATE:	3/18/2021

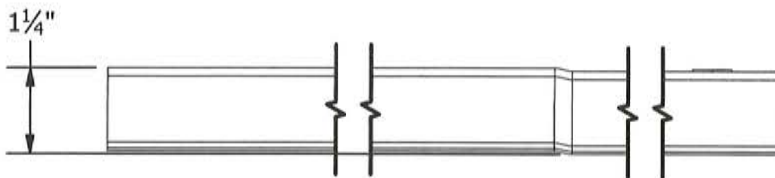
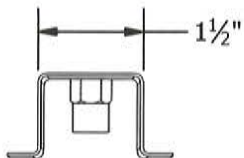
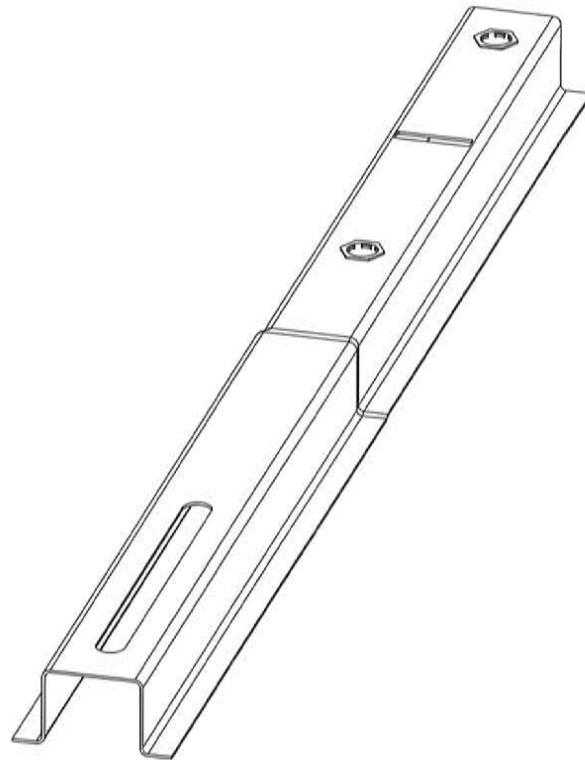
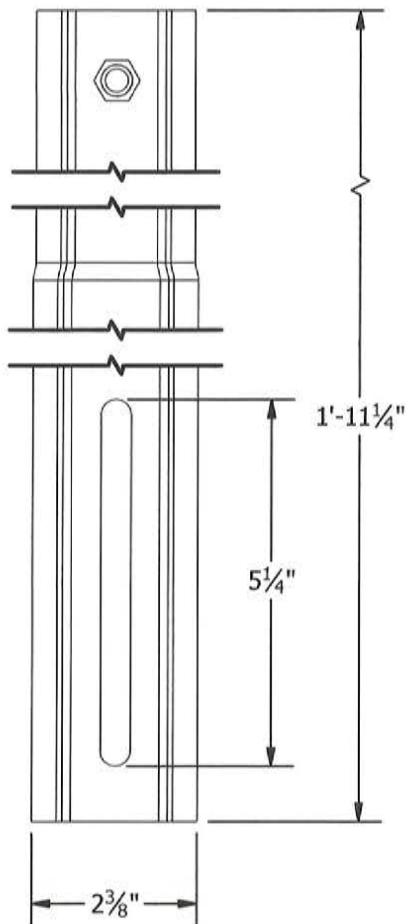
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PART # TABLE	
P/N	DESCRIPTION
360010	NORTH RAIL ASSEMBLY



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ALBUQUERQUE, NM 87102 USA
PHONE: 505.242.6411
WWW.UNIRAC.COM

PRODUCT LINE:	GRIDFLEX
DRAWING TYPE:	ASSEMBLY
DESCRIPTION:	NORTH RAIL
REVISION DATE:	1/25/2021

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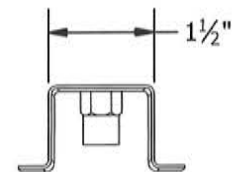
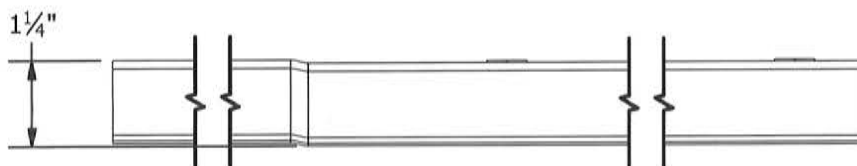
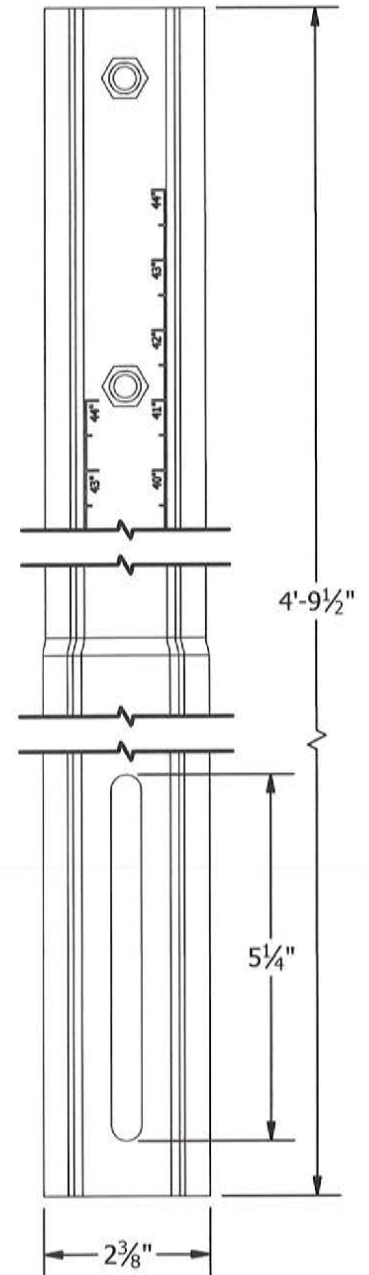
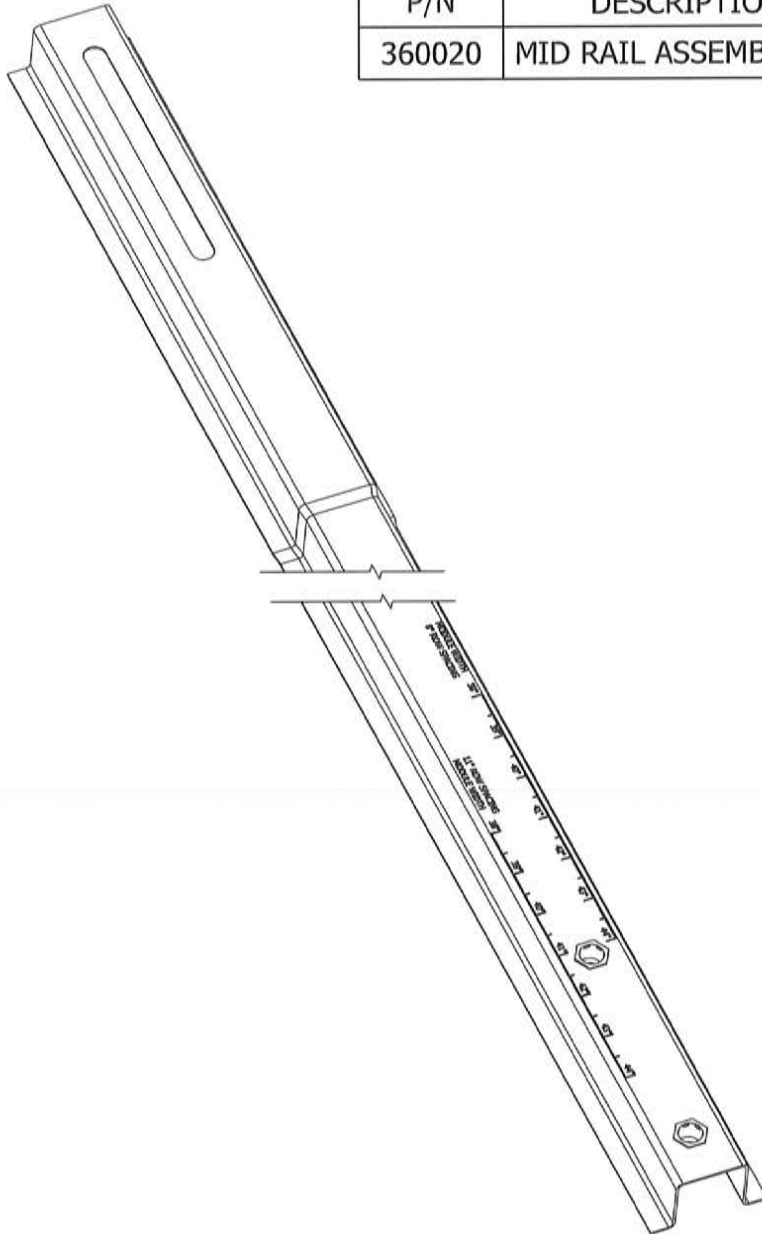
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PART # TABLE	
P/N	DESCRIPTION
360020	MID RAIL ASSEMBLY



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ALBUQUERQUE, NM 87102 USA
PHONE: 505.242.6411
WWW.UNIRAC.COM

PRODUCT LINE:	GRIDFLEX
DRAWING TYPE:	ASSEMBLY
DESCRIPTION:	MID RAIL
REVISION DATE:	1/14/2021

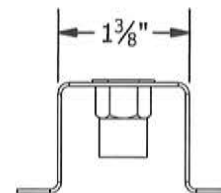
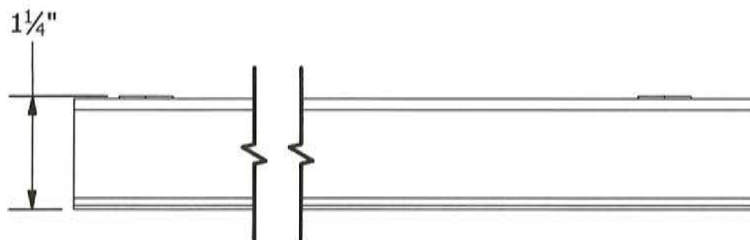
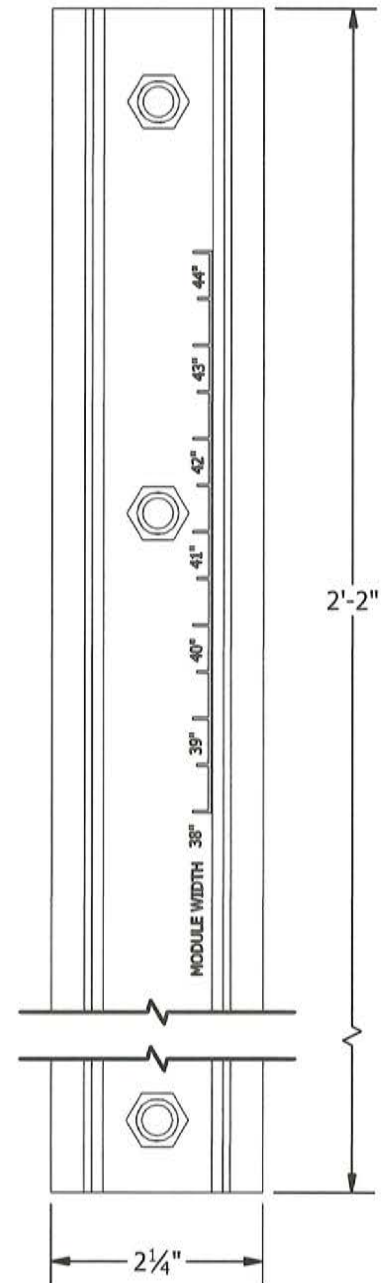
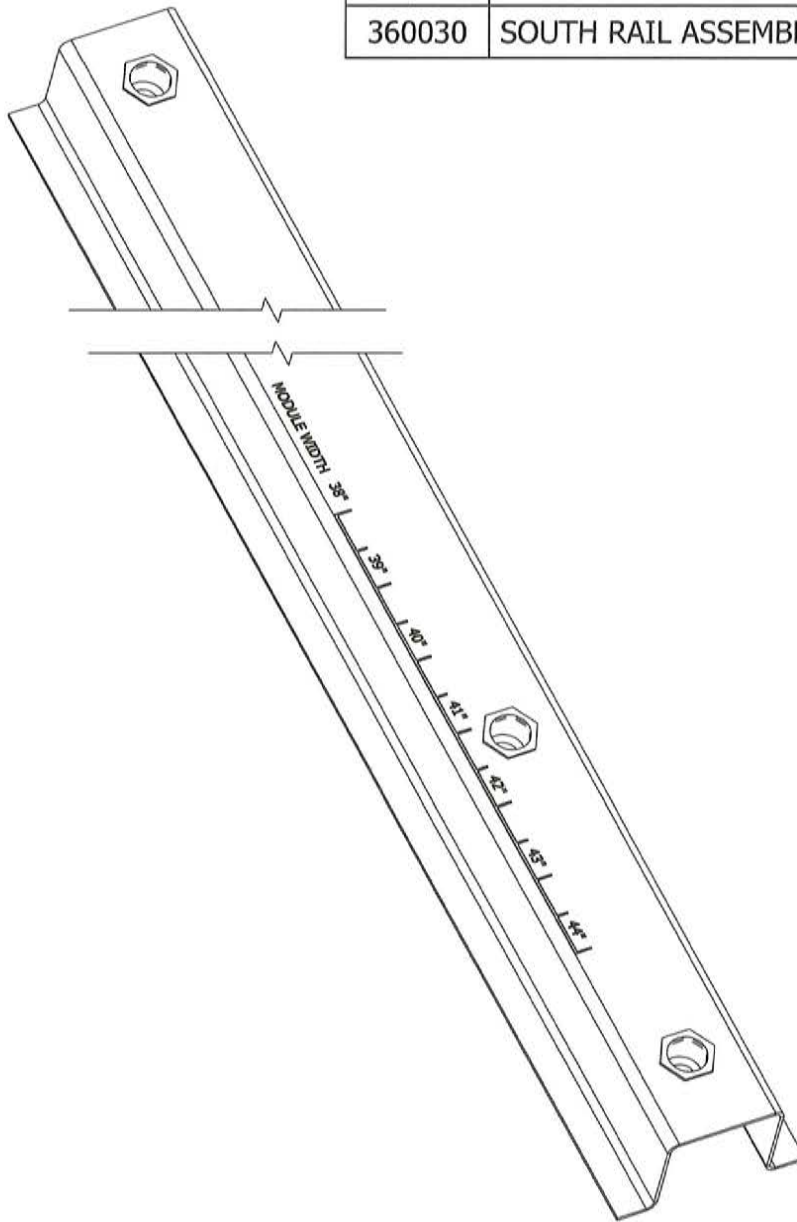
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PART # TABLE	
P/N	DESCRIPTION
360030	SOUTH RAIL ASSEMBLY



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ALBUQUERQUE, NM 87102 USA
PHONE: 505.242.6411
WWW.UNIRAC.COM

PRODUCT LINE:	GRIDFLEX
DRAWING TYPE:	ASSEMBLY
DESCRIPTION:	SOUTH RAIL
REVISION DATE:	1/14/2021

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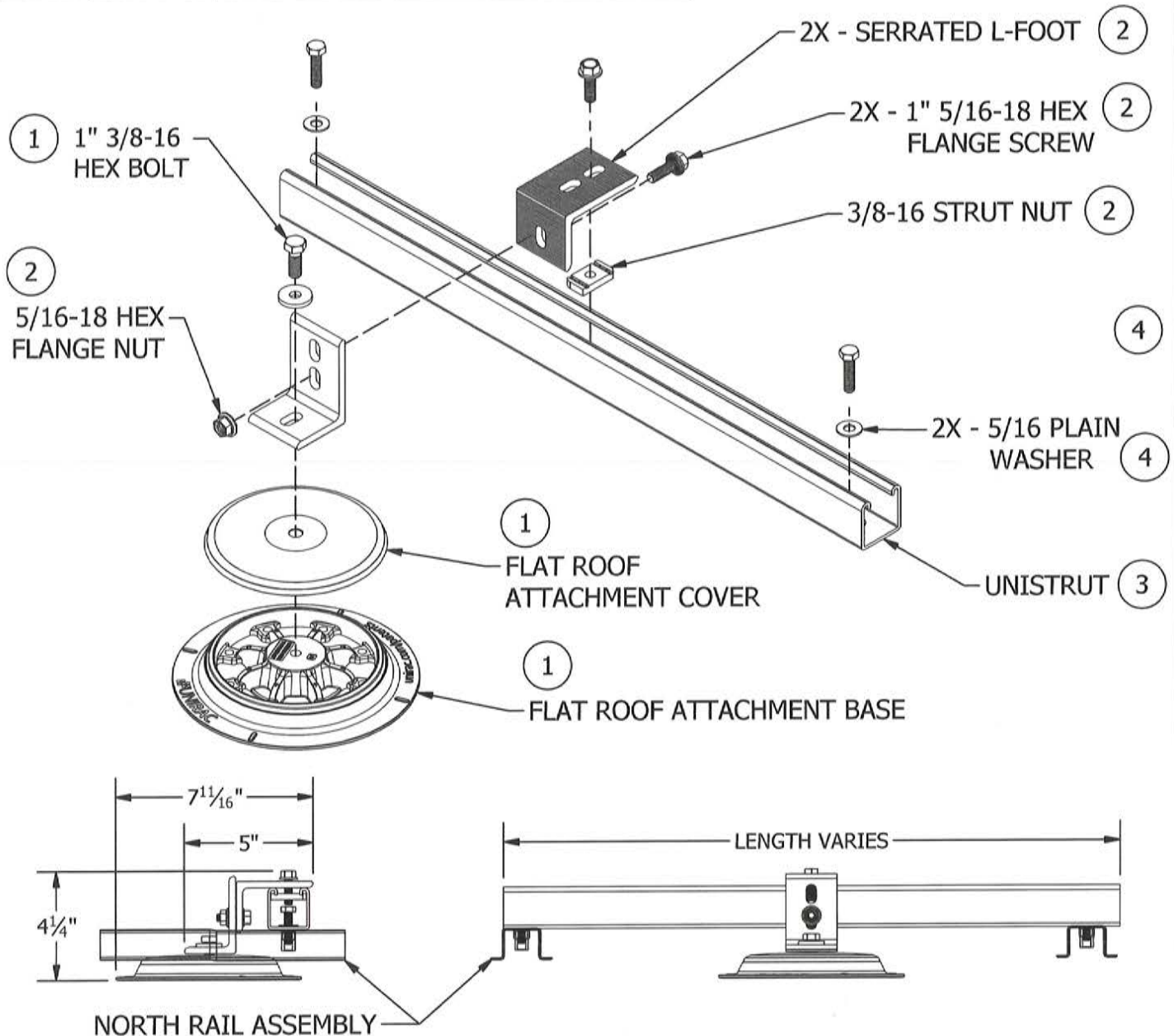
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ASSEMBLY # TABLE

ITEM	P/N	DESCRIPTION
1	310999	FLASHLOC RM KIT
2	ES10843	ECOFOOT ROOF TO STRUT HDWR KIT
3	ES20501	B22 GALVANIZED STRUT, 10'
4	360061	GRIDFLEX HRDWR KIT



1411 BROADWAY BLVD. NE
ALBUQUERQUE, NM 87102 USA
PHONE: 505.242.6411
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PRODUCT LINE: GRIDFLEX

DRAWING TYPE: ASSEMBLY

DESCRIPTION: ATTACHMENT KIT

REVISION DATE: 8/30/2021

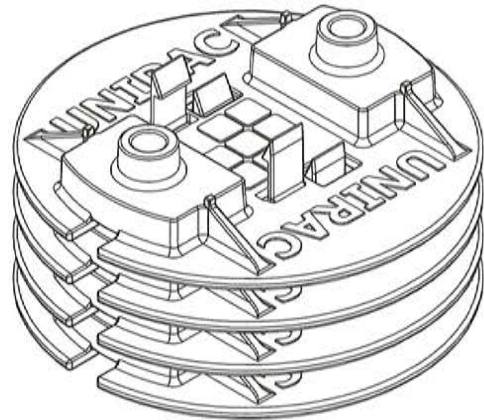
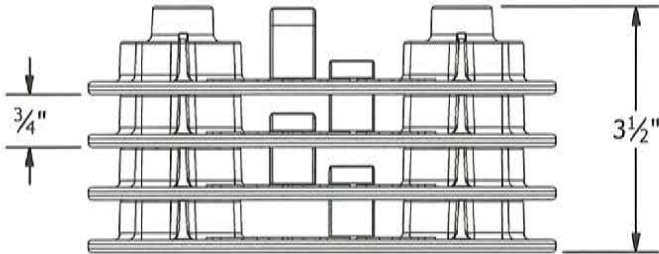
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GF-A08

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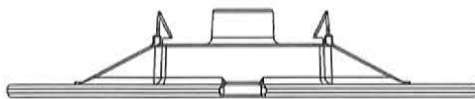
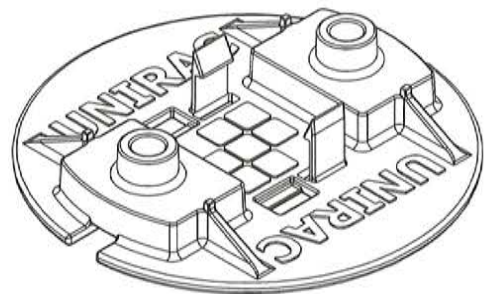
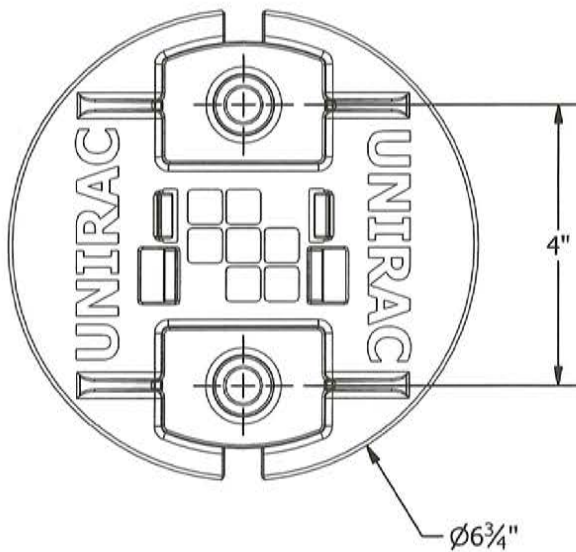
PART # TABLE	
P/N	DESCRIPTION
360060	ROOFPAD



NOTE:

ROOFPADS MAY BE STACKED (UP TO 4) AS SHOWN
TO ACCOMMODATE ROOF UNDULATIONS.

ROOFPAD STACKING NOT ALLOWED ON SOUTH END OF THE ARRAY.



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

PRODUCT LINE:	GRIDFLEX
DRAWING TYPE:	PART
DESCRIPTION:	ROOFPAD
REVISION DATE:	9/15/2021

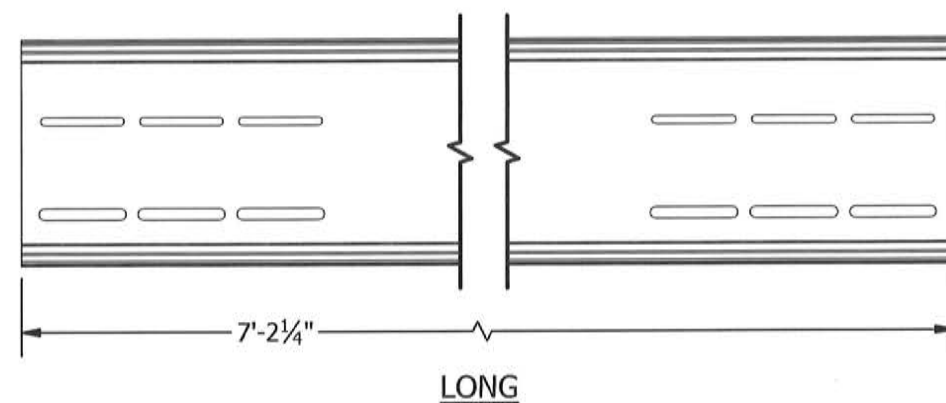
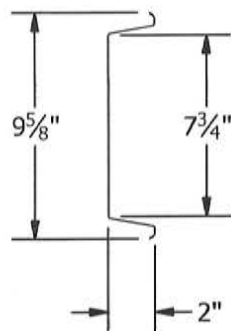
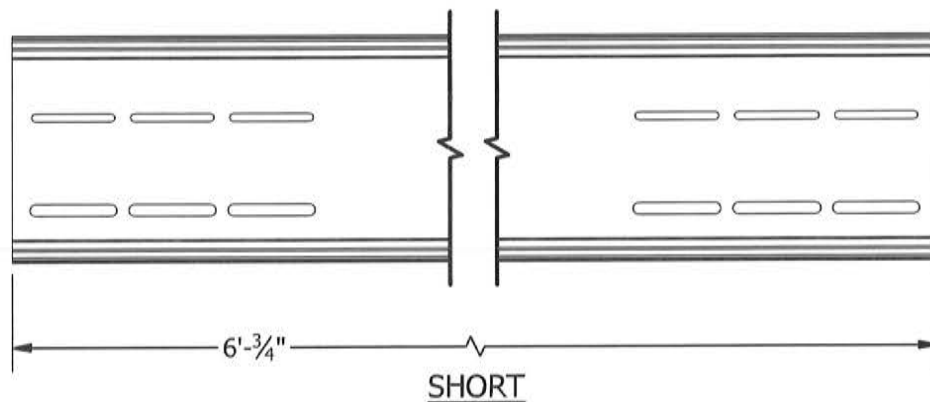
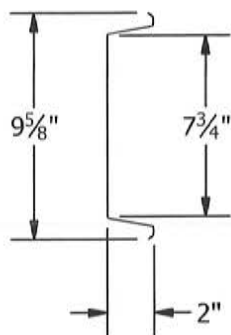
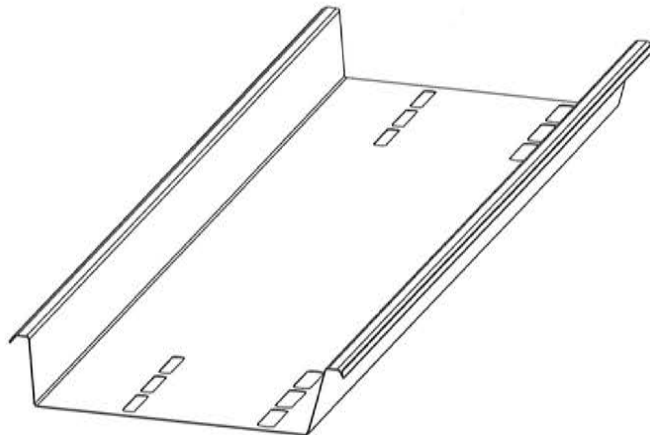
DRAWING NOT TO SCALE
ALL DIMENSIONS ARE
NOMINAL

PRODUCT PROTECTED BY
ONE OR MORE US PATENTS
LEGAL NOTICE

GF-P01

SHEET

PART # TABLE	
P/N	DESCRIPTION
360071	SHORT BALLAST TRAY 62" - 69"
360081	LONG BALLAST TRAY 77" - 83"



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

PRODUCT LINE: GRIDFLEX

DRAWING TYPE: PART

DESCRIPTION: BALLAST TRAYS

REVISION DATE: 9/15/2021

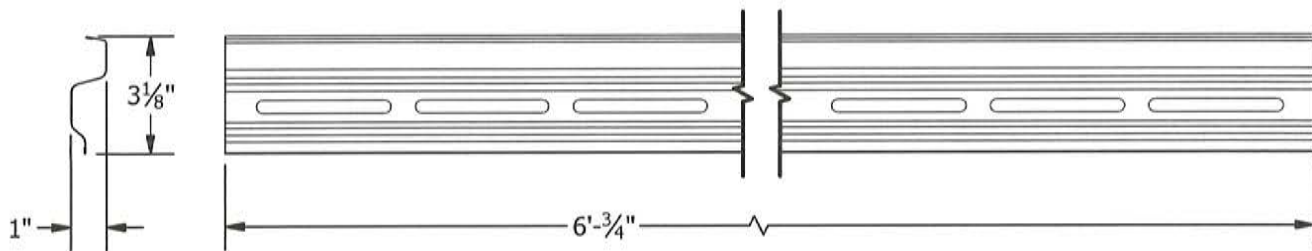
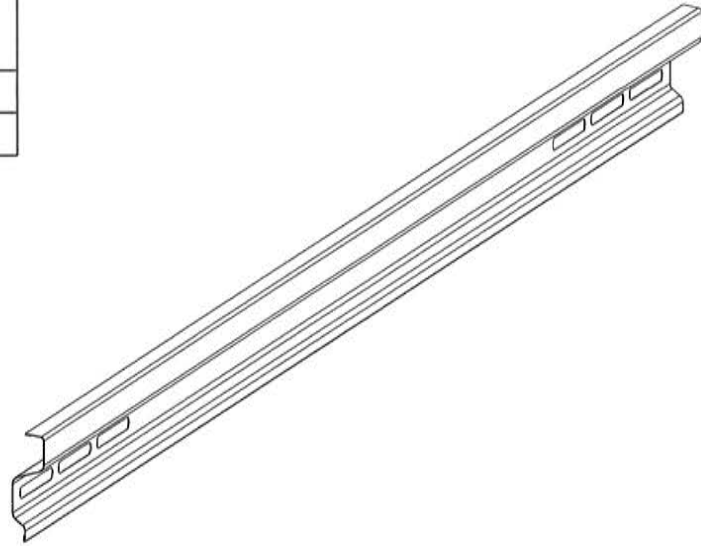
DRAWING NOT TO SCALE
ALL DIMENSIONS ARE
NOMINAL

PRODUCT PROTECTED BY
ONE OR MORE US PATENTS
LEGAL NOTICE

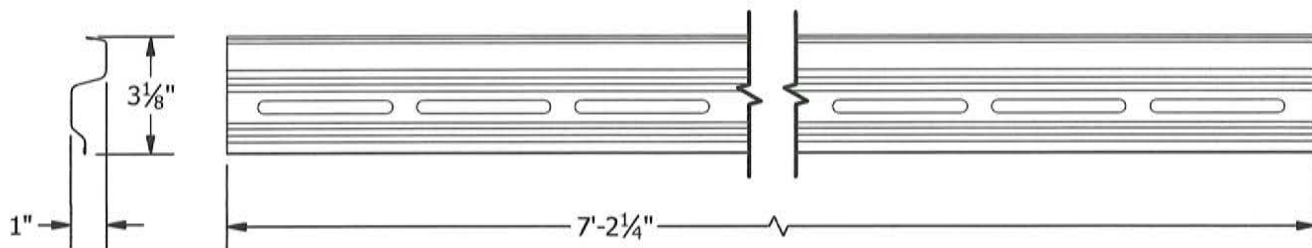
GF-P02

SHEET

PART # TABLE	
P/N	DESCRIPTION
360090	GRIDFLEX DEFLECTOR 62-69"
360100	GRIDLFEX DEFLECTOR 77-83"



SHORT



LONG



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

PRODUCT LINE:	GRIDFLEX
DRAWING TYPE:	PART
DESCRIPTION:	WIND DEFLECTORS
REVISION DATE:	1/14/2021

DRAWING NOT TO SCALE
ALL DIMENSIONS ARE
NOMINAL

PRODUCT PROTECTED BY
ONE OR MORE US PATENTS
LEGAL NOTICE

GF-P03

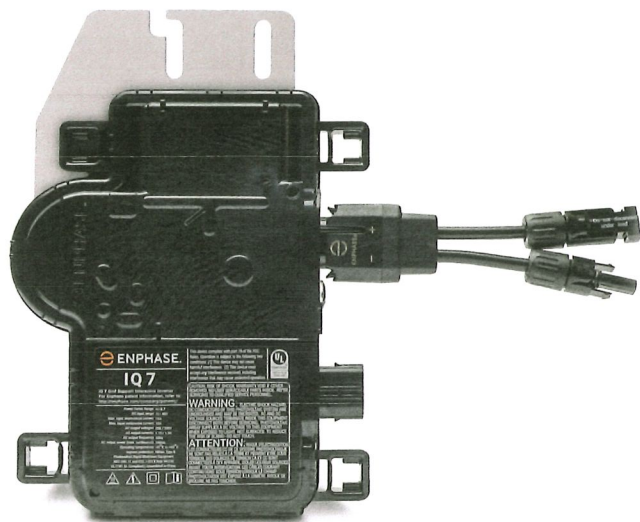
SHEET

Enphase IQ 7 and IQ 7+ Microinverters

The high-powered smart grid-ready **Enphase IQ 7 Micro™** and **Enphase IQ 7+ Micro™** dramatically simplify the installation process while achieving the highest system efficiency.

Part of the Enphase IQ System, the IQ 7 and IQ 7+ Microinverters integrate with the Enphase IQ Envoy™, Enphase IQ Battery™, and the Enphase Enlighten™ monitoring and analysis software.

IQ Series Microinverters extend the reliability standards set forth by previous generations and undergo over a million hours of power-on testing, enabling Enphase to provide an industry-leading warranty of up to 25 years.



Easy to Install

- Lightweight and simple
- Faster installation with improved, lighter two-wire cabling
- Built-in rapid shutdown compliant (NEC 2014 & 2017)

Productive and Reliable

- Optimized for high powered 60-cell/120 half-cell and 72-cell/144 half-cell* modules
- More than a million hours of testing
- Class II double-insulated enclosure
- UL listed

Smart Grid Ready

- Complies with advanced grid support, voltage and frequency ride-through requirements
- Remotely updates to respond to changing grid requirements
- Configurable for varying grid profiles
- Meets CA Rule 21 (UL 1741-SA)

* The IQ 7+ Micro is required to support 72-cell/144 half-cell modules.



To learn more about Enphase offerings, visit enphase.com



Enphase IQ 7 and IQ 7+ Microinverters

INPUT DATA (DC)	IQ7-60-2-US		IQ7PLUS-72-2-US	
Commonly used module pairings¹	235 W - 350 W +		235 W - 440 W +	
Module compatibility	60-cell/120 half-cell PV modules only		60-cell/120 half-cell and 72-cell/144 half-cell PV modules	
Maximum input DC voltage	48 V		60 V	
Peak power tracking voltage	27 V - 37 V		27 V - 45 V	
Operating range	16 V - 48 V		16 V - 60 V	
Min/Max start voltage	22 V / 48 V		22 V / 60 V	
Max DC short circuit current (module Isc)	15 A		15 A	
Overvoltage class DC port	II		II	
DC port backfeed current	0 A		0 A	
PV array configuration	1 x 1 ungrounded array; No additional DC side protection required; AC side protection requires max 20A per branch circuit			
OUTPUT DATA (AC)	IQ 7 Microinverter		IQ 7+ Microinverter	
Peak output power	250 VA		295 VA	
Maximum continuous output power	240 VA		290 VA	
Nominal (L-L) voltage/range²	240 V / 211-264 V	208 V / 183-229 V	240 V / 211-264 V	208 V / 183-229 V
Maximum continuous output current	1.0 A (240 V)	1.15 A (208 V)	1.21 A (240 V)	1.39 A (208 V)
Nominal frequency	60 Hz		60 Hz	
Extended frequency range	47 - 68 Hz		47 - 68 Hz	
AC short circuit fault current over 3 cycles	5.8 Arms		5.8 Arms	
Maximum units per 20 A (L-L) branch circuit³	16 (240 VAC)	13 (208 VAC)	13 (240 VAC)	11 (208 VAC)
Overvoltage class AC port	III		III	
AC port backfeed current	18 mA		18 mA	
Power factor setting	1.0		1.0	
Power factor (adjustable)	0.85 leading ... 0.85 lagging		0.85 leading ... 0.85 lagging	
EFFICIENCY	@240 V	@208 V	@240 V	@208 V
Peak efficiency	97.6 %	97.6 %	97.5 %	97.3 %
CEC weighted efficiency	97.0 %	97.0 %	97.0 %	97.0 %
MECHANICAL DATA				
Ambient temperature range	-40°C to +65°C			
Relative humidity range	4% to 100% (condensing)			
Connector type	MC4 (or Amphenol H4 UTX with additional Q-DCC-5 adapter)			
Dimensions (HxWxD)	212 mm x 175 mm x 30.2 mm (without bracket)			
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			
Environmental category / UV exposure rating	NEMA Type 6 / outdoor			
FEATURES				
Communication	Power Line Communication (PLC)			
Monitoring	Enlighten Manager and MyEnlighten monitoring options. Both options require installation of an Enphase IQ Envoy.			
Disconnecting means	The AC and DC connectors have been evaluated and approved by UL for use as the load-break disconnect required by NEC 690.			
Compliance	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 C22.1-2015 Rule 64-218 Rapid Shutdown of PV Systems, for AC and DC conductors, when installed according manufacturer's instructions.			

1. No enforced DC/AC ratio. See the compatibility calculator at <https://enphase.com/en-us/support/module-compatibility>.

2. Nominal voltage range can be extended beyond nominal if required by the utility.

3. Limits may vary. Refer to local requirements to define the number of microinverters per branch in your area.

To learn more about Enphase offerings, visit enphase.com



APPLICATION FOR BUILDING PERMIT

The Village of Irvington | 85 Main St | Irvington NY 10533

Application Number:	103	Date:	01/04/2022
Job Location:	90 FARGO LN	Parcel ID:	2.20-3-5
Property Owner:	ETA Fargo LLC; Managing Member: Sara Parganos	Property Class:	1 FAMILY RES
Occupancy:	One/ Two Family	Zoning:	
Common Name:			

Applicant		Contractor	
John Malone		Brandon Hall	
Ferguson Malone Architecture		Consolidated Hudson Electric	
One Bridge Street - Suite 29Irvington NY 10533		64 Main Street Irvington NY 10533	
914-564-3166		914-591-0100	

Description of Work

Type of Work:	Solar Panels	Applicant is:	Architect
Work Requested by:	The Owner	In association with:	
Cost of Work (Est.):	10000.00	Property Class:	1 FAMILY RES

Description of Work

Solar panels on roof

Please Note: Completing the application does not constitute a permit to commence construction. To obtain your permit follow the instructions on the instruction page provided on page 3.

Job Location: 90 FARGO LN

Parcel Id: 2.20-3-5

AFFIDAVIT OF APPLICANT

I **John Malone** being duly sworn, depose and says: That s/he does business as: **Ferguson Malone Architecture** with offices at: **One Bridge Street - Suite 29 Irvington NY 10533** and that s/he is:

- ☐ The owner of the property described herein.
- ☐ The _____ of the New York Corporation _____ with offices at: _____ duly authorized by resolution of the Board of Directors, and that said corporation is duly authorized by the owner to make this application.
- ☐ A general partner of _____ with offices _____ and that said Partnership is duly authorized by the Owner to make this application.
- ☐ The Lessee of the premises, duly authorized by the owner to make this application.
- ☒ The Architect of Engineer duly authorized by the owner to make this application.
- ☐ The contractor authorized by the owner to make this application.

That the information contained in this application and on the accompanying drawings is true to the best of his knowledge and belief. The undersigned hereby agrees to comply with all the requirements of the New York State Uniform Fire Prevention and Building Code, the Village of Irvington Building Code, Zoning Ordinance and all other laws pertaining to same, in the construction applied for, whether or not shown on plans or specify in this application.

Sworn to before me this 4th day of January of 2022

Jessica Emilia Baran

Notary Public / Commission of Deeds

Jessica Emilia Baran
NOTARY PUBLIC, STATE OF NEW YORK
Registration No. 01BA6355917
Qualified in Westchester County
Commission Expires March 20, 2025

[Signature]
Applicant's Signature

OWNER'S AUTHORIZATION

I **ETA Fargo LLC; Managing Member: Sara Parganos** as the owner of the subject premises and have authorized the contractor named above to perform the work under the subject application.

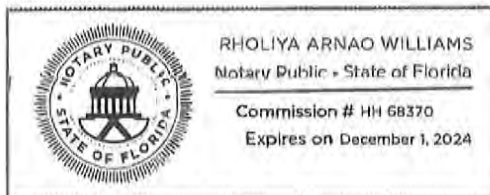
Owner phone number 917-623-6304 Owner email address saraemilyparganos@gmail.com

- ☒ Sara Parganos I hereby acknowledge that it is my responsibility as the **property owner** to ensure that if the permit (if issued) receives a Final Certificate of Approval from the Building Department and further that if a Final Certificate of Approval is not obtained upon completion of the construction, a property violation may be placed on the property for which this permit is being requested.

Sworn to before me this 4th day of January of 2022

Rholiya Arnao Williams
Notary Public / Commission of Deeds

Sara Parganos
Applicant's Signature



VILLAGE OF IRVINGTON

BUILDING DEPARTMENT

85 MAIN STREET

IRVINGTON, NEW YORK 10533

TEL: (914) 591-8335 • FAX: (914) 591-5870



PHOTOVOLTAIC (PV SOLAR) RESIDENTIAL SYSTEMS

PERMIT APPLICATION CHECK LIST

Revised June 7, 2017

It is suggested that all applicants applying for a permit read and understand the manufacture installation instructions prior to applying for a building permit and attached ARB guide lines and Village code for Solar Energy Equipment.

REQUIREMENTS TO APPLY FOR A PHOTOVOLTAIC (PV SOLAR) SYSTEM PERMIT

- ☒ 1) Apply on line at www.irvingtonny.gov for a mechanical permit, under building permits and along with your application, submit to the building department the following;
- ☒ 2) Owners phone number and email address entered in the online permit application
- ☒ 3) Evidence of Workers Compensation Insurance (on a C-105 or equivalent)
- ☒ 4) Evidence of Liability Insurance naming the Village of Irvington additional insured
- ☒ 5) A copy of the contractors Westchester County Department of Consumer Protection License
- ☒ 6) Pursuant to 9-12-A, provide evidence of notice to adjacent properties owners not less than 10 days prior to the meeting (see attached code section for more details)
- ☒ 7) Submit permit fee: (all fees must be paid at time of submission)
 - ☒ \$85 application fee
 - ☐ \$200 for systems up to 5 kilowatts
 - ☐ \$450 for systems above 5 kilowatts and less than 10 kilowatts
 - ☐ \$700 for systems above 10 kilowatts and less than 20 kilowatts
 - ☒ \$700 plus \$250 per additional 10 kilowatts above 20 for systems above 20 kilowatts
 - ☒ \$75 Certificate of Completion inspection and fee
- ☒ 8) An affidavit from a NYS licensed professional detailing and certifying that the existing structure meets or exceeds the minimum load requirement's as per TABLE R301.2(1) for wind and load before and after installation of the proposed equipment or the proposed upgrades to the existing structure to accomplish the aforesaid.
- ☒ 9) Drawings (signed and sealed by a NYS licensed professional) of the roof plan showing the following criteria:
 - a. ☒ Showing all proposed PV panels on all proposed roof surfaces.
 - b. ☒ Showing all equipment on all elevations including
 - c. ☒ Show / list all roof connectors and flashing details
 - d. ☒ Show compliance with section R902.4 (fire classification in accordance with UL1703 and 3' from any lot line)
 - e. ☒ Show compliance with sections R324.3.1 through R324.7.2.5 and NFPA 70 (installation)
 - f. ☒ Show compliance with section R324.7 (access and pathways) (see attachment)
 - g. ☒ Show compliance with section R324.7.2.1-6. (roof access points) (see attachment)
 - h. ☒ Show compliance with section R324.7.3 (ground access areas) (see attachment)
 - i. ☐ Show compliance with section R324.7.4 (single ridge roofs *when applicable*) (see attachment)
 - j. ☐ Show compliance with section R324.7.5 (hip roofs *when applicable*) (see attachment)
 - k. ☐ Show compliance with section R324.7.6 (roof with valleys *when applicable*) (see attachment)
 - l. ☒ Show compliance with section R324.7.7 (allowance for smoke ventilation operations) (see attachment)
 - m. ☒ Show a Fire Department AC disconnect, located outside by the Utility meter on all systems.
- ☒ 10) Provide a drawing or manufactures cut sheets of array mounting hardware and interconnection diagram and specifications.
- ☒ 11) Provide a drawing or manufactures cut sheets of the unit mount and roof penetration's flashing system.
- ☒ 12) 3 wire diagram showing all proposed equipment as governed by the National Electrical Code (NEC)
- ☒ 13) Provide a diagram showing all proposed labels and labeling locations including; Solar AC Disconnect, Inverter Output, Connection Warning, Dual Power Source Warning, Solar AC Combiner Panel, Solar PV Circuits Only, Solar Production meter. (see attachment)
- ☐ 14) Provide snow guards on panels were snow has the potential of sliding of the panel into a neighbor's property
- ☒ 15) Pictures of dwelling showing photo shopped arrays on the structure.
- ☒ 16) Provide a drawing or photo shop picture of all proposed equipment on all effected elevations (including FD emergency disconnect switch)
- ☒ 17) A Fire Department AC disconnect, located outside by the Utility meter on all systems.

VILLAGE OF IRVINGTON

BUILDING DEPARTMENT

85 MAIN STREET

IRVINGTON, NEW YORK 10533

TEL: (914) 591-8335 • FAX: (914) 591-5870



- ☒ 18) Separate Electrical Permit application by a Westchester County Department of Licensing, licensed Electrician with required insurances and the appropriate fee (must be filed by the licensed contractor, see village application for further details).
- ☒ 19) Submit signed check list with submission and appropriate building permit fee.
- ☒ 20) Applicant has provided seven copies of the entire submittal for Architectural Review Board approval.

Applicant Affidavit:

Applicants Name: John Malone
Applicants Address: 1 Bridge St - Suite 29
Irvington, NY 10533
Applicants Phone # 914-564-3166
Applicants Email info@fergusonmalone.com

Applicant Name: John Malone Signature: [Signature] Date: 01/04/2022 By signing this affidavit I attest to have read the attached Solar Energy Equipment Code and the Solar Equipment Guidelines manufactures installation instructions and that all information asked for above has been submitted and that the submitted information is correct.

General Contractor Affidavit:

Contractors Name: _____
Contractors Address: _____
Contractors Phone # _____
Contractors Email _____

General Contractor Name: _____ Signature: _____ Date: _____ By signing this affidavit I attest to being the general contractor of record for this application and will be responsible for oversight and direct supervision of same, and will maintain a valid Westchester County Department of Consumer Protection License, a valid for Workers Compensation Policy and a General Liability Policy listing the Village of Irvington as Certificate Holder and additional insured with no conditions until such time I apply for and receive a Certificate of Completion.

Electrical Contractor Affidavit:

Electrical Contractors Name: Consolidated Hudson Electric, Corp.
Electrical Contractors Address: 64 Main St.
Irvington, NY 10533
Electrical Contractors Phone # (914) 591-0100
Electrical Contractors Email brandon@conhudelectric.com

Electrical Contractor Name: Consolidated Hudson Electric, Corp. Signature: [Signature] Date: 1/4/2022 By signing this affidavit I attest to being the electrical contractor of record for this application and will be responsible for oversight and direct supervision of same, and will maintain a valid Westchester County Electrical License, a valid for Workers Compensation Policy and a General Liability Policy listing the Village of Irvington as Certificate Holder and additional insured with no conditions until such time I apply for and receive a Certificate of Completion.

Note: Applications for all exterior elevation changes including photovoltaic solar systems are required to apply for, make a presentation in front of, and receive approval from the Village of Irvington Architectural Review Board (ARB) prior to issuance of a building permit. The ARB meetings are the second and fourth Mondays of the month, with a deadline for submissions one week prior to the meetings (see village web site for confirmation of meetings). Seven sets of copies of the entire application are required to be submitted at the deadline with appropriate fee at the time of submission.

Note: The following list above is given to assist in the application process. It is not intended to be a replacement for the Building or Zoning Code, County or State Regulations, or Consolidate Edison Requirements. Unique and Special projects may require additional information.

***Hours of Construction: Monday-Friday 7AM-7PM; Saturday 9AM-5PM; Sunday and holiday's construction is prohibited**

***Only completed applications will be accepted with attached insurance certificates and County license**

Jessica Emilia Baran
NOTARY PUBLIC, STATE OF NEW YORK
Registration No. 01BA6355917
Qualified in Westchester County
Commission Expires March 20, 2025

PHOTOVOLTAIC DC DISCONNECT
WARNING! ELECTRIC SHOCK HAZARD!

Voc	V
Vmp	V
Isc	A
Imp	A

Label Location:
 (DC), (INV)
 Per Code:
 CEC 690.53, NE

Solar Disconnect

WARNING - Electric Shock Hazard
DO NOT TOUCH TERMINALS
 Terminals on both line and Load sides
 may be energized in the Open Position

Label Location:
 (AC), (LC)
 Per Code:
 CEC 690.17, NEC 690.14 (4)

WARNING - Dual Power Sources
 Second source is photovoltaic system

Label Location:
 (INV), (AC), (LC)

WARNING - Electric Shock Hazard
 No user serviceable parts inside
 Contact authorized servicer for assistance

Label Location:
 (CB)

DC DISCONNECT

WARNING - Electric Shock Hazard
DO NOT TOUCH TERMINALS
 Terminals on both line and Load sides
 may be energized in the Open Position
 DC VOLTAGE IS ALWAYS PRESENT WHEN
 SOLAR MODULES ARE EXPOSED TO SUNLIGHT

Label Location:
 (DC), (INV)

PHOTOVOLTAIC POINT OF INTERCONNECTION
WARNING! ELECTRIC SHOCK HAZARD!
 DO NOT TOUCH TERMINALS. TERMINALS ON BOTH THE
 LINE AND LOAD SIDE MAY BE ENERGIZED

PV POWER SOURCE	
MAXIMUM AC CIRCUIT OUTPUT OPERATING CURRENT	A
OPERATING AC VOLTAGE	V

Label Location:
 (POI)

WARNING!

INVERTER OUTPUT CONNECTION. DO NOT
 RELOCATE THIS OVERCURRENT DEVICE.

Label Location:
 (POI)

PV COMBINER BOX
WARNING:
ELECTRIC SHOCK HAZARD

Label Location:
 (CB)

PHOTOVOLTAIC AC DISCONNECT
WARNING! ELECTRIC SHOCK HAZARD!

OPERATING AC VOLTAGE	V
MAXIMUM OPERATING CURRENT	A

Label Location:
 (AC), (D), (LC)
 Per Code:
 CEC 690.8.A.3 & CEC 690.54, NEC 690.14 (c)(2)

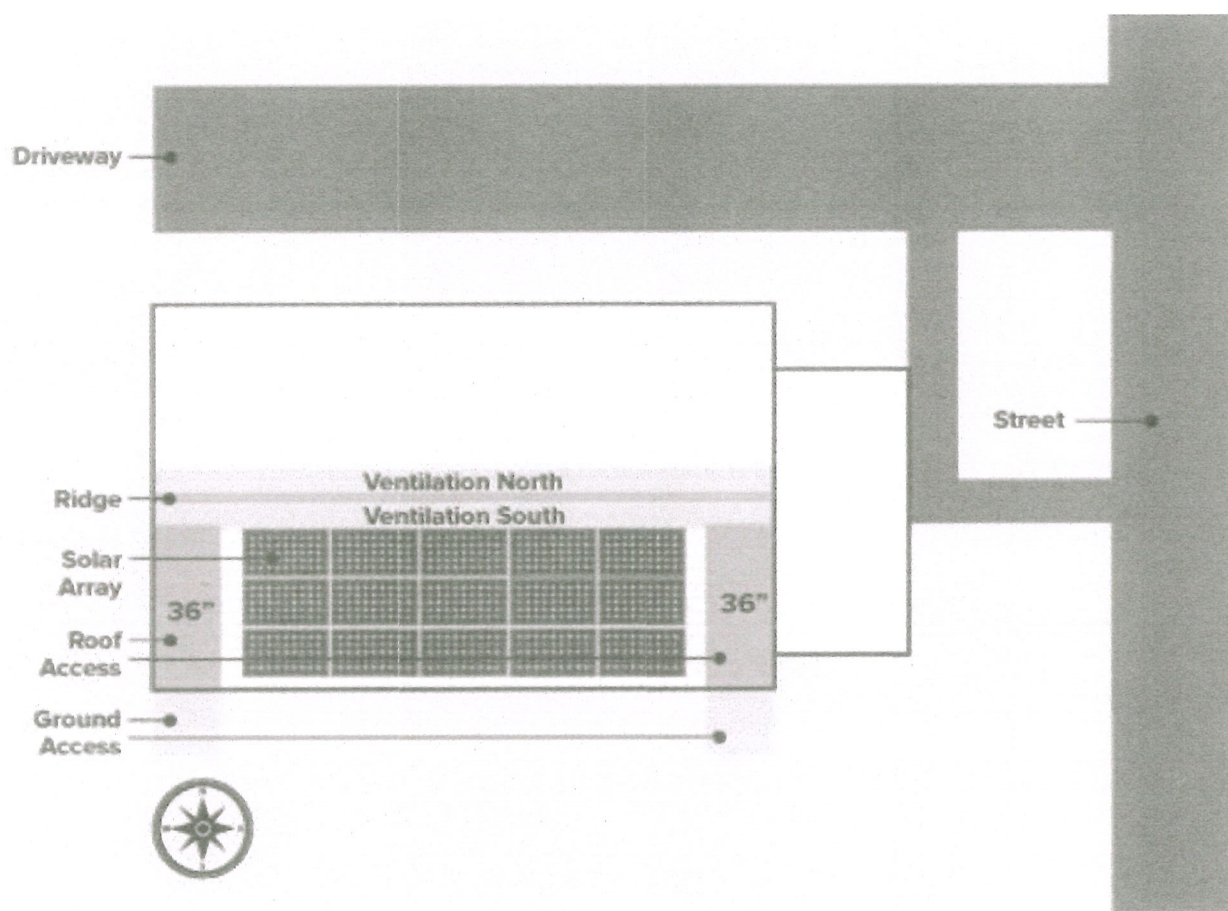
CAUTION: SOLAR CIRCUIT

Label Location:
 (C)

(AC): AC Disconnect
 (C): Conduit
 (CB): Combiner Box
 (D): Distribution Panel
 (DC): DC Disconnect
 (IC): Interior Run Conduit
 (INV): Inverter With Integrated DC Disconnect
 (LC): Load Center

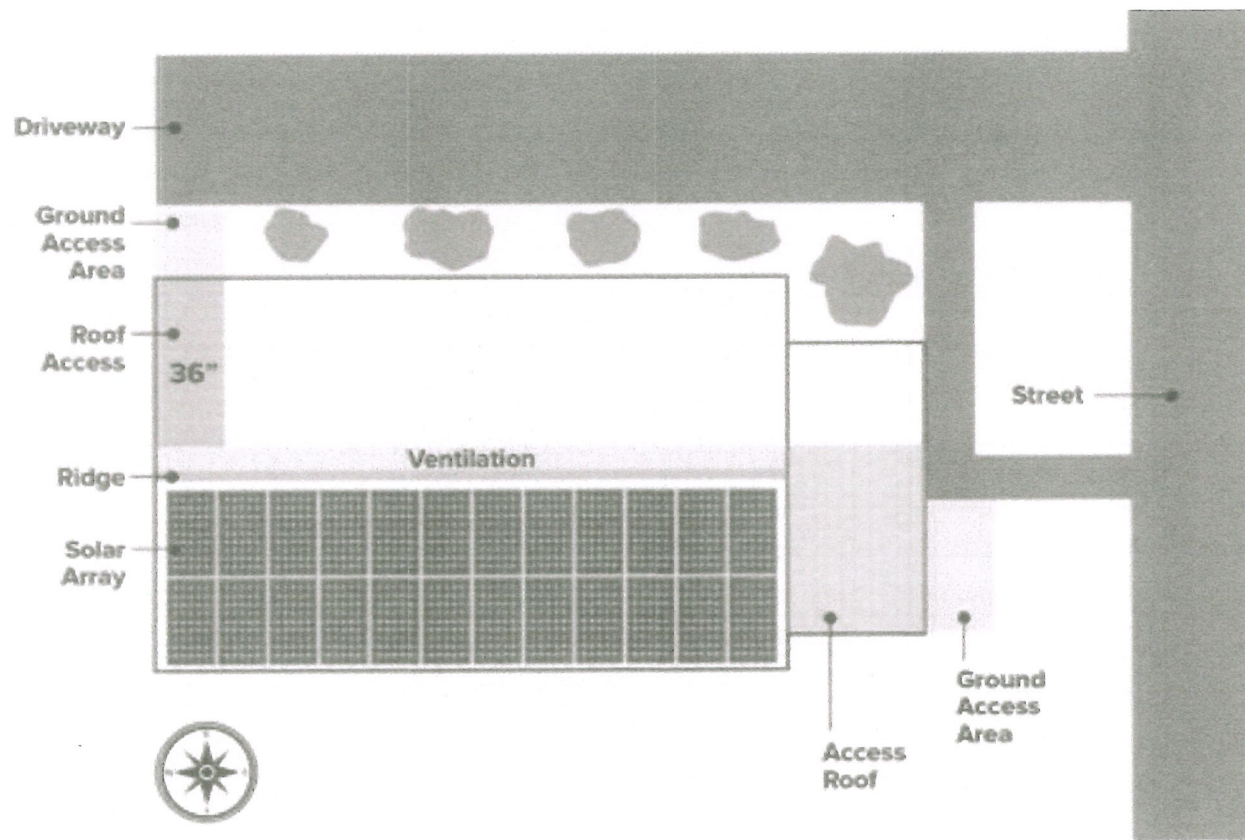
Single Ridge Roof with Two Pathways on Same Slope as Array

Two pathways are required for single ridge roofs. If both pathways are located on the same slope as the PV array, array space is limited. Exceptions to Section R324.7.4 may permit alternate access, pathways and venting locations.



Single Ridge Roof with Alternate Access and Venting Locations

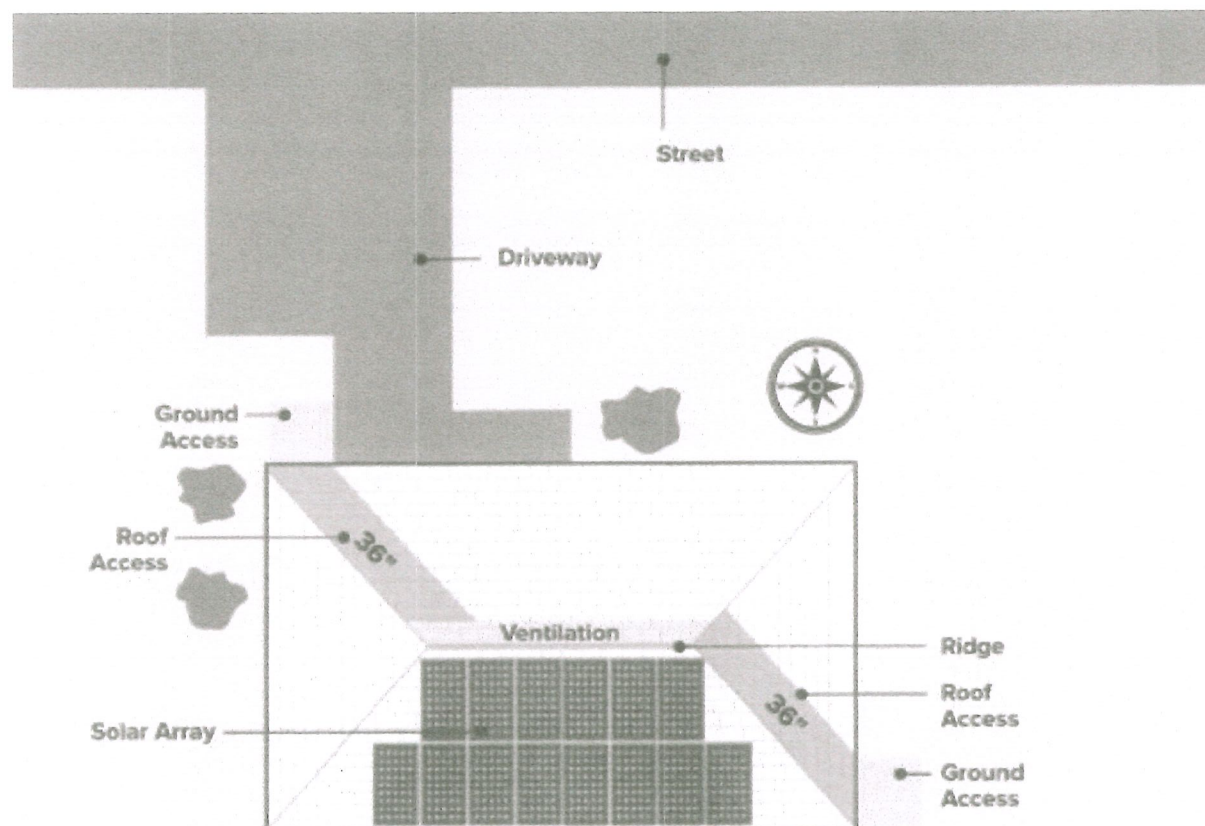
Alternate access, pathways and venting locations may be possible for single ridge roofs meeting exceptions to Section R324.7.4.



Source: NYSERDA

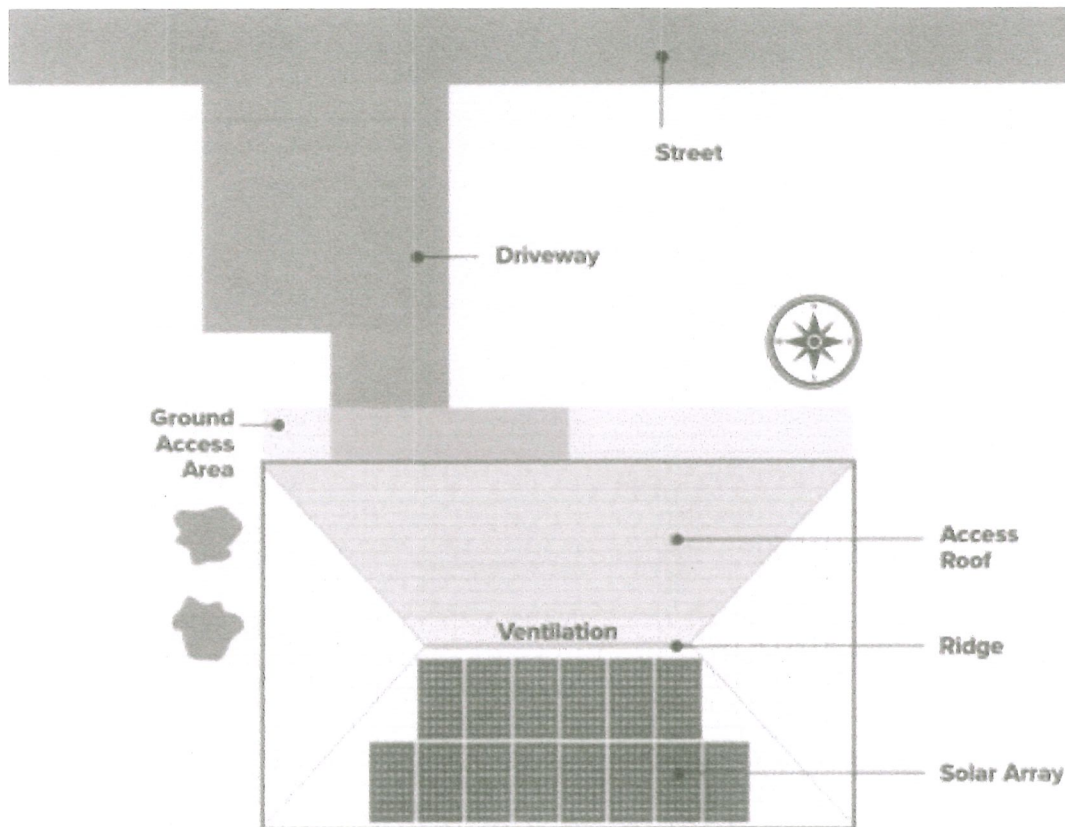
Hip Roof Installation with Alternate Venting and Pathway Locations

Alternate locations may be possible for venting and access pathways on hip roofs meeting exceptions to Section R324.7.5.



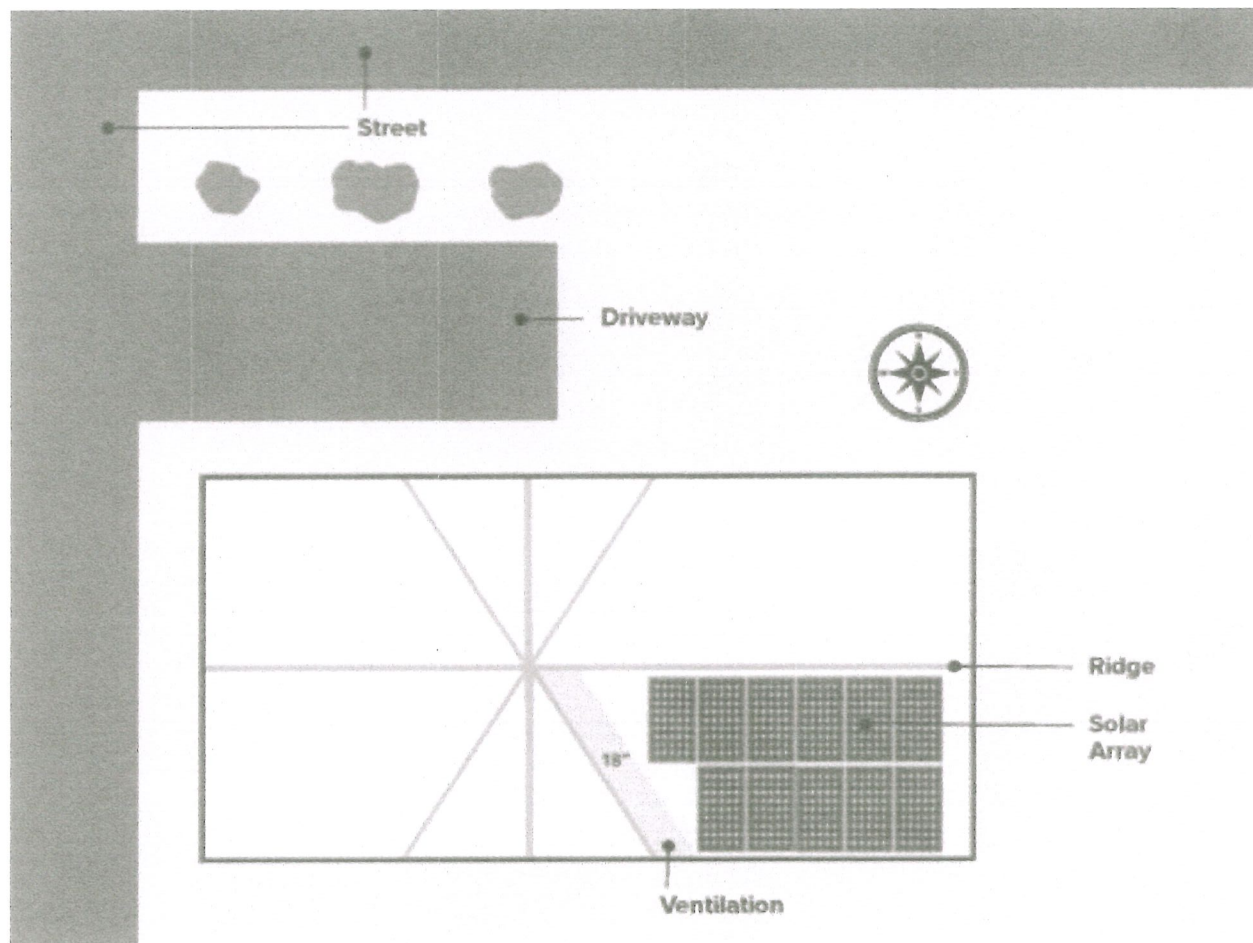
Hip Roof Installation Where an ACCESS ROOF Fronts a Street or Driveway

Section R324.7.5 Exception #2 generally applies to any residential structures where an ACCESS ROOF fronts a street, driveway, or other area readily accessible to emergency responders.



Roofs with Valleys

Section R324.7.6 requires any parts of PV arrays to be no closer than 18 inches from valleys.



FERGUSON MALONE ARCHITECTURE

January 04, 2022

Ed Marron,
Building inspector
Village of Irvington
Village Hall
85 Main Street
Irvington, NY 10533

**Parganos Residence
BP No. 361 (90 Fargo Lane, Irvington NY)
Revisions to ARB Approved Roof Plan**

Mr. Marron & Members of the Architectural Review Board,

This letter is to certify that the existing exceeds the minimum load requirements as per Table R301.2 (1) for wind and load after installation of the proposed solar equipment.

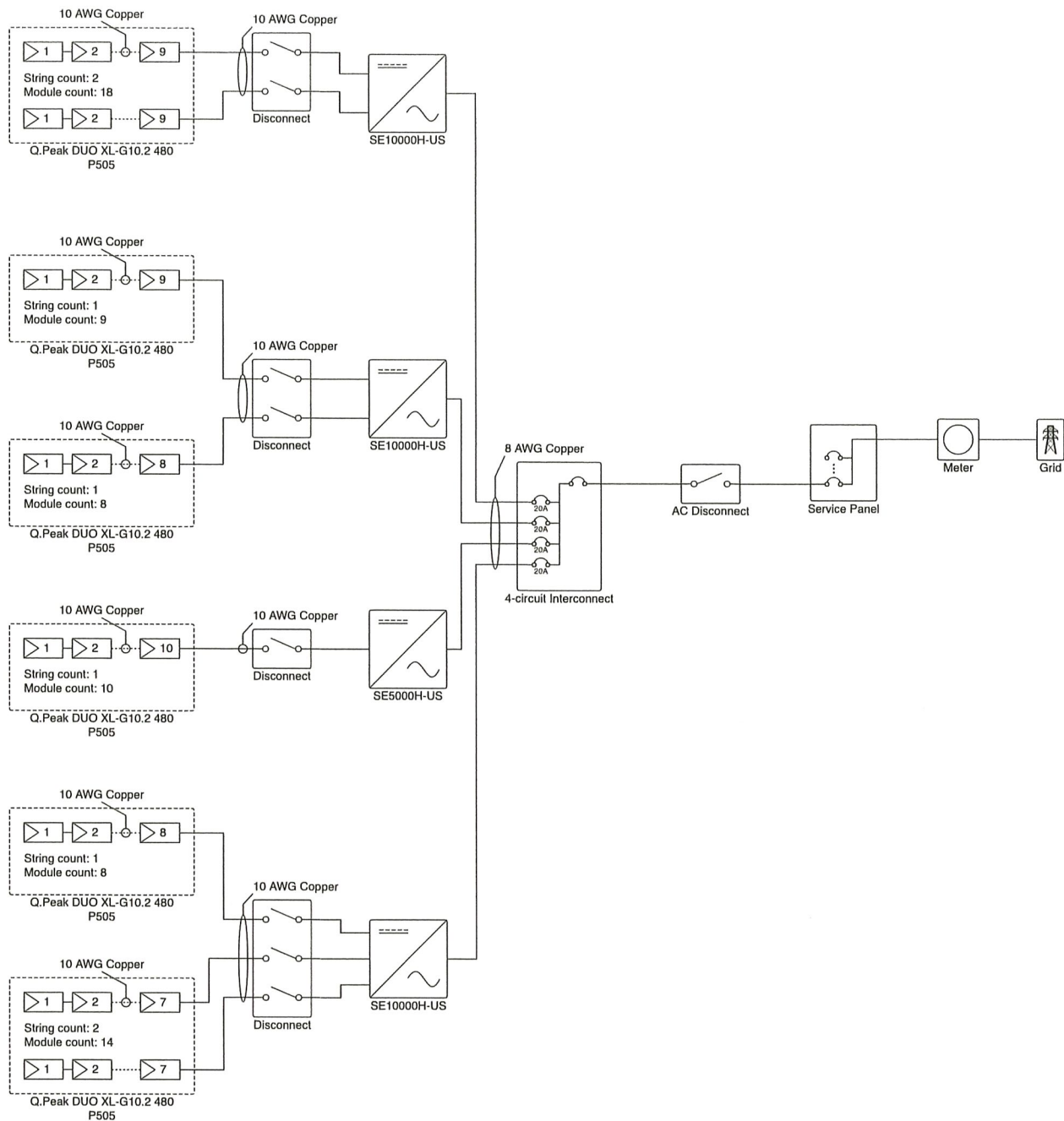
Please let me know if you or your consultants have any questions or concerns, and feel free to contact me at (914) 591-5066 or via email at jmalone@fergusonmalone.com.

Sincerely,



John Malone, AIA LEED AP

cc: ETA Fargo, LLC - Sara Parganos-Account Manager
File



Module Specifications	
67x Hanwha Q Cells Q.Peak DUO XL-G10.2 480	
STC Rating	480 W
Vmp	44.85 V
Imp	10.7 A
Voc	53.62 V
Isc	11.25 A

Inverter Specifications	
3x SolarEdge SE10000H-US	
Max AC Power Rating	10 kW
Max Input Voltage	480 V
Min AC Power Rating	0 W
Min Input Voltage	400 V

Inverter Specifications	
1x SolarEdge SE5000H-US	
Max AC Power Rating	5 kW
Max Input Voltage	480 V
Min AC Power Rating	0 W
Min Input Voltage	340 V

Wire Schedule		
Tier	Wire	Length
AC Branch	4x 8 AWG	2056ft
String	8x 10 AWG	291ft

PHOTOVOLTAGIC DC DISCONNECT
WARNING! ELECTRIC SHOCK HAZARD!

Voc	V
Vmp	V
Isc	A
Imp	A

Label Location:
(DC), (INV)
Per Code:
CEC 690.53, NE

WARNING - Dual Power Sources
Second source is photovoltaic system

Label Location:
(INV), (AC), (LC)

WARNING - Electric Shock Hazard
No user serviceable parts inside
Contact authorized servicer for assistance

Label Location:
(CB)

PHOTOVOLTAGIC POINT OF INTERCONNECTION
WARNING! ELECTRIC SHOCK HAZARD!
DO NOT TOUCH TERMINALS. TERMINALS ON BOTH THE
LINE AND LOAD SIDE MAY BE ENERGIZED

PV POWER SOURCE	
MAXIMUM AC CIRCUIT OUTPUT OPERATING CURRENT	A
OPERATING AC VOLTAGE	V

Label Location:
(POI)

PV COMBINER BOX
WARNING:
ELECTRIC SHOCK HAZARD

Label Location:
(CB)

CAUTION: SOLAR CIRCUIT

Label Location:
(C)

Solar Disconnect

WARNING - Electric Shock Hazard
DO NOT TOUCH TERMINALS
Terminals on both line and Load sides
may be energized in the Open Position

Label Location:
(AC), (LC)
Per Code:
CEC 690.17, NEC 690.14 (4)

DC DISCONNECT

WARNING - Electric Shock Hazard
DO NOT TOUCH TERMINALS
Terminals on both line and Load sides
may be energized in the Open Position
DC VOLTAGE IS ALWAYS PRESENT WHEN
SOLAR MODULES ARE EXPOSED TO SUNLIGHT

Label Location:
(DC), (INV)

WARNING!

INVERTER OUTPUT CONNECTION. DO NOT
RELOCATE THIS OVERCURRENT DEVICE.

Label Location:
(POI)

PHOTOVOLTAGIC AC DISCONNECT
WARNING! ELECTRIC SHOCK HAZARD!

OPERATING AC VOLTAGE	V
MAXIMUM OPERATING CURRENT	A

Label Location:
(AC), (D), (LC)
Per Code:
CEC 690.8.A.3 & CEC 690.54, NEC 690.14 (c)(2)

(AC): AC Disconnect
(C): Conduit
(CB): Combiner Box
(D): Distribution Panel
(DC): DC Disconnect
(IC): Interior Run Conduit
(INV): Inverter With Integrated DC Disconnect
(LC): Load Center

Data sheet

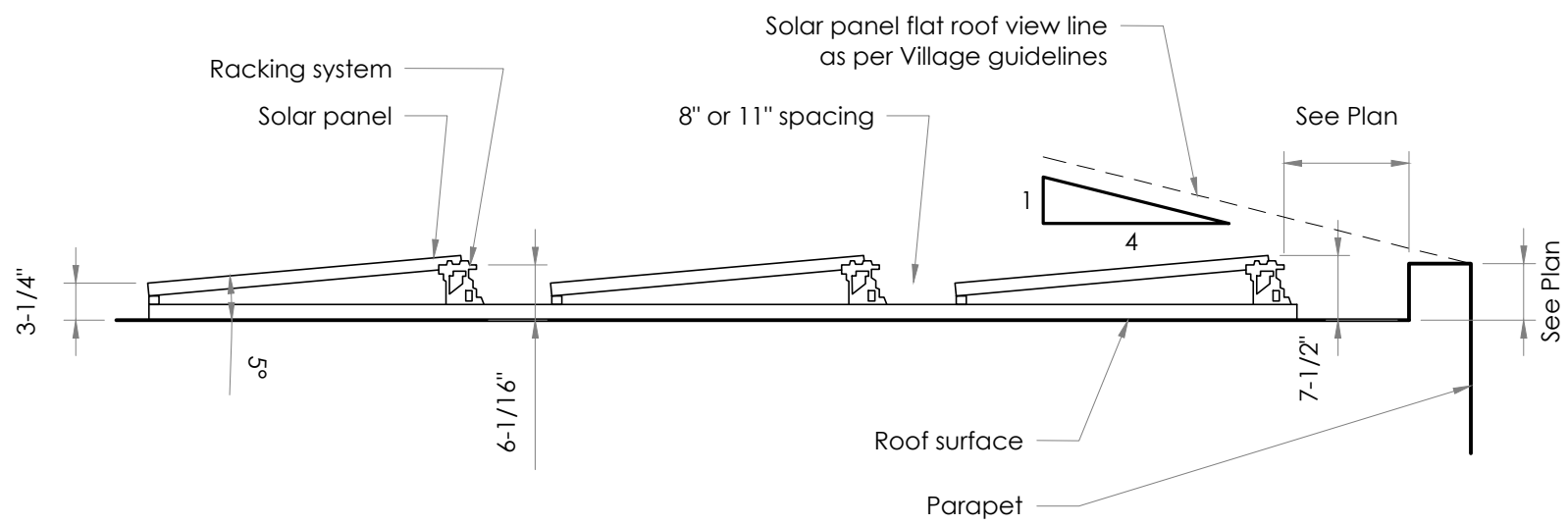
US2:HF224N

200A 2P 240V 3W FUSED HD TYPE 1

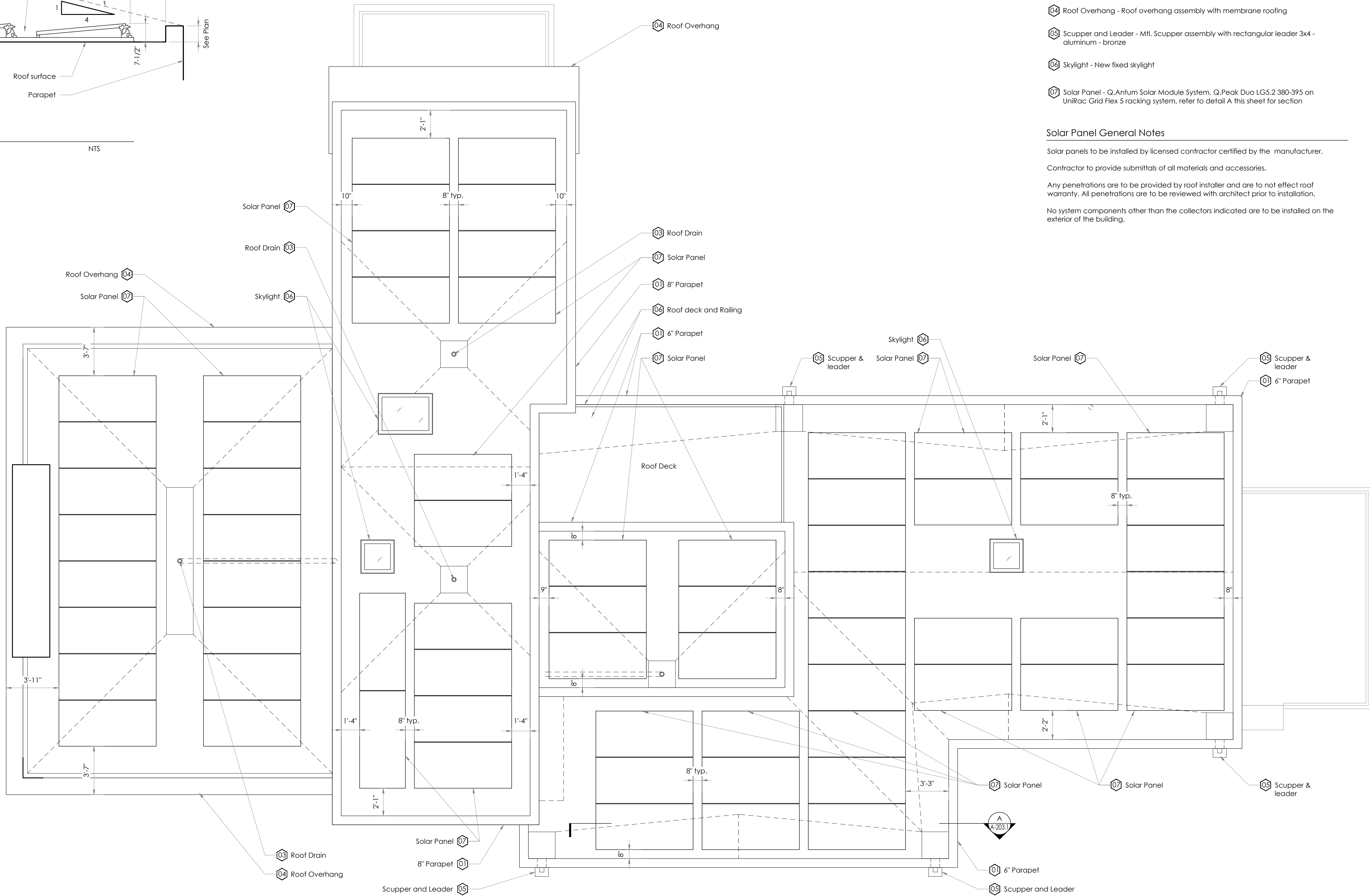


General technical data	
Installation location	INDOOR
Manner of function of the actuating element	SINGLE THROW
Mechanical service life (switching cycles) typical	8000
Mounting type	2 OR 3 POINT MOUNTING HOLES
Number of poles	2
Electricity	
Ampacity	200 A
Supply voltage frequency rated value 50/60 Hz	Yes
Voltage between phase and Ground (GND) rated value	240 V
Switching capacity	
Switching capacity active power	3 W
Environmental conditions	
Ambient temperature during operation maximum	120 °C
Ambient temperature during operation minimum	-20 °C
Model	
product brandname	SIEMENS

Product type designation	ENCLOSED/SAFETY SWITCH
Mechanical Design	
Design of the housing	TYPE 1
Material	STEEL
General product approval	
Certificate of suitability	UL
last modified:	01/09/2017



A Typical Solar Panel Section Detail
NTS



1 Solar Panel Layout
1/4" = 1'-0"

Key Notes

- 01 Parapet - Built-up Parapet with Metal Cap
- 02 Roof deck and Railing - Mahogany Roof deck and metal cable railing system
- 03 Roof Drain - Zyn Z125 8" diameter roof drain - installed as per manufacture's instructions and coordinated with membrane roof system
- 04 Roof Overhang - Roof overhang assembly with membrane roofing
- 05 Scupper and Leader - Mtl. Scupper assembly with rectangular leader 3x4 - aluminum - bronze
- 06 Skylight - New fixed skylight
- 07 Solar Panel - Q.Antum Solar Module System, Q.Peak Duo LG5.2 380-395 on UniRac Grid Flex 5 racking system, refer to detail A this sheet for section

Solar Panel General Notes

Solar panels to be installed by licensed contractor certified by the manufacturer.
Contractor to provide submittals of all materials and accessories.

Any penetrations are to be provided by roof installer and are to not effect roof warranty. All penetrations are to be reviewed with architect prior to installation.

No system components other than the collectors indicated are to be installed on the exterior of the building.

Parganos Residence

90 Fargo Lane
Irvington, NY

12	01/03/2022	Reubmission for ARB Approval
NO.	DATE	ISSUE/REVISION

In developing the plans and specifications for the project, the Architect has taken into account applicable state and municipal building laws and regulations, including the Residential Code 2015 of New York State (IRC 2015/New York State Amendments) which includes Chapter 11 Energy Efficiency.



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Proposed
Solar Panel
Plan

SCALE: As Noted

DATE: 09/04/2020

JOB: 1818

A-2.03.1

12 New Sheet