

APPLICATION FOR BUILDING PERMIT

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

Application Number:	100	Date:	01/03/2022
Job Location:	16 N ASTOR ST	Parcel ID:	2.40-12-4
Property Owner:	Jaxan Striano LLC	Property Class:	DOWNTOWN ROW (COM.WA
Occupancy:	One/ Two Family	Zoning:	
Common Name:			

Applicant	Contractor
Schrader Christine	Schrader Christine
Sunrise Solar Solutions LLC	Sunrise Solar Solutions LLC
510 North State Road Briarcliff Manor NY 10510	510 North State Road Briarcliff Manor NY 10510
570-269-9486	570-269-9486

Description of Work

Type of Work:	Solar Panels	Applicant is:	Contractor
Work Requested by:	The Owner	In association with:	
Cost of Work (Est.):	81505.00	Property Class:	DOWNTOWN ROW (COM.WA

Description of Work

System is a 16.00 KW DC STC grid-tied, roof mounted, residential photovoltaic system and a 13.0 kWh battery storage system.

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.

INSTRUCTIONS

REQUIREMENTS FOR OBTAINING A PERMIT:

The following items must be submitted in order to obtain a Building Permit:

1. One (1) Building Permit application signed by the owner or a notarized Agent Letter.
2. One (1) property survey (signed and sealed), reflecting existing conditions.
3. Two (2) sets of construction drawings and specifications, including existing and proposed conditions, state design criteria, structural and architectural details, plans, and cross sections, mechanical, electrical, and plumbing drawings (signed and sealed by a likened professional).
4. One USB with all plans (with Licensed Professionals certification/stamp) and specifications in PDF (file size must be less than 25MB).
5. Copy of approved site plan from the Irvington Planning Board when applicable (required on all increases of FAR, footprint, coverage, driveways and increases of cubic content under a roof).
6. Approval by the Architectural Review Board (ARB) when applicable. An additional five (5) sets of construction drawings and specifications (please see ARB requirements (available on the village web site www.irvingtonny.gov) prior to submission).
7. Visit the Village of Irvington website www.irvingtonny.gov for additional check list for solar panels, generators, underground propane tanks, signs and awnings(found in forms and documents in the Building & Planning General Information folder).
8. Village Zoning Code is available on the Village website: www.irvingtonny.gov.
9. Provide evidence that the application meets the NYS Energy code as described by www.dos.state.ny.us/code/energycode/overview.htm

Contractor Requirements in order to obtain a Building Permit:

10. Contractor's Certificate of Liability listing the Village of Irvington as the Certificate Holder with no disclaimer in the description other than certificate holder is named additional insured (any additional comments will not be accepted).
11. Contractor's Workers Compensation C-105 form (or equivalent) listing the Village of Irvington as Certificate Holder.
12. Copy of Contractor's Westchester County Home Improvement License.
13. All information above uploaded into permit application with the contractor's contact information, including mailing address, phone number, and email address.
14. Contractor's signature on Affidavit of Contractor (required prior to issuance of the permit).

Please Note:

-State Law requires that the contractor submits a copy of Workman's Compensation as required by the New York State Disability Insurance naming the Department of Buildings, Village of Irvington as certificate holder and showing coverage for general contracting and the locations covered by such insurance. If structure is to be demolished a copy of Liability Insurance must also be submitted.

- Please be advised under State and Municipal Laws, the Workman's Compensation and Disability benefits insurance must be submitted on separate state approved forms. The "Acord Form" is no longer acceptable as proof of Workman's Compensation coverage. Further information or questions may be answered by calling the NYS Bureau of Compliance at (518) 486-6307 or by visiting their website or by contacting your insurance provider.

FEES ASSOCIATED WITH BUILDING PERMIT APPLICATION(All fees must be paid at time of application):

Fee schedule

Building Permit (Non-Refundable)

* Application fee \$85

* Permit fee \$17 per thousand dollars (\$1000) of estimated cost of construction, or fraction thereof

85

• Inspection Fees (as applicable)

- | | |
|--|--|
| • Insulation: \$50 | • Footing: \$50 |
| • Solid Fuel: \$50 | • Preparation for concrete slabs and walls: \$50 |
| • Foundation and footing drain: \$50 | • Framing: \$50 |
| • Energy Code Compliance: \$50 | • Building systems, including underground and rough-in: \$50 |
| • Sediment and erosion control: \$50 | • Fire resistant construction and penetrations: \$50 |
| • Footing: \$50 | • Final Inspection for C.O.: \$50 |
| • Preparation for concrete slabs and walls: \$50 | • State and local laws (per re-inspection): \$50 |

Total Inspections _____

* Certificate of Occupancy Fees: One dollar (\$1.00) per thousand dollars of estimated cost. Minimum Fee \$25.00

* Permit Revisions or Amendment: \$50.00 (plus \$17 per thousand (\$1000), of the estimated cost of construction and any additional inspections fees).

* Re-inspection fee for work not ready at time of inspection or not in compliance: \$50

* Applications for Undocumented Work/ Legalizing: Applications to legalize work done prior to applying for and receiving a building permit shall pay double all applicable fees and inspections, including the cost of construction based on the cost of all proposed work being legalized at the time of application. Minimum fee \$500.00.

(To be collected at time of submission of application)Total _____

(Note: pursuant to 224-54A all permits are valid for one (1) year from date on permit
Any permit that expires will be subject to additional fees.)

Job Location: 16 N ASTOR ST

Parcel Id: 2.40-12-4

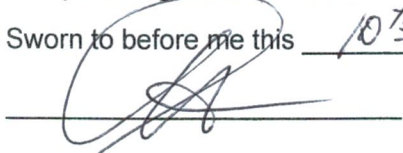
AFFIDAVIT OF APPLICANT

I Schrader Christine being duly sworn, depose and says: That s/he does business as: Sunrise Solar Solutions LLC with offices at: 510 North State Road Briarcliff Manor NY 10510 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 10th day of December of 2021


Notary Public / Commission of Deeds

Anthony Covone
Notary Public, State of New York
Reg. No. 01CO6118733
Qualified in Westchester County
Commission Expires November 15, 2024


Applicant's Signature

OWNER'S AUTHORIZATION

I Jaxan Striano LLC 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 (914) 450-5360 Owner email address JLSteinmetz1@me.com

- ☒ JULIA STEINMETZ 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 5th day of January of 2022


Notary Public / Commission of Deeds

AMINE OULD IBBAT
Notary Public, State of New York
No. 01OU6121096
Qualified in Westchester County
Commission Expires January 10, 2025


Applicant's Signature

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:
Sunrise Solar Solutions, LLC.

Applicants Name: 510 N State Rd

Applicants Address: Briarcliff Manor, NY 10510

Applicants Phone # (914) 762-7622

Applicants Email courtneylynn.m@sunrisesolarllc.com

Applicant Name: Courtney Mellina

Signature:

Date: 1/3/2021

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:

Sunrise Solar Solutions, LLC.

Contractors Name: 510 N. State Rd

Contractors Address: Briarcliff Manor, NY 10510

Contractors Phone # (914) 762-7622

Contractors Email courtneylynn.m@sunrisesolarllc.com

General Contractor Name: Doug Hertz

Signature:

Date: 1/3/2021

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:

Mill-Mart Electric

Electrical Contractors Name: 19 Strawberry Hill Ln

Electrical Contractors Address: West Nyack, NY 10994-1613

Electrical Contractors Phone #

Electrical Contractors Email millmartelectric@gmail.com

Electrical Contractor Name: Arthur Schroer

Signature:

Date: 1/3/2021

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**



LICENSED PROFESSIONAL AFFIDAVIT for RESIDENTIAL SOLAR SYSTEMS

TO BE SUBMITTED AS PART OF THE PERMIT APPLICATION

AFFIDAVIT OF ARCHITECT OR ENGINEER

State of New York }
County of Westchester } ss.:

I the undersigned, under penalty of perjury, do hereby affirm:

1. I am an the (architect)(engineer) duly licensed in the State of New York
2. I am the NYS licensed design professional named in the Application for which a Building Permit for a residential solar system located at 16 NORTH ASTOR, Irvington, New York 10533.
3. I have inspected the existing building and structure and find that the existing structure with the proposed solar panel installation and connections to the existing roof meet the minimum criteria set forth in;
Applicable Codes: 2015 Residential Code of New York State
Design Roof Load: 30 psf live load, 15 psf dead load, 45 psf total load
Design Wind Load: 120 mph, 35psf 15
OR have proposed additional measures to insure compliance with above.
4. I have reviewed the following submitted drawings and/or manufacture specifications as part of the submission
List applicable plans with revision dates:

<u>S1-S5</u>	(rev date) <u>12/30/21</u>
<u>E1</u>	(rev date) <u>12/31/21</u>
	(rev date)
	(rev date)
5. The plans, drawings and specifications which the Building Permit is requested and listed above, as submitted (a)-were prepared by me or under my supervision, and (b)-to the best of my knowledge comply with the requirements of the Residential Building Code of New York State as adopted by the Village of Irvington, applicable design loads and all other applicable laws, rules and regulations governing building construction.

Matthew J. Boyce
Signature
Matthew J. Boyce
(Architect) (Engineer)

Sworn to before me this
4 day of January, 2022
[Signature]
Notary Public



REBECCA ASHLEY GREEN
Notary Public - Notary Seal
State of Missouri
Commissioned for St Charles County
My Commission Expires: Mar. 3, 2025
21795639

REBECCA ASHLEY GREEN
1000 10th Street NW
Washington, DC 20004
202-462-1234
rebecca.ashley.green@gmail.com

NOTICE OF APPLICATION AND HEARING

Board of Architectural Review

Clerk's Office

Village of Irvington

Westchester County, New York

CERTIFIED MAIL

Date of Mailing [REDACTED]

NOTICE:

Pursuant to 9-12 of the code of the Village of Irvington notice to adjacent neighbors (as defined below) is required 10 days prior a meeting where an application for Solar Panels to the Village of Irvington Architectural Board is asking to be heard.

Date of Meeting: [REDACTED]

Time of Meeting: Meeting starts at 8pm

Location of Meeting: Trustees Meeting Room
85 Main St. Irvington, NY 10533

Applicant Name [REDACTED]
Applicant Mailing Address [REDACTED]
[REDACTED]
Applicant Phone Number [REDACTED]
Applicant Email Address [REDACTED]

Owners Name [REDACTED]
Owner Mailing Address [REDACTED]
[REDACTED]
Owners Phone Number [REDACTED]
Owners Email Address [REDACTED]

Address of Proposed Solar Panels:

Street Address [REDACTED]
[REDACTED]

To Adjacent Neighbors of: [REDACTED]
[REDACTED]

Please take notice that the applicant named above is requesting the Board of Architectural Review of the Village of Irvington to grant a permit for the installation of **Solar Energy Equipment** to the address listed above.

Plans of the proposed work are available in the office of the Irvington Building Department for public inspection during regular business hours 5 days prior to the scheduled meeting.

9-12. **Solar Energy Equipment.**

For any application for a building permit for solar energy equipment, written notice of the application and the date, time and place of the meeting at which it will be considered must be given to all adjacent property owners not less than 10 days prior to the meeting date. Notice shall be by a method of mail or a delivery service company providing proof of mailing or delivery or by personal service of such notice on the property owners, evidenced by their signature as acknowledgment of receipt of such notice on a form supplied or similar to one supplied by the Village Clerk. Proof of service of the notice shall be filed prior to or at the meeting at which the application is considered.*

("Adjacent property" refers to any neighbor that shares a property line with the subject property as well as neighbors across any street from the subject property.)

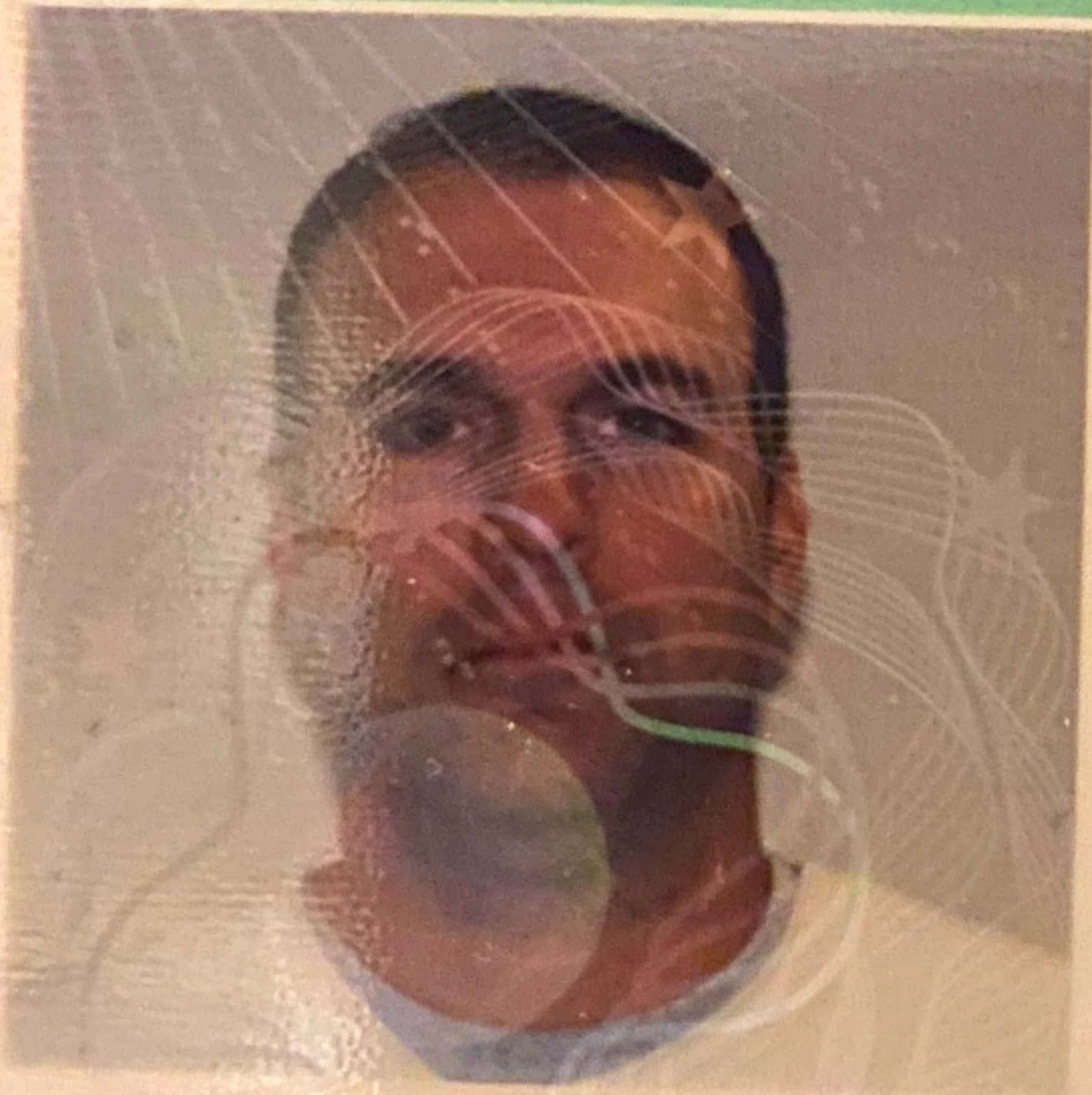
Sunrise Solar Solutions

Check Request

Date Requested:	1/10/2021
Date Needed:	By 1/11/2021
Job Number:	20-0004 Steinmetz
Reason:	Village of Irvington Building Department for Building Permit (Revised)
G/L Class:	
Make Out to:	Village of Irvington Building Department
	85 Main St. Irvington, NY 10533
Amount:	\$860
Requested by:	Courtney Mellina
Memo:	

Westchester County Electrical Licensing Board
Westchester County Consumer Protection

Master Electrician License 2022



Arthur Schroer

D.O.B: 2/20/1976

Company:

Secka Electric, Inc/Mil-Mart Electric

19 Strawberry Hill Lane

West Nyack, NY 10994

License No. 1690

Expires on: 12/31/2022

A handwritten signature in blue ink, appearing to read 'Peter Borducci'. The signature is stylized with a long horizontal line extending to the right.

Peter Borducci

George Latimer
Westchester County Executive

Westchester
gov.com

James Maisano
Director, Consumer Protection

Department of Consumer Protection Home Improvement License

SUNRISE SOLAR SOLUTIONS, LLC
510 NORTH STATE ROAD
BRIARCLIFF MANOR, NY-10510

This license is issued in accordance with Article XVI of the Westchester County Consumer Protection Code and is valid only upon presence of the official department seal. Proof of citizenship or immigration status is not required for issuance of this license.
NOT FOR FEDERAL PURPOSES

License Number
WC-22419-H09



Date of Expiration
11/18/2023



CERTIFICATE OF INSURANCE COVERAGE

NYS DISABILITY AND PAID FAMILY LEAVE BENEFITS LAW

PART 1. To be completed by NYS disability and Paid Family Leave benefits carrier or licensed insurance agent of that carrier

<p>1a. Legal Name & Address of Insured (use street address only) SUNRISE SOLAR SOLUTIONS, LLC</p> <p>510 NORTH STATE ROAD BRIARCLIFF MANOR, NY 10510</p> <p><small>Work Location of Insured (Only required if coverage is specifically limited to certain locations in New York State, i.e., Wrap-Up Policy)</small></p>	<p>1b. Business Telephone Number of Insured 914-762-7622</p> <p>1c. Federal Employer Identification Number of Insured or Social Security Number 270479601</p>
<p>2. Name and Address of Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder) Irvington Building Department Village Hall 85 Main Street Irvington, NY 10533</p>	<p>3a. Name of Insurance Carrier ShelterPoint Life Insurance Company</p> <p>3b. Policy Number of Entity Listed in Box "1a" DBL333258</p> <p>3c. Policy effective period 02/08/2021 to 02/07/2023</p>

4. Policy provides the following benefits:

☒ A. Both disability and paid family leave benefits.

☐ B. Disability benefits only.


☐ C. Paid family leave benefits only.

5. Policy covers:

☒ A. All of the employer's employees eligible under the NYS Disability and Paid Family Leave Benefits Law.

☐ B. Only the following class or classes of employer's employees:

Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the insurance carrier referenced above and that the named insured has NYS Disability and/or Paid Family Leave Benefits insurance coverage as described above.

Date Signed 1/2/2022 By 
(Signature of insurance carrier's authorized representative or NYS Licensed Insurance Agent of that insurance carrier)

Telephone Number 516-829-8100 Name and Title Richard White, Chief Executive Officer

IMPORTANT: If Boxes 4A and 5A are checked, and this form is signed by the insurance carrier's authorized representative or NYS Licensed Insurance Agent of that carrier, this certificate is COMPLETE. Mail it directly to the certificate holder.

If Box 4B, 4C or 5B is checked, this certificate is NOT COMPLETE for purposes of Section 220, Subd. 8 of the NYS Disability and Paid Family Leave Benefits Law. It must be emailed to PAU@wcb.ny.gov or it can be mailed for completion to the Workers' Compensation Board, Plans Acceptance Unit, PO Box 5200, Binghamton, NY 13902-5200.

PART 2. To be completed by the NYS Workers' Compensation Board (Only if Box 4B, 4C or 5B have been checked)

State of New York
Workers' Compensation Board

According to information maintained by the NYS Workers' Compensation Board, the above-named employer has complied with the NYS Disability and Paid Family Leave Benefits Law (Article 9 of the Workers' Compensation Law) with respect to all of their employees.

Date Signed _____ By _____
(Signature of Authorized NYS Workers' Compensation Board Employee)

Telephone Number _____ Name and Title _____

Please Note: Only insurance carriers licensed to write NYS disability and paid family leave benefits insurance policies and NYS licensed insurance agents of those insurance carriers are authorized to issue Form DB-120.1. **Insurance brokers are NOT authorized to issue this form.**



Additional Instructions for Form DB-120.1

By signing this form, the insurance carrier identified in Box 3 on this form is certifying that it is insuring the business referenced in Box 1a for disability and/or Paid Family Leave benefits under the NYS Disability and Paid Family Leave Benefits Law. The insurance carrier or its licensed agent will send this Certificate of Insurance Coverage (Certificate) to the entity listed as the certificate holder in Box 2.

The insurance carrier must notify the above certificate holder and the Workers' Compensation Board within 10 days IF a policy is cancelled due to nonpayment of premiums or within 30 days IF there are reasons other than nonpayment of premiums that cancel the policy or eliminate the insured from coverage indicated on this Certificate. (These notices may be sent by regular mail.) Otherwise, this Certificate is valid for one year after this form is approved by the insurance carrier or its licensed agent, or until the policy expiration date listed in Box 3c, whichever is earlier.

This Certificate is issued as a matter of information only and confers no rights upon the certificate holder. This Certificate does not amend, extend or alter the coverage afforded by the policy listed, nor does it confer any rights or responsibilities beyond those contained in the referenced policy.

This Certificate may be used as evidence of a NYS disability and/or Paid Family Leave benefits contract of insurance only while the underlying policy is in effect.

Please Note: Upon the cancellation of the disability and/or Paid Family Leave benefits policy indicated on this form, if the business continues to be named on a permit, license or contract issued by a certificate holder, the business must provide that certificate holder with a new Certificate of Insurance Coverage for NYS disability and/or Paid Family Leave Benefits or other authorized proof that the business is complying with the mandatory coverage requirements of the NYS Disability and Paid Family Leave Benefits Law.

NYS DISABILITY AND PAID FAMILY LEAVE BENEFITS LAW

§220. Subd. 8

(a) The head of a state or municipal department, board, commission or office authorized or required by law to issue any permit for or in connection with any work involving the employment of employees in employment as defined in this article, and notwithstanding any general or special statute requiring or authorizing the issue of such permits, shall not issue such permit unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that the payment of disability benefits and after January first, two thousand and twenty-one, the payment of family leave benefits for all employees has been secured as provided by this article. Nothing herein, however, shall be construed as creating any liability on the part of such state or municipal department, board, commission or office to pay any disability benefits to any such employee if so employed.

(b) The head of a state or municipal department, board, commission or office authorized or required by law to enter into any contract for or in connection with any work involving the employment of employees in employment as defined in this article and notwithstanding any general or special statute requiring or authorizing any such contract, shall not enter into any such contract unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that the payment of disability benefits and after January first, two thousand eighteen, the payment of family leave benefits for all employees has been secured as provided by this article.



SUNRSOL-01

LYOJA1

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

1/3/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Levitt-Fuirst Associates, LTD 520 White Plains Road 2nd Floor Tarrytown, NY 10591	CONTACT NAME: PHONE (A/C, No, Ext): (914) 457-4200		FAX (A/C, No): (914) 457-4200
	E-MAIL ADDRESS: info@levittfuirst.com		
INSURED Sunrise Solar Solutions, LLC 510 North State Rd Briarcliff Manor, NY 10510	INSURER(S) AFFORDING COVERAGE		NAIC #
	INSURER A : Southwest Marine & General Insurance Company		12294
	INSURER B : AmGuard Insurance Company		42390
	INSURER C : New York State Insurance Fund		36102
	INSURER D : ShelterPoint		81434
	INSURER E : Fair American Insurance & Reinsurance Co.		35157
INSURER F :			

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:


THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC OTHER:			GL202100008728	3/21/2021	3/21/2022	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 \$
B	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input checked="" type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY			SUAU237092	4/25/2021	4/25/2022	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$ 10,000			EX202100001810	3/21/2021	3/21/2022	EACH OCCURRENCE \$ 5,000,000 AGGREGATE \$ 5,000,000 \$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) <input checked="" type="checkbox"/> Y <input type="checkbox"/> N If yes, describe under DESCRIPTION OF OPERATIONS below		N/A	20925574	6/29/2021	6/29/2023	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
D	Disability			DBL333258	2/8/2021	2/7/2023	Statutory Limits
E	Owners/Contractors P			RPL700031700	3/2/2021	3/21/2022	\$2mm/\$6mm

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
Worksite: 16 N Astor St Irvington NY 10533

CERTIFICATE HOLDER

CANCELLATION

Irvington Building Department/ Village Hall 85 Main St Irvington, NY 10533	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE 

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

COMMERCIAL LIABILITY BROADENING ENDORSEMENT- ENERGY

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by the endorsement.

SCHEDULE – EXTENSIONS OF COVERAGE

Coverages	
Additional Insured	Incidental Medical Services Coverage
Additional Insured – Vendors	Liberalization
Blanket Waiver Of Subrogation	Non Employment Discrimination
Broadened Bodily Injury	Non-owned Watercraft Coverage
Broadened Named Insured	Personal And Advertising Injury
Duties In The Event Of An Occurrence, Offense, Claim Or Suit	Supplementary Payments – Increased Limits
Expected Or Intended Injury	Unintentional Failure To Disclose Hazards
Fire, Explosion, Sprinkler Leakage Or Lightning Legal Liability Coverage	
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

Coverage extensions under this section only apply in the event that no other specific coverage for these extensions is provided under this policy. If such specific coverage applies, the terms, conditions and limits of that coverage are the sole and exclusive coverage applicable under this policy, unless otherwise noted in this endorsement.

1. Additional Insured

A. Under **Section II – Who Is An Insured**, Paragraph **2.** is amended by the addition of the following:

- e.** Any person or organization, other than as specifically named on a separate Additional Insured endorsement attached to this policy, is included as an additional insured, but only to the extent such person or organization is held liable for “bodily injury”, “property damage” or “personal and advertising injury” arising out of:

- (1)** The ownership, maintenance, or use of that part of the premises or land owned by, rented to, or leased to you, except such person or organization is not an insured with respect to structural alterations, new construction or demolition operations performed by or on behalf of such person or organization;
- (2)** Your ongoing operations performed for that insured;
- (3)** “Your work” included in the “products-completed operations hazard”;
- (4)** Their financial control of you, except such person or organization is not an insured with respect to structural alterations, new construction or demolition operations performed by or on behalf of such person or organization;

- (5) The maintenance, operation or use by you of equipment leased to you by such person or organization;
- (6) Operations performed by you or on your behalf and for which a state or political subdivision has issued a permit, provided such operations are not performed for such state or political subdivision, and are not included within the "products-completed operations hazard";

With respect to the insurance afforded under this provision to such insured, all of the following additional provisions apply:

- (1) You and such person or organization have agreed in a written "insured contract" that such person or organization be added as an additional insured under this policy;
- (2) The "bodily injury", "property damage" or "personal and advertising injury" for which said person or organization is held liable occurs subsequent to the execution of such "insured contract";
- (3) The most we will pay is the lesser of either the Limits of Insurance shown in the Declarations or the Limits of Insurance required by the "insured contract".

However:

- (1) The insurance afforded under this provision to such additional insured only applies to the extent permitted by law; and
- (2) If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

B. With respect to the insurance afforded to these additional insureds, the following exclusions are added:

- (1) This insurance does not apply to "bodily injury", "property damage", "personal and advertising injury", "occurrence" or offense:
 - (a) Which takes place at a particular premise after you cease to be a tenant of that premises;
 - (b) Which takes place after the expiration of any equipment lease to which **A.e.(5)** above applies;
- (2) With respect to architects, engineers or surveyors, coverage does not apply to "bodily injury", "property damage" or "personal and advertising injury" arising out of the rendering or failure to render any professional services by or for you, including:
 - (a) The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders, or drawings and specifications;
 - (b) Supervisory, inspection, architectural or engineering services.

C. Only with respect to coverage provided under **1.A.**, above, Definition **9. Insured Contract** under **Section V – Definitions** is amended to modify the first sentence of this definition as follows:

- 9.** "Insured contract" means a written contract or written agreement in effect or becoming effective during the term of this policy, as described below:

2. Additional Insured – Vendors

A. Under **Section II – Who Is An Insured**, Paragraph **2.** is amended by the addition of the following:

- f.** Any vendor of yours, other than as specifically named on a separate Additional Insured - Vendors endorsement attached to this policy, is included as an additional insured, but only with respect to "bodily injury" or "property damage" arising out of "your products" which are distributed or sold in the regular course of the vendor's business.

However:

- (1) The insurance afforded under this provision to such additional insured only applies to the extent permitted by law; and
- (2) If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

B. With respect to the insurance afforded to these vendors, the following additional exclusions apply:

- (1) The insurance afforded to the vendor does not apply to:

- (a) "Bodily injury" or "property damage" if the "products-completed operations hazard" is excluded under this policy.
 - (b) "Bodily injury" or "property damage" for which the vendor is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages that the vendor would have in the absence of the contract or agreement;
 - (c) Any express warranty unauthorized by you;
 - (d) Any physical or chemical change in the product made intentionally by the vendor;
 - (e) Repackaging, unless unpacked solely for the purpose of inspection, demonstration, testing, or the substitution of parts under instructions from the manufacturer, and then repackaged in the original container;
 - (f) Any failure to make such inspections, adjustments, tests or servicing as the vendor has agreed to make or normally undertakes to make in the usual course of business, in connection with the distribution or sale of the products;
 - (g) Demonstration, installation, servicing or repair operations, except such operations performed by the vendor in full compliance with the manufacturer's written instructions at the vendor's premises in connection with the sale of the product;
 - (h) Products which, after distribution or sale by you, have been labeled or relabeled or used as a container, part or ingredient of any other thing or substance by or for the vendor; or
 - (i) "Bodily injury" or "property damage" arising out of the liability of the vendor for its own acts or omissions or those of its employees or anyone else acting on its behalf.
- (2) This insurance does not apply to any insured person or organization from whom you have acquired such products or any ingredient, part or container, entering into, accompanying or containing such products.

3. Blanket Waiver Of Subrogation

Under **Section IV – Conditions**, Paragraph 8. **Transfer Of Rights Of Recovery Against Others To Us** is replaced by the following:

Transfer Of Rights Of Recovery Against Others To Us And Blanket Waiver Of Subrogation

- a. If the insured has rights to recover all or part of any payment we have made under this Coverage Part, those rights are transferred to us. The insured must do nothing after the loss to impair those rights. At our request, the insured will bring "suit" or transfer those rights to us and help us enforce them.
- b. If required by a written "insured contract" executed prior to the "occurrence" or offense, we waive any right of recovery we may have against any person or organization named in such "insured contract", because of payments we make for injury or damage arising out of your ongoing operations or "your work" for that person or organization.

4. Broadened Named Insured

Under **Section II – Who Is An Insured**, Paragraph 3. is replaced by the following:

Any organization you newly acquire or form during the policy period, and over which you maintain during the policy period majority ownership or majority interest, will qualify as a Named Insured if:

- a. There is no other similar insurance available to that organization;
- b. The first Named Insured shown in the Declarations has the responsibility of placing insurance for that organization; and
- c. That organization is incorporated or organized under the laws of the United States of America.

However:

- a. Coverage under this provision is afforded only until the next occurring annual anniversary of the beginning of the policy period shown in the Declarations, or the end of the policy period, whichever is earlier;
- b. Coverage **A** does not apply to "bodily injury" or "property damage" that occurred before you acquired or formed the organization; and

- c. Coverage **B** does not apply to “personal and advertising injury” arising out of an offense committed before you acquired or formed the organization.

No person or organization is an insured with respect to the conduct of any current or past partnership, joint venture, or limited liability company that is not shown as a Named Insured in the Declarations. However, this does not apply to a limited liability company that meets all of the conditions of **Section II – Who Is An Insured**.

5. Broadened Bodily Injury

Under **Section V – Definitions**, Paragraph **3.** is replaced by the following:

"Bodily injury" means bodily injury, disability, sickness or disease sustained by a person, including death resulting from any of these at any time. "Bodily injury" includes mental anguish or other mental injury resulting from "bodily injury".

6. Duties In The Event Of An Occurrence, Offense, Claim Or Suit

Under **Section IV – Commercial General Liability Conditions**, Paragraph **2.a.** is replaced by the following:

- a. You must see to it that we or any licensed agent of ours are notified of a general liability “occurrence” or offense which may result in a claim as soon as practicable after it becomes known to:

- (1) You, if you are an individual;
- (2) Your partner or member, if you are a partnership or joint venture;
- (3) Your member, if you are a limited liability company;
- (4) Your executive officer if you are an organization other than a partnership, joint venture or limited liability company; or
- (5) Your authorized representative or insurance manager.

Knowledge of an “occurrence” or offense by persons other than those listed above does not imply that those listed above also have such knowledge.

- b. To the extent possible, notice should include:

- (1) How, when and where the “occurrence” or offense took place;
- (2) The names and addresses of any injured persons and witnesses; and
- (3) The nature and location of any injury or damage arising out of the “occurrence” or offense.

7. Expected Or Intended Injury

Under **Section I – Coverages, Coverage A – Bodily Injury And Property Damage Liability**, Paragraph **2.**, Exclusions, Item **a. Expected Or Intended Injury** is replaced by the following:

Expected Or Intended Injury

“Bodily injury” or “property damage” expected or intended from the standpoint of the insured.

This exclusion does not apply to “bodily injury” or “property damage” resulting from the use of reasonable force to protect persons or property.

8. Fire, Explosion, Sprinkler Leakage Or Lightning Legal Liability Coverage

- A. Under **Section I – Coverages, Coverage A – Bodily Injury And Property Damage Liability**, the final paragraph of the **Exclusions** provision is replaced by the following:

Exclusions **c.** through **n.** do not apply to damage by fire, explosion, sprinkler leakage or lightning to premises while:

- (1) Rented to you;
- (2) Temporarily occupied by you with the permission of the owner; or
- (3) Managed by you under a written agreement with the owner.

A separate limit of insurance applies to this coverage as described in **Section III – Limits Of Insurance**.

- B. Under **Section III – Limits Of Insurance**, Paragraph **6.** is replaced by the following:

Subject to paragraph 5. above, the Damage to Premises Rented To You Limit shown in the Declarations for “property damage” to any one premises while rented to you, or in the case of damage by fire, explosion, sprinkler leakage, or lightning while rented to you, temporarily occupied by you with the permission of the owner, or managed by you under a written agreement with the owner, is the greater of:

a. \$300,000 Any One Premises; or

b. The Damage To Premises Rented To You Limit shown in the Declarations.

C. Under **Section IV – Commercial General Liability Conditions**, Paragraph 4., **Other Insurance**, Sub-Paragraph b. **Excess Insurance** is amended to delete Items (1)(a)(ii) and (1)(a)(iii) in their entirety and replace with the following:

(ii) That is Fire, Explosion, Sprinkler Leakage, or Lightning insurance for premises while rented to you, temporarily occupied by you with permission of the owner, or managed by you under a written agreement with the owner;

(iii) That is insurance purchased by you to cover your liability as a tenant for “property damage” to premises rented to you, temporarily occupied by you with the permission of the owner, or managed by you under a written agreement with the owner;

D. Under **Section V – Definitions**, Paragraph 9.a. is replaced by the following:

a. A contract for a lease of premises. However, that portion of the contract for a lease of premises that indemnifies any person or organization for damage by fire, explosion, sprinkler leakage, or lightning to premises while rented to you, temporarily occupied by you with permission of the owner, or managed by you under a written agreement with the owner, is not an “insured contract”;

9. Incidental Medical Services Coverage

Section I – Coverages is amended to include the following additional coverage:

We will pay for “bodily injury” arising out of the rendering of or failure to render the following treatment or services by an “employee” or “volunteer worker” for an accident occurring during the policy period:

a. First aid treatment including cardiopulmonary resuscitation (CPR); and

b. Medical, surgical, dental, x-ray, or nursing service or treatment, or the furnishing of food or beverages in connection therewith; and the furnishing or dispensing of drugs, or medical, dental, or surgical supplies or appliances.

However, this coverage does not apply to any insured or to any entity engaged in the business or occupation of providing the services or treatments described in a. and b. above.

Paragraph e. **Employer’s Liability** of the **Exclusions** provision of **Section I – Coverages, Coverage A – Bodily Injury And Property Damage Liability** does not apply to psychological injury arising out of the services described above.

10. Liberalization

Section IV – Commercial General Liability Conditions is amended by the addition of the following condition:

Liberalization

If we revise this endorsement to provide more coverage without additional premium charge, we will automatically provide the additional coverage to all endorsement holders as of the day the revision is effective in your state.

11. Non Employment Discrimination Liability

Unless “personal and advertising injury” is excluded from this policy, the following applies:

A. Under **Section V – Definitions**, Paragraph 14. is amended by the addition of the following:

“Personal and advertising injury” also means injury, including consequential “bodily injury” arising out of “discrimination”.

B. **Section V – Definitions** is amended by the addition of the following:

"Discrimination" means the unlawful treatment of a person or class of persons because of their specific race, color, religion, gender, age or national origin in comparison to one or more persons who are not members of the specified class.

C. Under Section I – Coverages, Coverage B – Personal And Advertising Injury Liability, Paragraph 2. Exclusions is amended by the addition of the following exclusions:

This insurance does not apply to:

"Discrimination" directly or indirectly related to the past employment, employment or prospective employment of any person or class of persons by any insured;

"Discrimination" directly or indirectly related to the sale, rental, lease or sublease or prospective sale, rental, lease or sublease of any dwelling or permanent lodging by or at the direction of any insured;

"Discrimination", if insurance thereof is prohibited by law; or

Fines, penalties, specific performance, or injunctions levied or imposed by a governmental entity, governmental code, law, or statute because of "discrimination".

12. Non-owned Watercraft Coverage Extension

Under **Section I – Coverages, Coverage A – Bodily Injury And Property Damage Liability, Paragraph 2.g.(2)** of the **Aircraft, Auto Or Watercraft** exclusion is replaced by the following:

This exclusion does not apply to:

(1) A watercraft you do not own that is:

(a) Less than 50 feet long; and

(b) Not being used to carry persons or property for a charge;

13. Personal And Advertising Injury Liability

Unless "personal and advertising injury" is excluded from this policy, the following applies:

Under **Section I – Coverages, Coverage B – Personal And Advertising Injury Liability, Paragraph 2.e. Contractual Liability** of the **Exclusions** provision is deleted.

14. Supplementary Payments – Increased Limits

Under **Section I – Coverages, Supplementary Payments – Coverages A and B, Paragraphs 1.b., 1.d., and 1.e.** are replaced by the following:

b. The cost of bail bonds required because of accidents or traffic law violations arising out of the use of any vehicle to which the Bodily Injury Liability Coverage applies. We do not have to furnish these bonds.

d. All reasonable expenses incurred by the insured at our request to assist us in the investigation or defense of the claim or "suit", including substantiated loss of earnings up to \$500 a day because of time off from work.

e. All court costs taxed against the insured in the "suit".

15. Unintentional Failure To Disclose Hazards

Under **Section IV – Commercial General Liability Conditions, Paragraph 6. Representations** is amended by the addition of the following:

d. If you unintentionally fail to disclose any hazards existing at the inception date of this policy, we will not deny coverage under this Coverage Form because of such failure.

However, this provision does not affect our right to collect additional premium or exercise our right of cancellation or non-renewal.

All other terms, definitions, conditions and exclusions of this policy remain unchanged.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

PRIMARY AND NONCONTRIBUTORY – OTHER INSURANCE CONDITION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

The following is added to the **Other Insurance** Condition and supersedes any provision to the contrary:

Primary And Noncontributory Insurance

This insurance is primary to and will not seek contribution from any other insurance available to an additional insured under your policy provided that:

- (1) The additional insured is a Named Insured under such other insurance; and

- (2) You have agreed in writing in a contract or agreement that this insurance would be primary and would not seek contribution from any other insurance available to the additional insured.

CERTIFICATE OF WORKERS' COMPENSATION INSURANCE

***** 270479601
LEVITT-FUIRST ASSOCIATES LTD
520 WHITE PLAINS ROAD, 2ND FL
TARRYTOWN NY 10591



SCAN TO VALIDATE
AND SUBSCRIBE

POLICYHOLDER SUNRISE SOLAR SOLUTIONS LLC 510 NORTH STATE ROAD BRIARCLIFF MANOR NY 10510		CERTIFICATE HOLDER IRVINGTON BUILDING DEPARTMENT VILLAGE HALL 85 MAIN STREET IRVINGTON NY 10533	
POLICY NUMBER G2092 557-4	CERTIFICATE NUMBER 291586	POLICY PERIOD 06/29/2021 TO 06/29/2022	DATE 1/2/2022

THIS IS TO CERTIFY THAT THE POLICYHOLDER NAMED ABOVE IS INSURED WITH THE NEW YORK STATE INSURANCE FUND UNDER POLICY NO. 2092 557-4, COVERING THE ENTIRE OBLIGATION OF THIS POLICYHOLDER FOR WORKERS' COMPENSATION UNDER THE NEW YORK WORKERS' COMPENSATION LAW WITH RESPECT TO ALL OPERATIONS IN THE STATE OF NEW YORK, EXCEPT AS INDICATED BELOW.

IF YOU WISH TO RECEIVE NOTIFICATIONS REGARDING SAID POLICY, INCLUDING ANY NOTIFICATION OF CANCELLATIONS, OR TO VALIDATE THIS CERTIFICATE, VISIT OUR WEBSITE AT [HTTPS://WWW.NYSIF.COM/CERT/CERTVAL.ASP](https://www.nysif.com/cert/certval.asp). THE NEW YORK STATE INSURANCE FUND IS NOT LIABLE IN THE EVENT OF FAILURE TO GIVE SUCH NOTIFICATIONS.

THIS POLICY AFFORDS COVERAGE TO THE SOLE PROPRIETOR, PARTNERS AND/OR MEMBERS OF A LIMITED LIABILITY COMPANY.

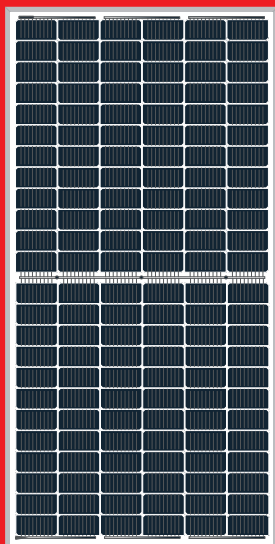
DOUGLAS HERTZ
RAND M MANASSEE
ERIC MESSER
SUNRISE SOLAR SOLUTIONS LLC

THE POLICY INCLUDES A WAIVER OF SUBROGATION ENDORSEMENT UNDER WHICH NYSIF AGREES TO WAIVE ITS RIGHT OF SUBROGATION TO BRING AN ACTION AGAINST THE CERTIFICATE HOLDER TO RECOVER AMOUNTS WE PAID IN WORKERS' COMPENSATION AND/OR MEDICAL BENEFITS TO OR ON BEHALF OF AN EMPLOYEE OF OUR INSURED IN THE EVENT THAT, PRIOR TO THE DATE OF THE ACCIDENT, THE CERTIFICATE HOLDER HAS ENTERED INTO A WRITTEN CONTRACT WITH OUR INSURED THAT REQUIRES THAT SUCH RIGHT OF SUBROGATION BE WAIVED.

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS NOR INSURANCE COVERAGE UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICY.

NEW YORK STATE INSURANCE FUND

DIRECTOR, INSURANCE FUND UNDERWRITING

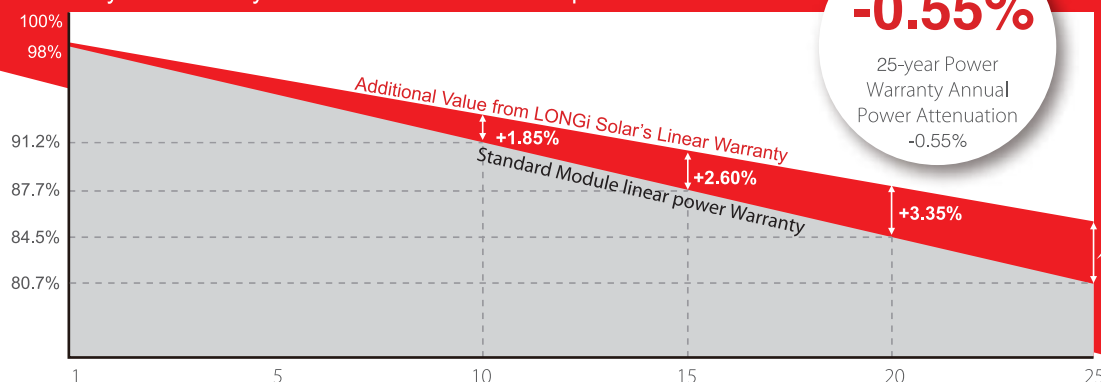


LR4-72HPH 425~455M



**High Efficiency
Low LID Mono PERC with
MBB & Half-cut Technology**

12-year Warranty for Materials and Processing;
25-year Warranty for Extra Linear Power Output



Complete System and Product Certifications

IEC 61215, IEC 61730, UL 61730

ISO 9001:2008: ISO Quality Management System

ISO 14001: 2004: ISO Environment Management System

OHSAS 18001: 2007 Occupational Health and Safety



* Specifications subject to technical changes and tests.
LONGi Solar reserves the right of interpretation.

Positive power tolerance (0 ~ +5W) guaranteed

High module conversion efficiency (up to 20.9%)

Slower power degradation enabled by Low LID Mono PERC technology: first year <2%,
0.55% year 2-25

Solid PID resistance ensured by solar cell process optimization and careful module BOM selection

Reduced resistive loss with lower operating current

Higher energy yield with lower operating temperature

Reduced hot spot risk with optimized electrical design and lower operating current

LONGi Green Energy Technology Co., Ltd.

LONGi

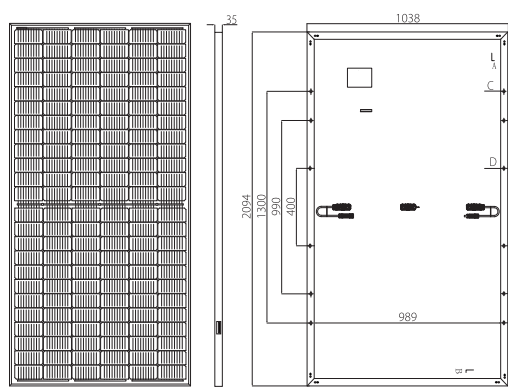
Address: Level 8 / 124 Walker Street North Sydney NSW 2060 Australia

Tel: +61 2 8484 5806 E-mail: info@longi-solar.com.au Website: www.long-solar.com.au

Note: Due to continuous technical innovation, R&D and improvement, technical data above mentioned may be of modification accordingly. LONGi have the sole right to make such modification at anytime without further notice; Demanding party shall request for the latest datasheet for such as contract need, and make it a consisting and binding part of lawful documentation duly signed by both parties.

LR4-72HPH 425~455M

Design (mm)



Units: mm(inch)

Tolerance:

Length: ± 2 mm

Width: ± 2 mm

Height: ± 1 mm

Pinch-off: ± 1 mm

Mechanical Parameters

Cell Orientation: 144 (6x24)
 Junction Box: IP68, three diodes
 Output Cable: 4mm², 1400mm in length
 Connector: Staubli EVO2
 Glass: Single glass
 3.2mm coated tempered glass
 Frame: Anodized aluminum alloy frame
 Weight: 23.5kg
 Dimension: 2094x1038x35mm
 Packaging: 30pcs per pallet
 150pcs per 20'GP
 660pcs per 40'HC

Operating Parameters

Operational Temperature: -40 °C ~ +85 °C
 Power Output Tolerance: 0 ~ +5 W
 Voc and Isc Tolerance: $\pm 3\%$
 Maximum System Voltage: DC1500V (IEC/UL)
 Maximum Series Fuse Rating: 20A
 Nominal Operating Cell Temperature: 45 ± 2 °C
 Safety Protection Class: Class II
 Fire Rating: Class C according to UL790

Electrical Characteristics

Test uncertainty for Pmax: $\pm 3\%$

Model Number	LR4-72HPH-425M		LR4-72HPH-430M		LR4-72HPH-435M		LR4-72HPH-440M		LR4-72HPH-445M		LR4-72HPH-450M		LR4-72HPH-455M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	425	317.4	430	321.1	435	324.9	440	328.6	445	332.3	450	336.1	455	339.8
Open Circuit Voltage (Voc/V)	48.3	45.3	48.5	45.5	48.7	45.7	48.9	45.8	49.1	46.0	49.3	46.2	49.5	46.4
Short Circuit Current (Isc/A)	11.23	9.08	11.31	9.15	11.39	9.21	11.46	9.27	11.53	9.33	11.60	9.38	11.66	9.43
Voltage at Maximum Power (Vmp/V)	40.5	37.7	40.7	37.9	40.9	38.1	41.1	38.3	41.3	38.5	41.5	38.6	41.7	38.8
Current at Maximum Power (Imp/A)	10.50	8.42	10.57	8.47	10.64	8.53	10.71	8.59	10.78	8.64	10.85	8.70	10.92	8.75
Module Efficiency(%)	19.6		19.8		20.0		20.2		20.5		20.7		20.9	

STC (Standard Testing Conditions): Irradiance 1000W/m², Cell Temperature 25 °C, Spectra at AM1.5

NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m², Ambient Temperature 20 °C, Spectra at AM1.5, Wind at 1m/s

Temperature Ratings (STC)

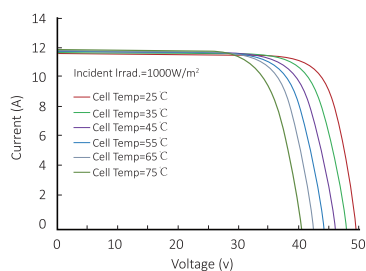
Temperature Coefficient of Isc	+0.048%/°C
Temperature Coefficient of Voc	-0.270%/°C
Temperature Coefficient of Pmax	-0.350%/°C

Mechanical Loading

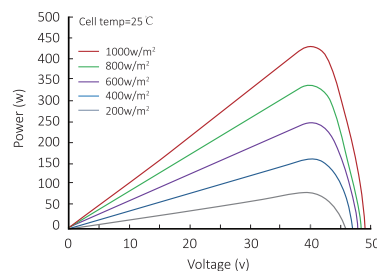
Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

I-V Curve

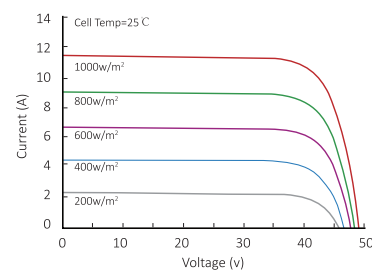
Current-Voltage Curve (LR4-72HPH-440M)



Power-Voltage Curve (LR4-72HPH-440M)



Current-Voltage Curve (LR4-72HPH-440M)

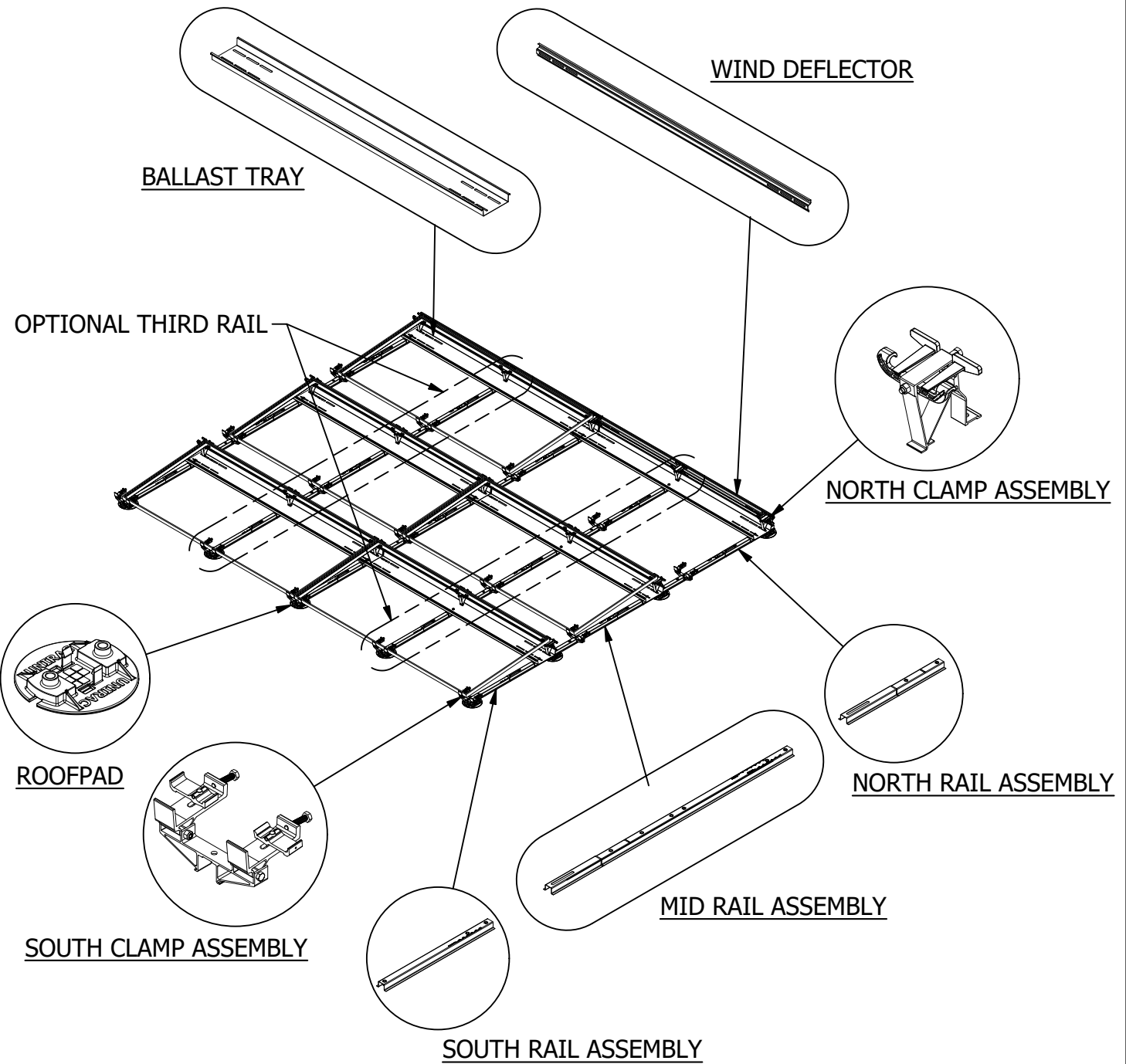


LONGi

LONGi Green Energy Technology Co., Ltd.

Address: Level 8 / 124 Walker Street North Sydney NSW 2060 Australia
 Tel: +61 2 8484 5806 E-mail: info@longi-solar.com.au Website: www.long-solar.com.au

Note: Due to continuous technical innovation, R&D and improvement, technical data above mentioned may be of modification accordingly. LONGi have the sole right to make such modification at anytime without further notice; Demanding party shall request for the latest datasheet for such as contract need, and make it a consisting and binding part of lawful documentation duly signed by both parties.



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

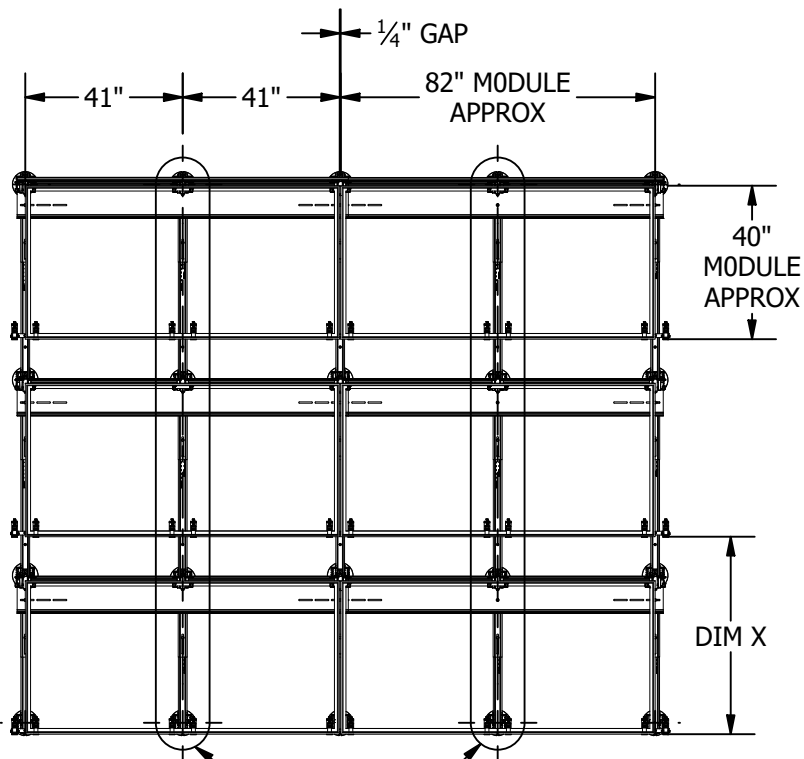
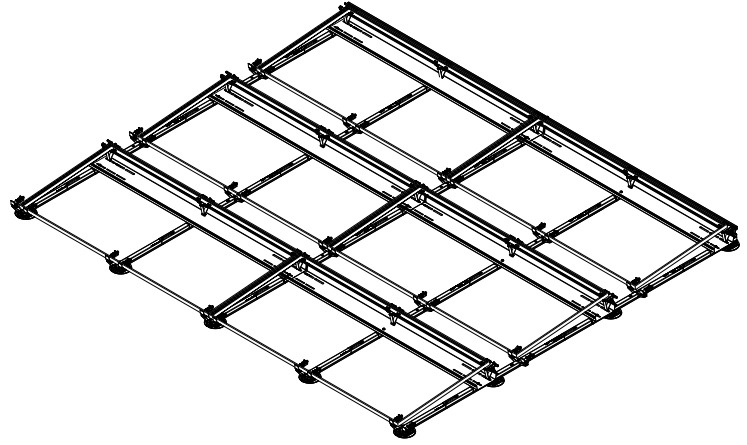
PRODUCT PROTECTED BY
ONE OR MORE US PATENTS
LEGAL NOTICE

GF-A01

SHEET

NOTE:

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



TOP

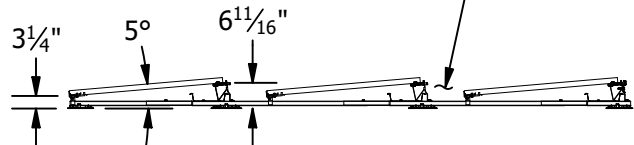
OPTIONAL THIRD RAIL



FRONT

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

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

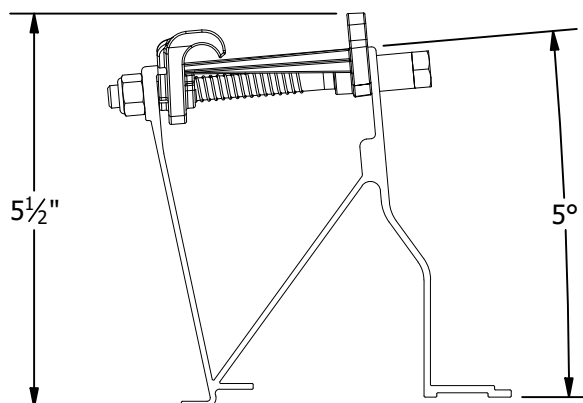
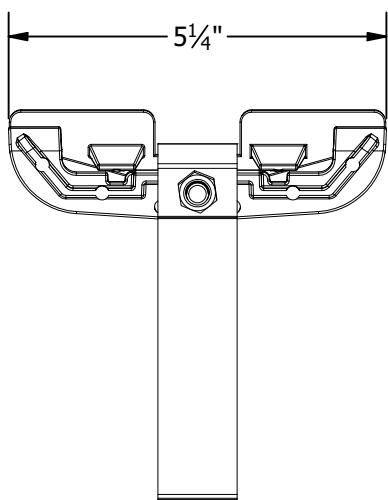
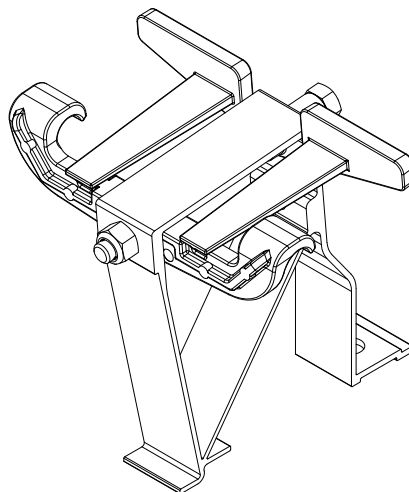
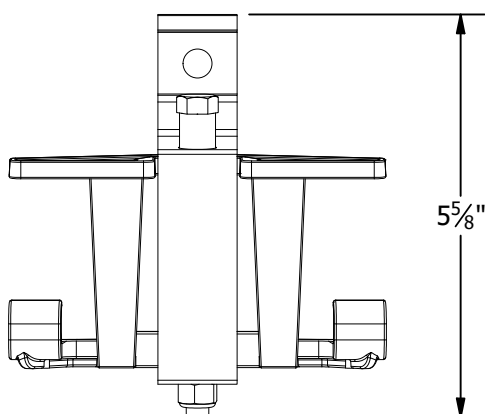
DRAWING NOT TO SCALE
ALL DIMENSIONS ARE
NOMINAL

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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

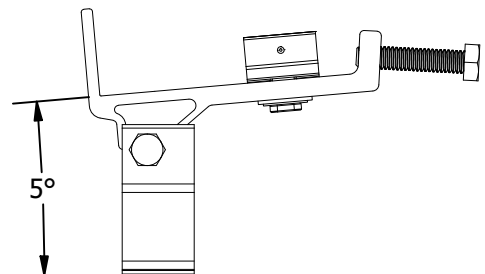
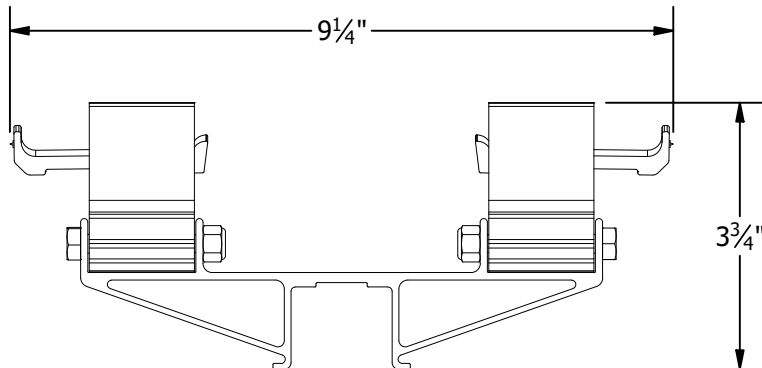
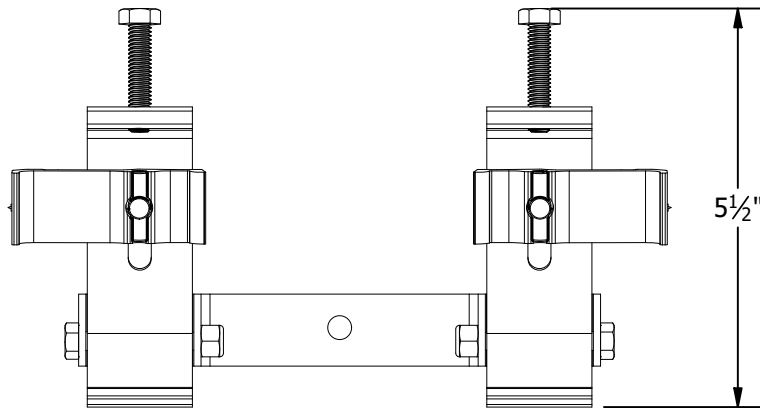
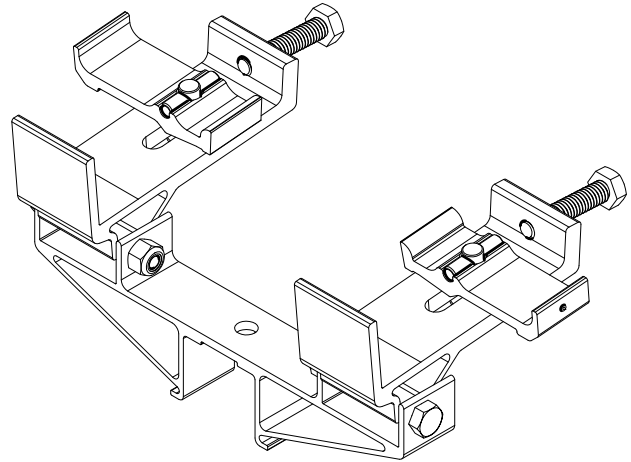
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GF-A03

SHEET

PART # TABLE	
P/N	DESCRIPTION
360050	SOUTH CLAMP ASSEMBLY



1411 BROADWAY BLVD. NE
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

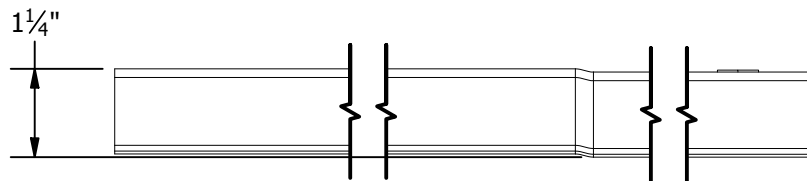
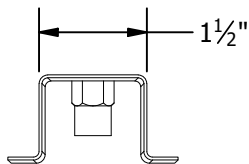
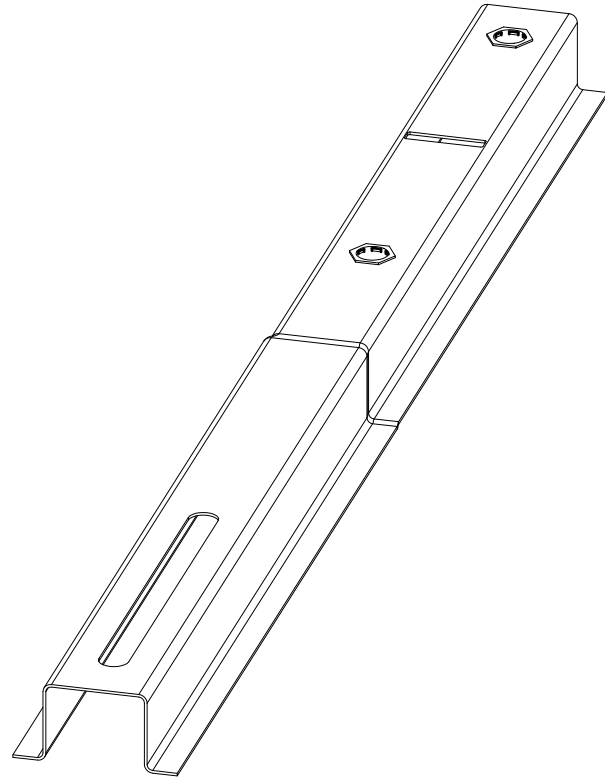
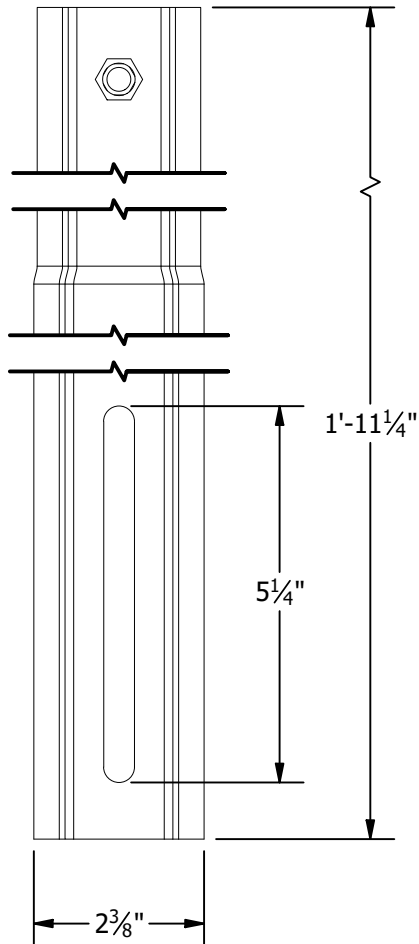
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GF-A04

SHEET

PART # TABLE	
P/N	DESCRIPTION
360010	NORTH RAIL ASSEMBLY



1411 BROADWAY BLVD. NE
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

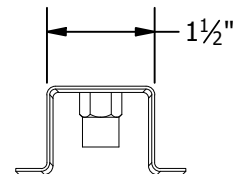
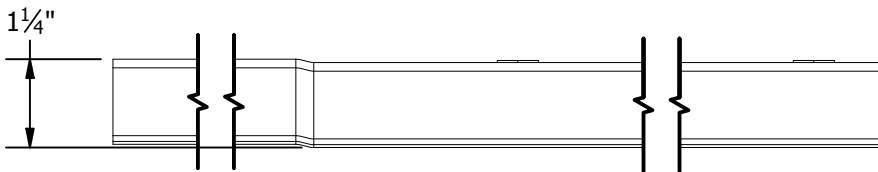
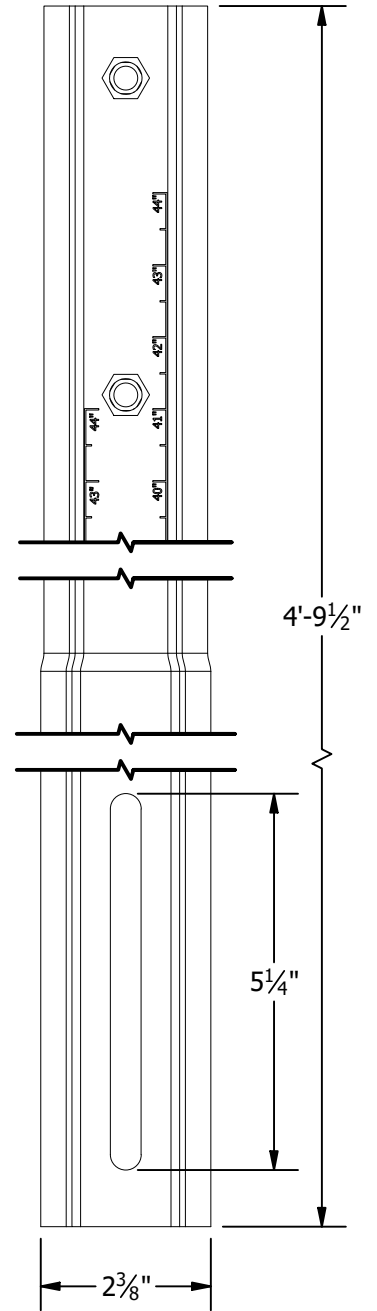
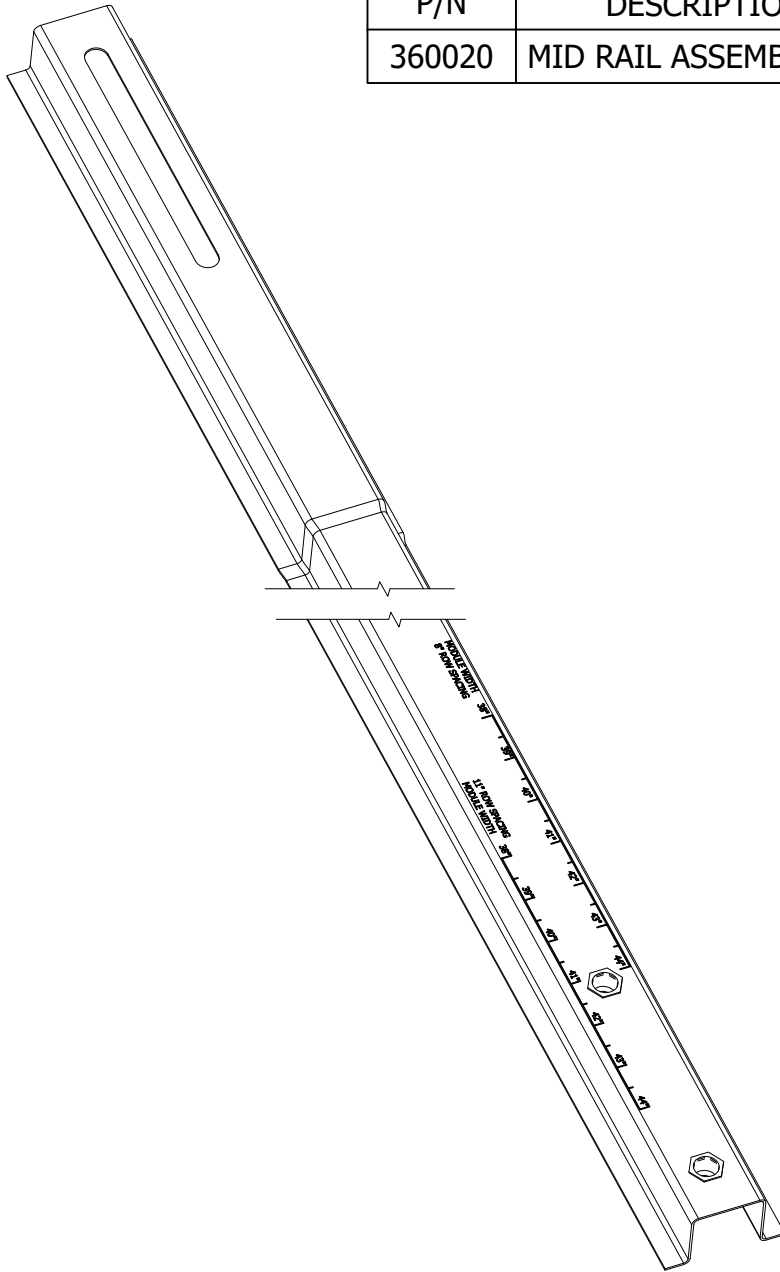
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GF-A05

SHEET

PART # TABLE	
P/N	DESCRIPTION
360020	MID RAIL ASSEMBLY



1411 BROADWAY BLVD. NE
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

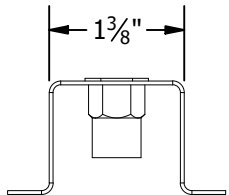
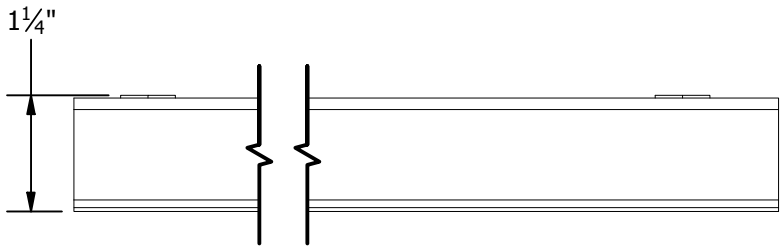
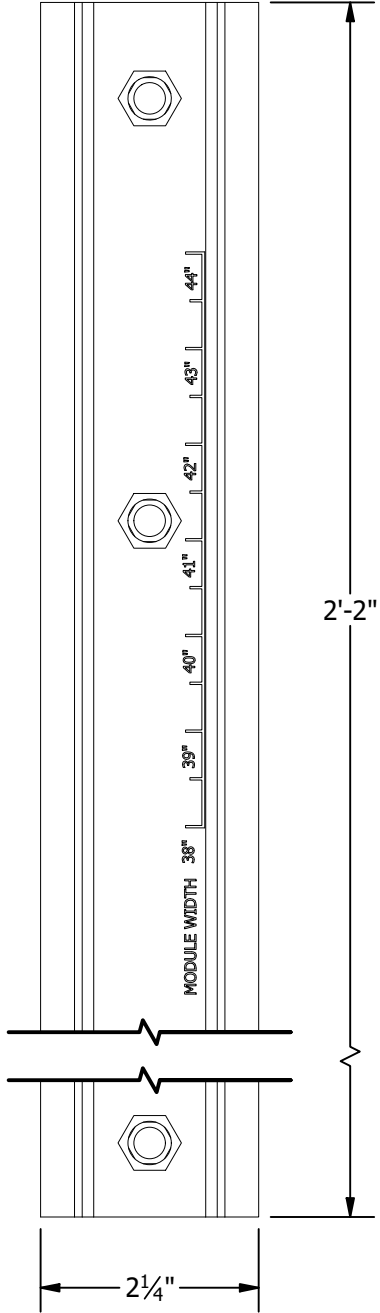
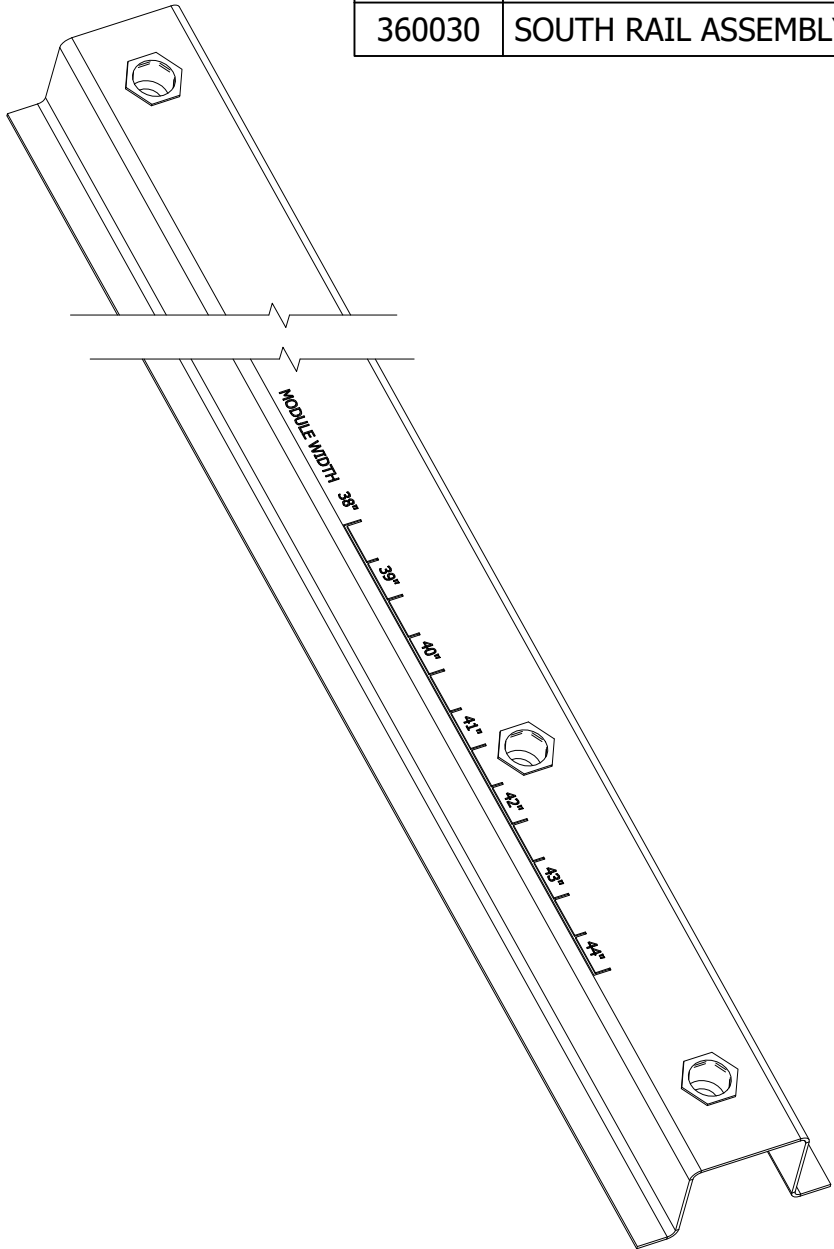
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GF-A06

SHEET

PART # TABLE	
P/N	DESCRIPTION
360030	SOUTH RAIL ASSEMBLY



1411 BROADWAY BLVD. NE
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

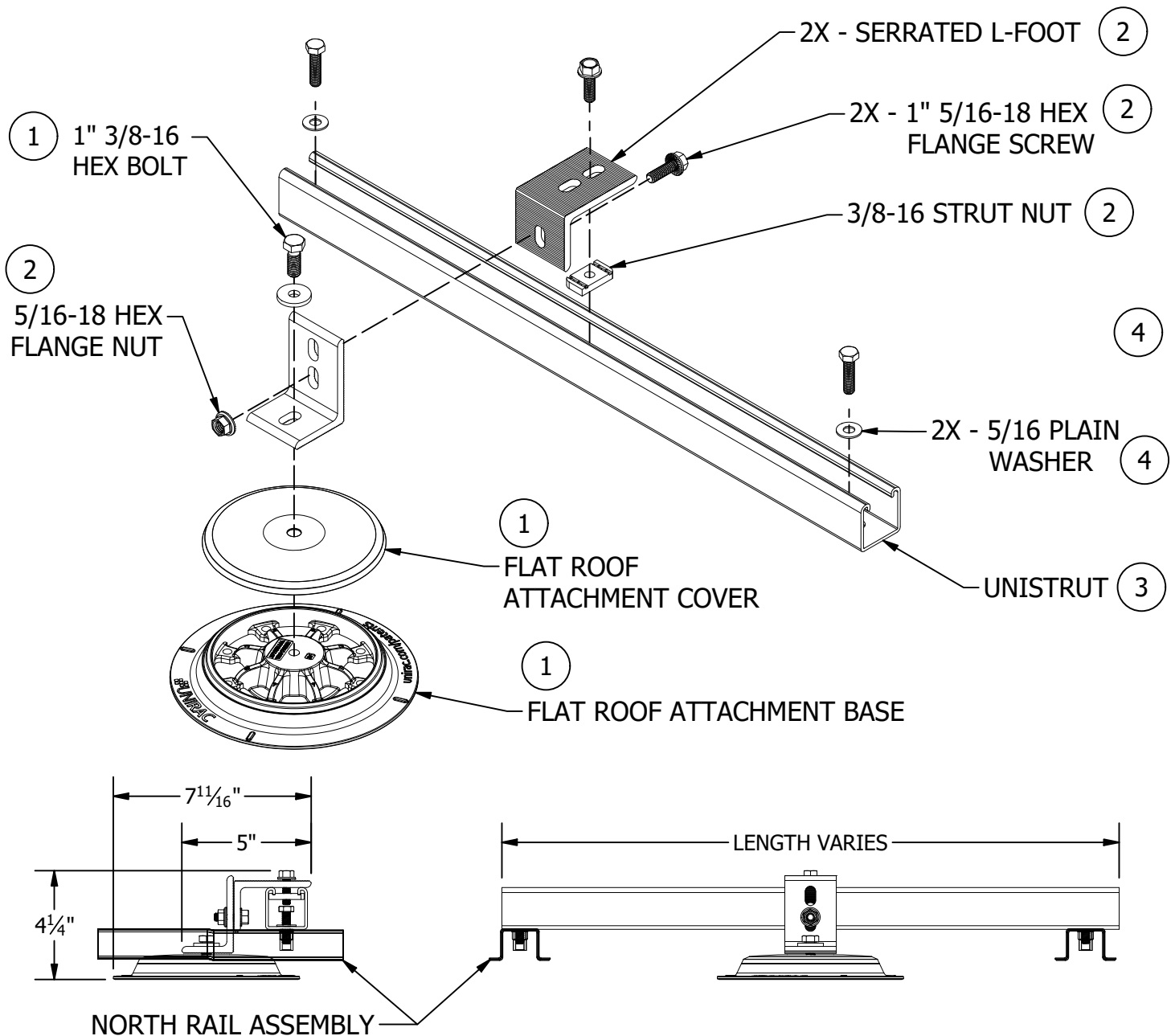
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GF-A07

SHEET

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
WWW.UNIRAC.COM

PRODUCT LINE: GRIDFLEX

DRAWING TYPE: ASSEMBLY

DESCRIPTION: ATTACHMENT KIT

REVISION DATE: 8/30/2021

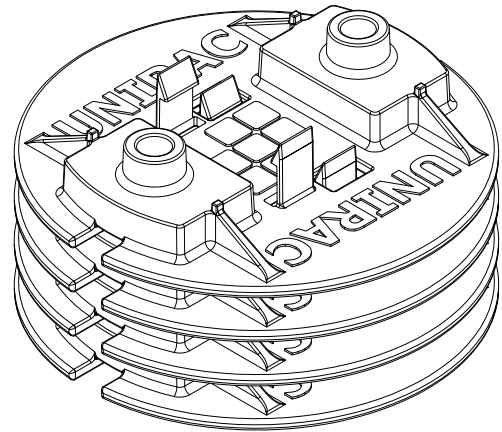
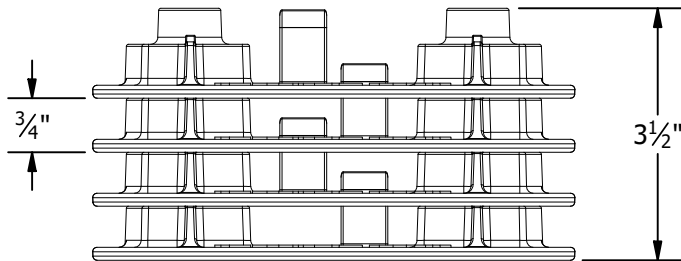
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GF-A08

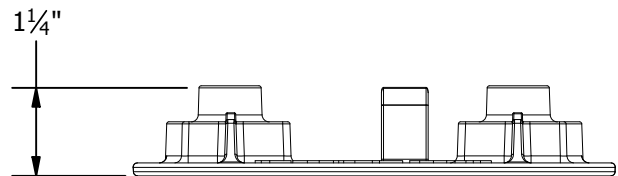
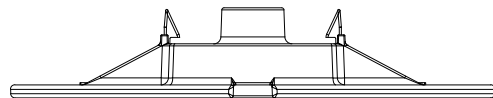
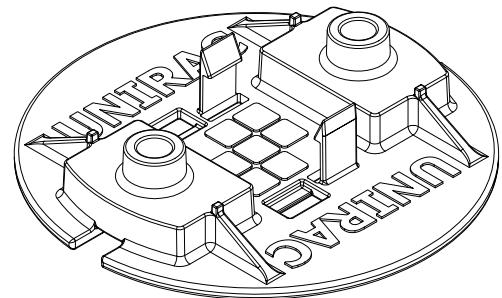
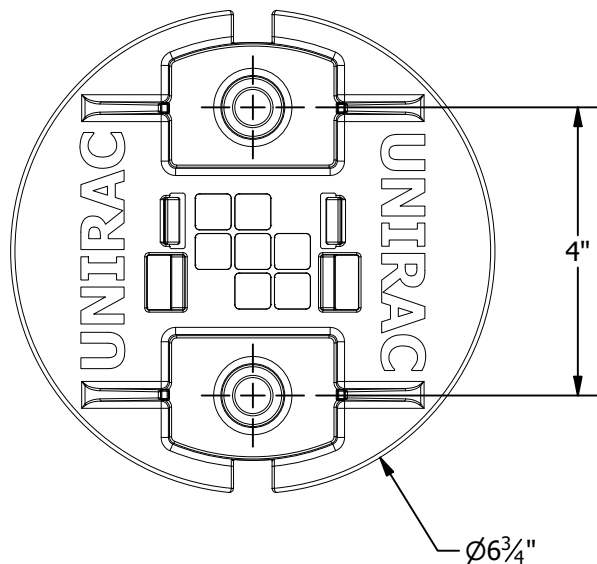
SHEET

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

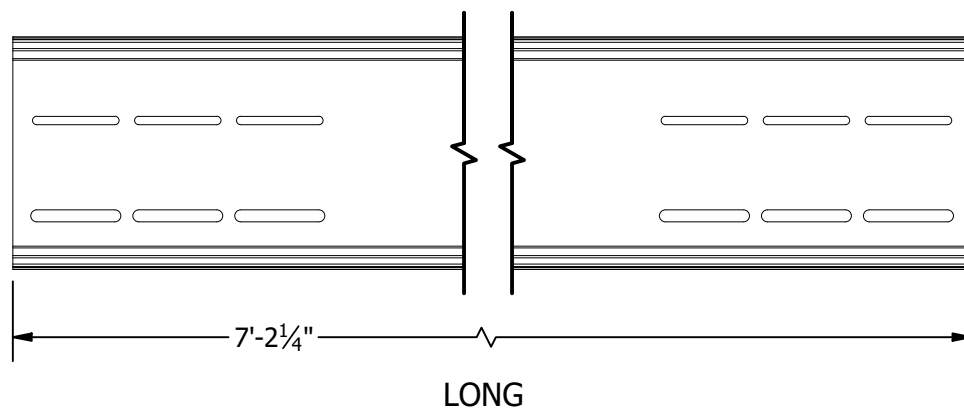
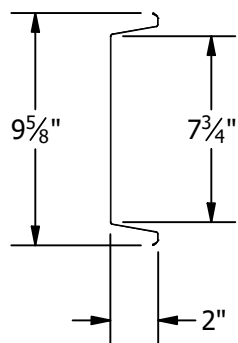
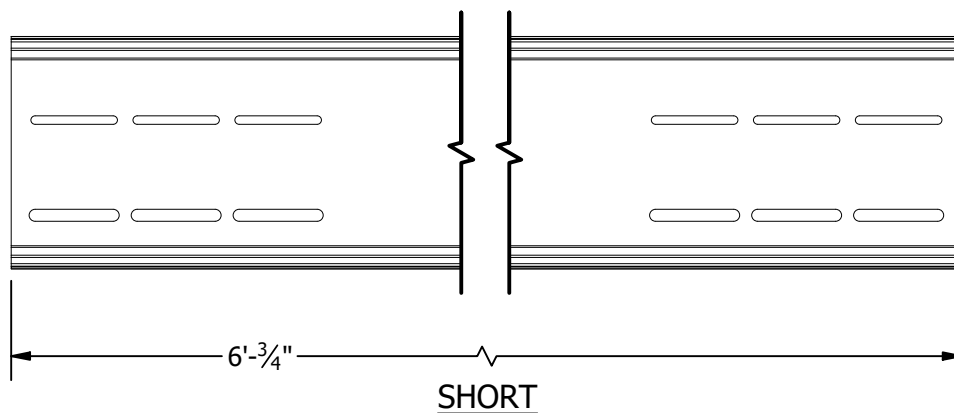
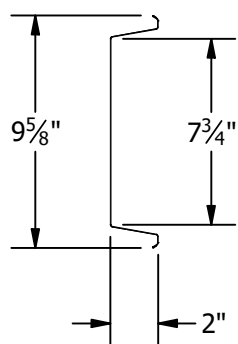
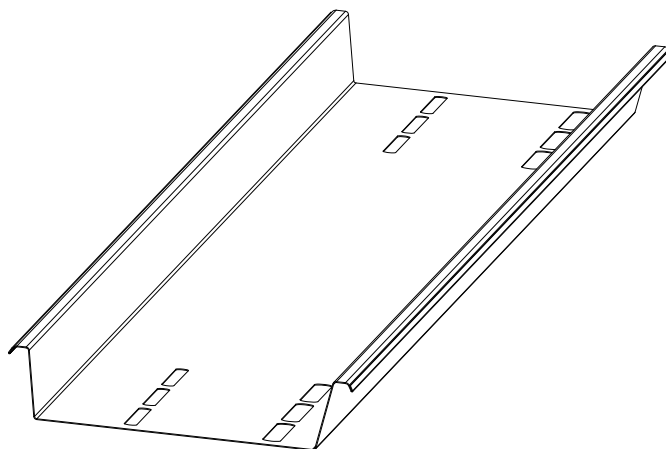
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GF-P01

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

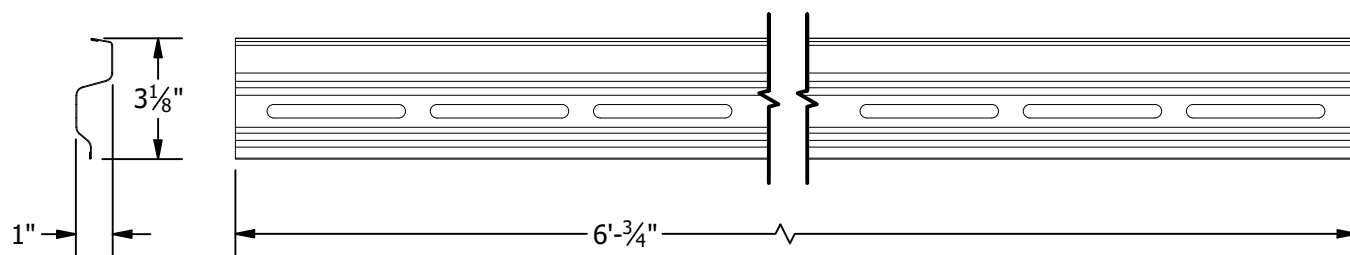
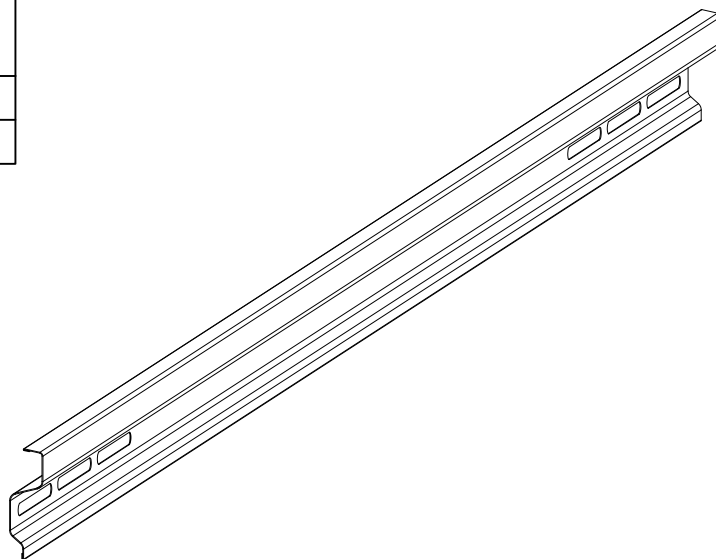
DRAWING NOT TO SCALE
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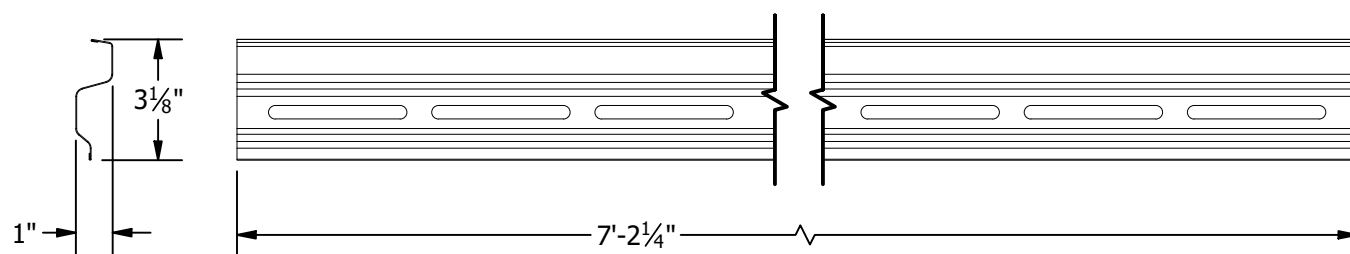
GF-P02

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

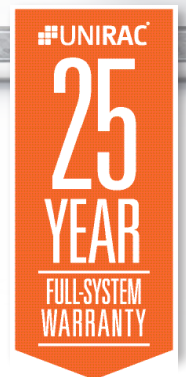
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LEGAL NOTICE

GF-P03

SHEET



GridFlex™ combines strength and flexibility for the best in flat roof solar. Low ballast counts and ultimate array design flexibility. Rail sections connect to create a rigid structure that greatly reduces ballast weight. Modular, preassembled components offer ultimate array design flexibility and installer preferred construction process. Additionally, preassembled stanchion clamps secure the inside and outside of the module frame for robust reliable connections that can be trusted beyond the 25-year warranty.



UNLOCK THE TRUE POTENTIAL OF FLAT ROOF SOLAR

FOR QUESTIONS OR CUSTOMER SERVICE VISIT UNIRAC.COM OR CALL (505) 248-2702

LIGHTER

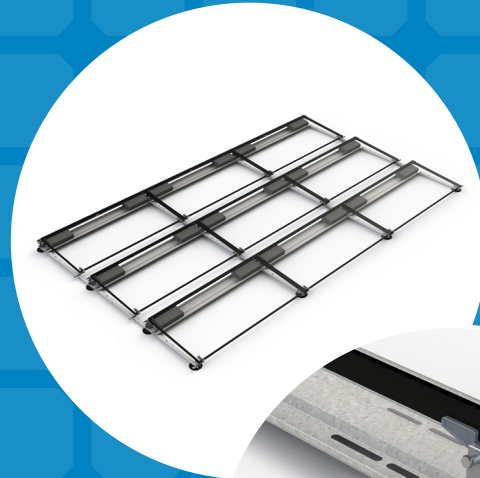
- Grid structure increases load sharing benefits
- Low profile for aerodynamic advantage
- Wind deflectors used at north array edge to reduce ballast

FASTER

- Modular, universal components for easy design and install
- Preassembled components are fast and easy to use
- Hinged module clamp for install and O&M access
- Shared rail, fewer parts, single tool install

MORE SECURE

- Robust, reliable clamps with multiple frame connection points.
- Ballast fully contained under modules in structural tray
- Wind tunnel tested and validated
- Clamp fasteners provide more security than friction-only connections



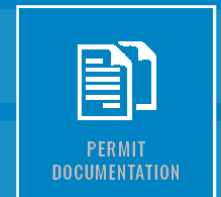
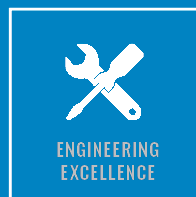
Shared Rail
Grid Strength



Clamps Wrap Module Frame

LISTED **UL2703** BONDING & GROUNDING
MECHANICAL LOADING
SYSTEM FIRE CLASSIFICATION

UNIRAC CUSTOMER SERVICE MEANS THE HIGHEST LEVEL OF PRODUCT SUPPORT



TECHNICAL SUPPORT

UNIRAC's technical support team is dedicated to answering questions & addressing issues in real time. An online library of documents including engineering reports, stamped letters and technical data sheets greatly simplifies your permitting and project planning process.

CERTIFIED QUALITY PROVIDER

UNIRAC is the only PV mounting vendor with ISO certifications for 9001:2015, 14001:2015 and OHSAS 18001:2007, which means we deliver the highest standards for fit, form, and function. These certifications demonstrate our excellence and commitment to first class business practices.

BANKABLE WARRANTY

Don't leave your project to chance, UNIRAC has the financial strength to back our products and reduce your risk. Have peace of mind knowing you are receiving products of exceptional quality. GRIDFLEX[™] is covered by a twenty five (25) year limited product warranty.

PROTECT YOUR REPUTATION WITH QUALITY RACKING SOLUTIONS BACKED BY ENGINEERING EXCELLENCE AND A SUPERIOR SUPPLY CHAIN

FLAT ROOF SOLUTIONS | COMPARISON GUIDE



Every project has unique requirements – let the Unirac Commercial Team help optimize the right solution to match your specific project parameters. Our design experts can identify the product solutions that satisfy your specific site variables and project goals.

**SUBMIT A
QUOTE!**



SCAN HERE

	ROOFMOUNT			ECOFOOT		GRIDFLEX	
	Reliable Simplicity			Upgrade in Aesthetics and Aerodynamics		Grid Based For Lower Ballast Weight	
	Flat roof's workhorse offers a 10°, 5°, and Dual Tilt solution with minimal SKUs. As simple and easy as ballasted solar can be.			A great-looking flat roof solution with integral wind deflectors to reduce uplift. Preassembled clamps and stackable bays are ready for modules in seconds.		Grid-based structure provides load sharing to reduce system weight. Preassembled, universal components for install speed and flexibility.	
							
	RM10	RM5	RMDT	EcoFoot2+	EcoFoot5D	GridFlex 5°	GridFlex 10°
SYSTEM ADVANTAGE	Bay + Clamps #1 Bifacial Solution Validated Install Speed	2 Row Space Options Wind Deflector to Reduce Ballast	Max Module Density Lowest Cost Best Aerodynamics	3 SKUs Validated Install Speed Landscape and Portrait	Each Module Supported by 6 Connection Points	2 Row Space Options Fewer Components than other Grid Systems	3 Row Space Options Fastest Grid System
LIGHTEST SYSTEM WEIGHT (PSF)							
OPTIMAL FOR WIND LOADS							
OPTIMAL FOR SNOW LOADS							
INSTALL EASE							

KEY: 1 ICON = GOOD 5 ICONS = BEST

EVERYTHING YOU NEED FOR A QUICK, PROFESSIONAL INSTALLATION

FOR QUESTIONS OR CUSTOMER SERVICE VISIT UNIRAC.COM OR CALL (505) 248-2702

Backup Interface

for North America

BI-EUSGN-01 / BI-NUSGN-01



Backup Interface for Flexible Backup

- Automatically provides backup power to home loads in the event of grid interruption
- Full flexibility in which loads to backup - the entire home or selected loads
- Scalable solution to support higher power & higher capacity
- Built-in Auto Transformer and Energy Meter for easier and faster installation
- Seamless integration with the StorEdge inverter to manage and monitor both PV generation and energy storage
- Generator connection support

/ Backup Interface for North America

BI-EUSGN-01 / BI-NUSGN-01

	BI-EUSGN-01	BI-NUSGN-01	
INPUT FROM GRID			
AC Current Input	200		A
AC Output Voltage (Nominal)	240		Vac
AC Output Voltage Range	211 - 264		Vac
AC Frequency (Nominal)	60		Hz
AC Frequency Range	59.3 - 60.5		Hz
Microgrid Interconnection Device Rated Current	200		A
Service Side AC Main Circuit Breaker Rated Current	200	N/A	A
Service Side AC Main Circuit Breaker Interrupt Current	10k	N/A	A
Grid Disconnection Switchover Time	<100		ms
OUTPUT TO MAIN DISTRIBUTION PANEL			
Maximum AC Current Output	200		A
AC L-L Output Voltage (Nominal)	240		Vac
AC L-L Output Voltage Range	211 - 264		Vac
AC Frequency (Nominal)	60		Hz
AC Frequency Range	59.3 - 60.5		Hz
Maximum Inverters AC Current Output in Backup Operation	78		A
Imbalance Compensation in Backup Operation	5000		W
AC L-N Output Voltage in Backup (Nominal)	120		V
AC L-N Output Voltage Range in Backup	105 - 132		V
AC Frequency Range in Backup	55 - 65		Hz
INPUT FROM INVERTER			
Number of Inverter Inputs	3		#
Rated AC Power	7,600		W
Maximum Continuous Input Current @ 240V	32		A
Rated AC Power in Continuous Backup Operation	6,100		W
Maximum Continuous Input Current in Backup Operation	26		A
Peak AC Power (<10 sec) in Backup Operation	7,000		W
Peak AC Current (<10 sec) in Backup Operation	30		A
Inverter Input AC Circuit Breaker	40		A
Upgradability	Up to 3 X 40A CB ⁽¹⁾		
GENERATOR⁽²⁾			
Maximum Rated AC Power	15,000		W
Maximum Continuous Input Current	63		Adc
Dry Contact Switch Voltage Rating	250/30		Vac/Vdc
Dry Contact Switch Current Rating	5		A
2-wire Start Switch	Yes		
ADDITIONAL FEATURES			
Installation Type	Suitable for use as service equipment	For main lug only	
Number of Communication Inputs	2		
Communication	RS485		
Energy Meter (for Import/Export)	1% accuracy		
Manual Control Over Microgrid Interconnection Device	Yes		

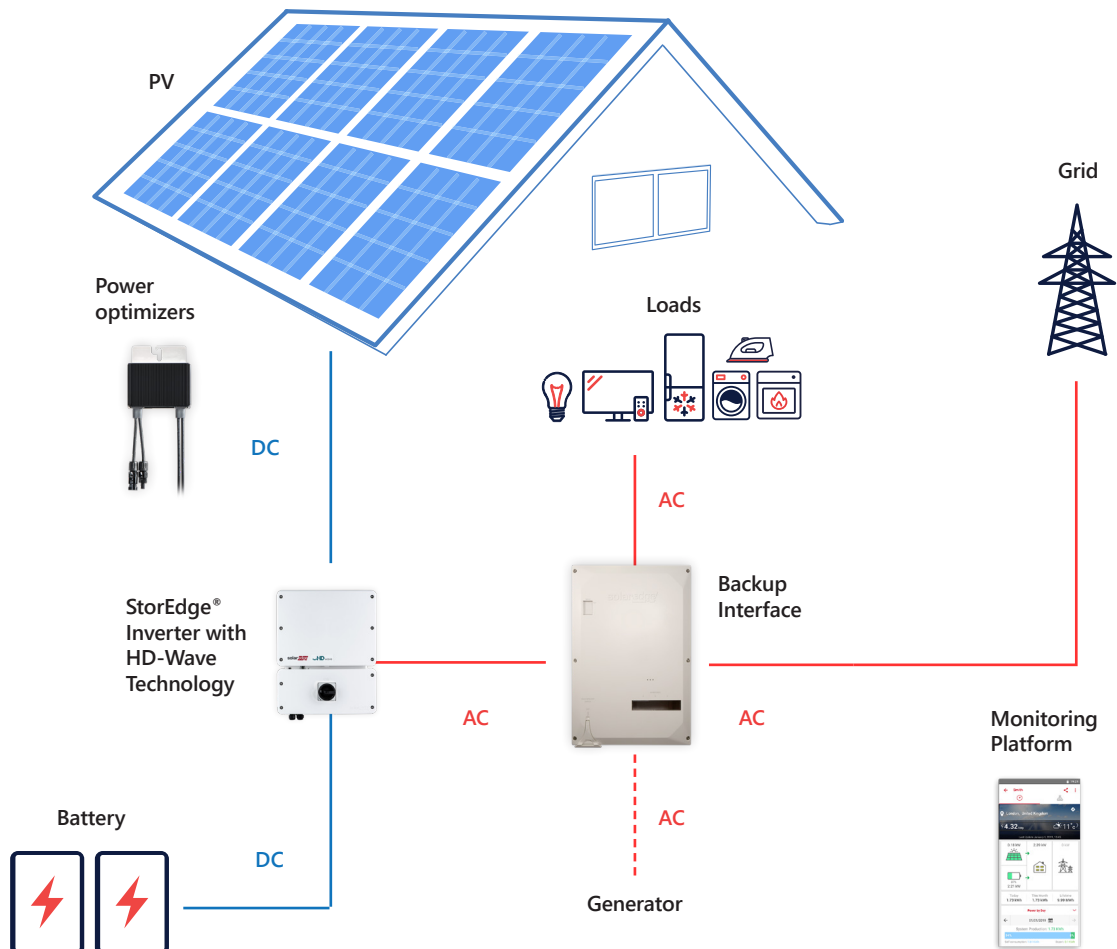
⁽¹⁾ Each 40A CB supports an 7600W inverter; CB upgrade kit is available with the following part numbers: for 40A CB CB-UPG-40-01

⁽²⁾ Requires supporting inverter firmware

/ Backup Interface for North America

BI-EUSGN-01 / BI-NUSGN-01

	BI-EUSGN-01	BI-NUSGN-01	
STANDARD COMPLIANCE			
Safety	UL1741, CSA 22.2 NO. 107		
	UL869A	N/A	
Emissions	FCC part 15 class B		
INSTALLATION SPECIFICATIONS			
Supported Inverters	StorEdge single phase inverter, StorEdge single phase inverter with HD-Wave Technology		
AC From Grid Conduit Size / AWG Range	2" conduits / #0 - 4/0 AWG		
AC Inverter Conduit Size / AWG Range	1" conduit / 14 - 4 AWG		
AC Generator Input Conduit Size / AWG Range	1" conduit / 8 - 3 AWG		
Communication Conduit Size / AWG Range	3/4" / 24 - 10 AWG		
Weight	73 / 33		lb / Kg
Cooling	Fan (user replaceable)		
Noise	< 50		dBA
Operating Temeprature Range	-40 to +122 / -40 to +50		°F / °C
Protection Rating	NEMA 3R, IP44		
Dimensions (HxWxD)	20.59 x 13.88 x 8.62 / 523.5 x 352.5 x 219		in / mm



SolarEdge Energy Bank 10kWh Battery For North America

HOME BACKUP



Optimized for SolarEdge Energy Hub Inverters⁽¹⁾

- Maximized system performance, gaining more energy to store and use for on-grid and backup power applications
- Integrates with the complete SolarEdge residential offering, providing a single point of contact for warranty, support, training, and simplified logistics & operations
- DC coupled battery featuring superior overall system efficiency, from PV to battery to grid
- Scalable solution for increased power and capacity with multiple SolarEdge inverters and batteries
- Solar, storage, EV charging, and smart devices all monitored and managed by a single app to optimize solar production, consumption and backup* power
- Wireless communication to the inverter, reducing wiring, labor and installation faults
- Simple plug and play installation, with automatic SetApp-based configuration
- Includes multiple safety features for battery protection

* Backup application are subject to local regulation and may require additional components and firmware upgrade

/ SolarEdge Energy Bank

10kWh Battery

For North America

BAT-10K1PS0B-01

BATTERY SPECIFICATION

Usable Energy (100% depth of discharge)	9700	Wh
Continuous Output Power	5000	W
Peak Output Power (for 10 seconds)	7500	W
Peak Roundtrip Efficiency	>94.5	%
Warranty ⁽²⁾	10	Years
Voltage Range	350-450	Vdc
Communication Interfaces	Wireless*	
Batteries per Inverter	Up to 3 ⁽³⁾	

STANDARD COMPLIANCE

Safety	UL1642, UL1973, UL9540, UN38.3	
Emissions	FCC Part 15 Class B	

MECHANICAL SPECIFICATIONS

Dimensions (W x H x D)	31.1 x 46.4 x 9.84 / 790 x 1179 x 250	in / mm
Weight	267 / 121	lb / kg
Mounting ⁽⁴⁾	Floor or wall mount ⁽⁵⁾	
Operating Temperature ⁽⁶⁾	+14 to +122 / -10 to +50	°F / °C
Storage Temperature (more than 3 months)	+14 to +86 / -10 to +30	°F / °C
Storage Temperature (less than 3 months)	-22 to +140 / -30 to +60	°F / °C
Altitude	6562 / 2000	ft / m
Enclosure Protection	IP55 / NEMA 3R - indoor and outdoor (water and dust protection)	
Cooling	Natural convection	
Noise (at 1m distance)	<25	dBA

* The SolarEdge Energy Bank is designed for use with SolarEdge Energy Net for wireless communication. The inverter might require a matching SolarEdge Energy Net Plug-in (more details below).

Using RS485 could reduce the usable energy to 9500Wh.

(1) Please refer to the SolarEdge Energy Bank battery connections and configuration application note for compatible inverters.

(2) For warranty details please refer to the SolarEdge Energy Bank battery Limited Warranty.

(3) Installations with multiple SolarEdge Energy Bank batteries connected to a single inverter require a pair of branch connectors (DC + and DC -) per battery excluding the last battery. Support for 3 batteries is pending supporting inverter firmware. The branch connectors should be purchased separately.

(4) Installation and mounting requires handles that should be purchased separately. Please refer to the Accessories' PN table below.

(5) The floor stand is purchased separately. One floor stand is required per SolarEdge Energy Bank battery. Please refer to the Accessories' PN table below.

(6) Please note that operating the SolarEdge Energy Bank at extreme temperatures for extended durations of time may void the Energy Bank's warranty coverage.

Please see the Energy Bank Limited Product Warranty for additional details.

SolarEdge Energy Bank Battery – Accessories (purchased separately)

Accessory	PN
Floor stand	IAC-RBAT-FLRSTD-01
Branch connectors set (includes a pair of DC + and DC - connectors) Required for installations with multiple SolarEdge Energy Bank batteries with a single inverter	IAC-RBAT-USYCBL-01
Handles	IAC-RBAT-HANDLE-01
SolarEdge Energy Net Plug-in	ENET-HBNP-01
Battery inverter extension cable 1.5m long (MC4 to terminal block)	IAC-RBAT-05M415-01

Single Phase Energy Hub Inverter with Prism Technology

For North America

SE3000H-US / SE3800H-US / SE6000H-US / SE7600H-US /
SE10000H-US / SE11400H-US⁽¹⁾



Optimized battery storage with HD-Wave technology

- Record-breaking 99% weighted efficiency with 200% DC oversizing
- Small, lightweight, and easy to install
- Modular design, future ready with optional upgrades to:
 - DC-coupled storage for full or partial home backup
 - Built-in consumption monitoring
 - Direct connection to the SolarEdge smart EV charger
- Multi-inverter, scalable storage solution
 - With enhanced battery power up to 10kW
- Integrated arc fault protection and rapid shutdown for NEC 2014, NEC 2017 and NEC 2020, per article 690.11 and 690.12
- Embedded revenue grade production data, ANSI C12.20 Class 0.5

/ Single Phase Energy Hub Inverter with Prism Technology For North America

SE3000H-US / SE3800H-US / SE6000H-US / SE7600H-US / SE10000H-US / SE11400H-US⁽¹⁾

	SE3000H-US	SE3800H-US	SE6000H-US	SE7600H-US	SE10000H-US	SE11400H-US	UNITS
OUTPUT - AC ON GRID							
Rated AC Power	3000	3800 @ 240V 3300 @ 208V	6000 @ 240V 5000 @ 208V	7600	10000	11400 @ 240V 10000 @ 208V	W
Maximum AC Power Output	3000	3800 @ 240V 3300 @ 208V	6000 @ 240V 5000 @ 208V	7600	10000	11400 @ 240V 10000 @ 208V	W
AC Frequency Range (min - nom - max)	59.3 - 60 - 60.5 ⁽²⁾						Hz
Maximum Continuous Output Current @ 240V	12.5	16	25	32	42	47.5	A
Maximum Continuous Output Current @ 208V	-	16	24	-	-	48.5	A
GFDI Threshold	1						A
Total Harmonic Distortion (THD)	<3						%
Power Factor	1, adjustable -0.85 to 0.85						
Utility Monitoring, Islanding Protection, Country Configurable Thresholds	Yes						
Charge Battery from AC (if allowed)	Yes						
Typical Nighttime Power Consumption	<2.5						W
OUTPUT - AC BACKUP ⁽³⁾							
Rated AC Power in Backup Operation ⁽⁴⁾	3000	3800 7600*	6000	7600 10300*	10000	10300	W
AC L-L Output Voltage Range in Backup	211 - 264						Vac
AC L-N Output Voltage Range in Backup	105 - 132						Vac
AC Frequency Range in Backup (min - nom - max)	55 - 60 - 65						Hz
Maximum Continuous Output Current in Backup Operation	12.5	16 32*	25	32 43*	42	43	A
GFDI	1						A
THD	<5						%
OUTPUT - SMART EV CHARGER AC							
Rated AC Power	9600						W
AC Output Voltage Range	211 - 264						Vac
On-Grid AC Frequency Range (min - nom - max)	59.3 - 60 - 60.5						Hz
Maximum Continuous Output Current @240V (grid, PV and battery)	40						Aac
INPUT - DC (PV AND BATTERY)							
Transformer-less, Ungrounded	Yes						
Max Input Voltage	480						Vdc
Nom DC Input Voltage	380						Vdc
Reverse-Polarity Protection	Yes						
Ground-Fault Isolation Detection	600kΩ Sensitivity						
INPUT - DC (PV)							
Maximum DC Power @ 240V	6000	7600 15200*	12000	15200 22800*	22000	22800	W
Maximum DC Power @ 208V	-	6600	10000	-	-	20000	W
Maximum Input Current ⁽⁵⁾ @ 240V	8.5	10.5 20*	16.5	20 31*	27	31	Adc
Maximum Input Current ⁽⁵⁾ @ 208V	-	9	13.5	-	-	27	Adc
Max. Input Short Circuit Current	45						Adc
Maximum Inverter Efficiency	99	99.2					%
CEC Weighted Efficiency	99					99 @ 240V 98.5 @ 208V	%
2-pole Disconnection	Yes						

* Supported with PN SExxxxH-USMMxxxxxx or SExxxxH-USMNxxxxxx

(1) These specifications apply to inverters with part numbers SExxxxH-USMMxxxxxx or SExxxxH-USMNxxxxxx and connection unit model number DCD-1PH-US-PxH-F-x

(2) For other regional settings please contact SolarEdge support

(3) Not designed for standalone applications and requires AC for commissioning. Backup functionality is only supported for 240V grid

(4) Rated AC power in Backup Operation are valid for installations with multiple inverters. For a single backup inverter operation, rated AC power in Backup is 90% of the value stated

(5) A higher current source may be used; the inverter will limit its input current to the values stated

/ Single Phase Energy Hub Inverter with Prism Technology For North America

SE3000H-US / SE3800H-US / SE6000H-US / SE7600H-US / SE10000H-US / SE11400H-US⁽¹⁾

	SE3000H-US	SE3800H-US	SE6000H-US	SE7600H-US	SE10000H-US	SE11400H-US	UNITS
INPUT - DC (BATTERY)							
Supported Battery Types	SolarEdge Energy Bank, LG RESU Prime ⁽⁶⁾						
Number of Batteries per Inverter	Up to 3 SolarEdge Energy Bank, up to 2 LG RESU Prime						
Continuous Power ⁽⁷⁾	6000	7600	10000				W
Peak Power ⁽⁷⁾	6000	7600	10000				W
Max Input Current	16	20	26.5				Adc
2-pole Disconnection	Yes						
SMART ENERGY CAPABILITIES							
Consumption Metering	Built - in ⁽⁸⁾						
Backup & Battery Storage	With Backup Interface (purchased separately) for service up to 200A; Up to 3 inverters						
EV Charging	Direct connection to Smart EV charger						
ADDITIONAL FEATURES							
Supported Communication Interfaces	RS485, Ethernet, Cellular ⁽⁹⁾ , Wi-Fi (optional),SolarEdge Energy Net (optional)						
Revenue Grade Metering, ANSI C12.20	Built - in ⁽⁸⁾						
Integrated AC, DC and Communication Connection Unit	Yes						
Inverter Commissioning	With the SetApp mobile application using built-in Wi-Fi Access Point for local connection						
DC Voltage Rapid Shutdown (PV and Battery)	Yes, according to NEC 2014, NEC 2017 and NEC 2020 690.12						
STANDARD COMPLIANCE							
Safety	UL1741, UL1741 SA, UL1741 PCS, UL1699B, UL1998, UL9540, CSA 22.2						
Grid Connection Standards	IEEE1547, Rule 21, Rule 14H						
Emissions	FCC part 15 class B						
INSTALLATION SPECIFICATIONS							
AC Output and EV AC Output Conduit Size / AWG Range	1" maximum / 14-4 AWG						
DC Input (PV and Battery) Conduit Size / AWG Range	1" maximum / 14-6 AWG						
Dimensions with Connection Unit (H x W x D)	17.7 x 14.6 x 6.8 / 450 x 370 x 174			17.7 x 14.6 x 6.8 / 450 x 370 x 174	17.7 x 14.6 x 6.8 / 450 x 370 x 174		in / mm
				17.7 x 14.6 x 6.8 / 450 x 370 x 174*			
Weight with Connection Unit	26 / 11.8			26 / 11.8	30.2 / 13.7		lb / kg
				30.2 / 13.7*			
Noise	< 25	< 25	< 25	< 50			dBA
< 50*							
Cooling	Natural Convection						
Operating Temperature Range	-40 to +140 / -40 to +60 ⁽¹⁰⁾						°F / °C
Protection Rating	NEMA 4						

(6) The part numbers SExxxxH-USxMxxxx only support the SolarEdge Energy Bank. The part numbers SExxxxH-USxNxxxx support both SolarEdge Energy Bank and LG RESU Prime batteries
Requires supporting inverter firmware

(7) Discharge power is limited up to the inverter rated AC power for on-grid and backup applications

(8) For consumption metering current transformers should be ordered separately: SECT-SPL-225A-T-20 or SEACT0750-400NA-20 units per box. Revenue grade metering is only for production metering

(9) Information concerning the Data Plan's terms & conditions is available in the following link:

<https://www.solaredge.com/sites/default/files/se-communication-plan-terms-and-conditions-eng.pdf>

(10) Full power up to at least 50°C / 122°F; for power de-rating information refer to: <https://www.solaredge.com/sites/default/files/se-temperature-derating-note-na.pdf>



914.762.7622
www.sunrisesolarllc.com

AUTHORIZATION TO ACT AS AGENT

RE: Building Department

Village of Irvington

Municipality

1/13/2022

Date

I, Julia Steinmetz, Jaxan Striano LLC, authorize Sunrise Solar Solutions, LLC and its employees to act on my behalf with all matters concerning the installation of a solar panel electrical system located at:

Residence of

Commercial Property/Residence of

16 North Astor Street

Street Address

Irvington, NY 10533

City, State, Zip

914-450-5361

(Area Code) Phone Number

I authorize Sunrise Solar Solutions, LLC to file a building permit for this project on my behalf and also give Sunrise Solar Solutions, LLC permission to access a copy of this property's survey, site plans, and building plans.

Please do not hesitate to contact us at 914.762.7622 regarding any questions or if you require additional information.

Julia Steinmetz, Jaxan Striano LLC

Julia Steinmetz, Jaxan Striano LLC (Jan 20, 2022 16:16 EST)

Customer Signature

Julia Steinmetz, Owner Jaxan Striano, LLC

Printed Name



December 31, 2021

Mr. Kai Nybro
Sunrise Solar Solutions, LLC
510 North State Road
Briarcliff Manor, NY 10510

RE: Steinmetz – 16 North Astor Street, Irvington, NY 10533
Project # 21.648

Mr. Nybro:

We have reviewed the proposed solar array and the structure(s) at the above referenced address. The array consists of (40) Sunpower modules on the structure, mounted on a Unirac racking system, with a system weight of 2.8 psf. Attachments to be 5/16" standard lag bolt, with a minimum of 1-1/2" of embedment into the structural member.

We hereby certify that the existing structure, with the addition of the proposed solar energy devices and racking, is capable of supporting the design loads required by the 2020 Residential Code of New York State.

We have attached the calculation for the critical roof member for the structures – a 3" x 8" joist and a 5.25" x 11.25" roof beam, checked for bending stress and deflection in accordance with ASCE 7-10.

Please feel free to contact us should you have any comments or questions.

Respectfully yours,

Matthew J. Boyce, PE

Matthew J. Boyce, PE



Engineered Solutions, LLC
3368 Carriage Crossing
Saint Charles, MO 63301

Wood Beam

Lic. #: KW-06012821

DESCRIPTION: 2x6 or larger

CODE REFERENCES

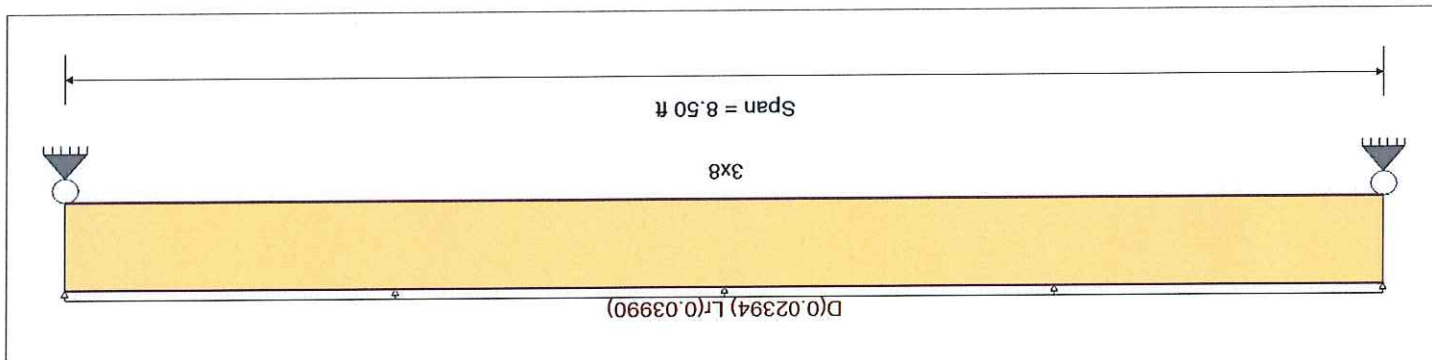
Calculations per NDS 2018, IBC 2018, CBC 2019, ASCE 7-16
Load Combination Set : ASCE 7-16

Material Properties

Analysis Method : Allowable Stress Design
Load Combination ASCE 7-16Wood Species : Southern Pine
Wood Grade : No.2: 2" - 4" Thick : 8" Wide

Beam Bracing : Beam is Fully Braced against lateral-torsional buckling

E : Modulus of Elasticity 1600 ksi
Emberd-xx 1200 psi
Emberd-xx 1550 psi
Density 34.33 pcf
Repetitive Member Stress Increase 580 ksi



Applied Loads

Loads on all spans...
Uniform Load on ALL spans : $D = 0.0180$, $L_r = 0.030$ ksf, Tributary Width = 1.330 ft

DESIGN SUMMARY

Maximum Bending Stress Ratio	=	0.183	1	Maximum Shear Stress Ratio	=	0.088	1
Section used for this span	=	3x8		Section used for this span	=	3x8	
Load Combination	=	+D+Lr		Load Combination	=	+D+Lr	
Location of maximum on span	=	4.250 ft		Location of maximum on span	=	0.000 ft	
Span # where maximum occurs	=	Span # 1		Span # where maximum occurs	=	Span # 1	
Maximum Deflection		0.037 in	Ratio =	2748 > 240		0.000 in	Ratio =
Max Downward Transient Deflection		0.000 in	Ratio =	0 < 240		0.000 in	Ratio =
Max Upward Transient Deflection		0.059 in	Ratio =	1717 > 180		0.000 in	Ratio =
Max Downward Total Deflection		0.000 in	Ratio =	0 < 180		0.000 in	Ratio =
Max Upward Total Deflection		0.000 in	Ratio =	0 < 180		0.000 in	Ratio =

Maximum Forces & Stresses for Load Combinations

Load Combination	Segment Length	Span #	M	V	Cd	Cf	Cm	Ct	CL	Moment Values	Shear Values
D Only	Length = 8.50 ft	1	0.095	0.046	0.90	1.00	1.15	1.00	1.00	0.00	0.00
+D+Lr	Length = 8.50 ft	1	0.183	0.088	1.25	1.00	1.15	1.00	1.00	118.46	7.25
+D+0.750Lr	Length = 8.50 ft	1	0.155	0.075	1.25	1.00	1.15	1.00	1.00	266.55	16.32
+0.60D	Length = 8.50 ft	1	0.155	0.075	1.25	1.00	1.15	1.00	1.00	266.55	16.32
Length = 8.50 ft										0.00	0.00
Overall Maximum Deflections											
Load Combination	Span	Max. "±" Defl	0.0594	1							
			4.281								
			0.0000								
			0.000								

DESCRIPTION: 2x6 or Larger

Vertical Reactions

Support notation : Far left is #1		Values in KIPS
Load Combination		
Support 1	Support 2	
0.271	0.271	Overall Maximum
0.170	0.170	Overall Minimum
0.102	0.102	D Only
0.271	0.271	+D+Lr
0.229	0.229	+D+0.750Lr
0.061	0.061	+0.60D
0.170	0.170	Lr Only

Wood Beam

Lic. #: KW-06012821

DESCRIPTION: Header

CODE REFERENCES

Calculations per NDS 2018, IBC 2018, CBC 2019, ASCE 7-16
Load Combination Set : ASCE 7-16

Material Properties

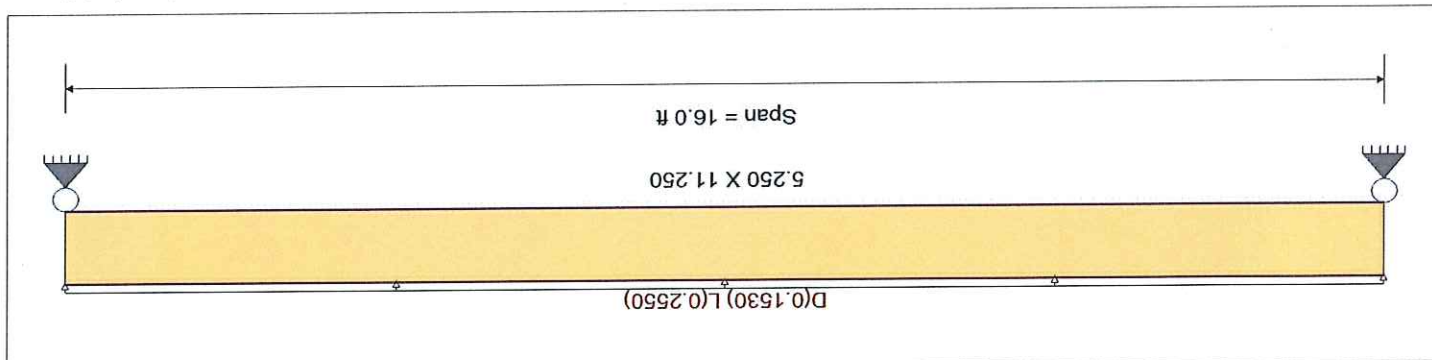
Analysis Method : Allowable Stress Design
Load Combination :ASCE 7-16

Load Combination: ASCE 7-16

Wood Species : Trus Joist

Wood Grade : MicroLam LVL 1.9 E

Beam Bracing : Beam is Fully Braced against lateral-torsional buckling



Applied Loads

Beam self weight calculated and added to loads

Loads on all spans...

Uniform Load on All spans : $D = 0.0180$, $L = 0.030$ ksf, Tributary Width = 8.50 ft

DESIGN SUMMARY

[illegible]

Maximum Forces & Stresses for Load Combinations

[illegible]

DESCRIPTION: Header

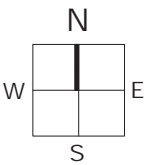
Vertical Reactions		Support notation : Far left is #1		Values in KIPS	
Load Combination		Support 1	Support 2		
Overall Maximum	3.402	3.402	3.402		
Overall Minimum	2.040	2.040	2.040		
D Only	1.362	1.362	1.362		
+D+L	3.402	3.402	3.402		
+D+0.750L	2.892	2.892	2.892		
+0.60D	0.817	0.817	0.817		
L Only	2.040	2.040	2.040		

SITE OF PROPOSED SOLAR INSTALLATION:

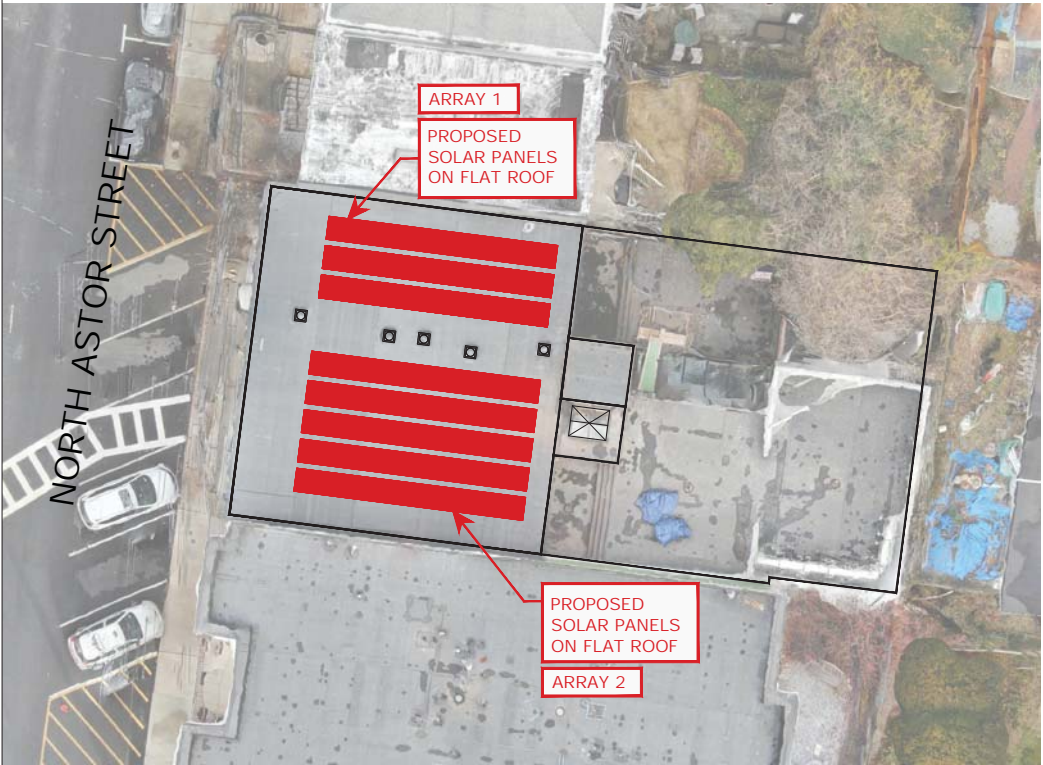
Steinmetz Residence
16 N Astor St,
Irvington, NY 10533

INSTALLER:

Sunrise Solar Solutions, LLC
510 North State Road
Briarcliff Manor, NY 10510



VICINITY/PHOTO LOCATION
N.T.S.



AERIAL VIEW
N.T.S.



16 North Astor Street



2 VIEW DOWN THE STREET

N Astor Street



3 VIEW DOWN THE STREET

N Astor Street



VICINITY/PHOTO LOCATION
N.T.S.



4 NEIGHBORING HOUSE

22 N Astor Street



5 NEIGHBORING HOUSE

20 N Astor Street



6 VIEW DOWN THE STREET

N Astor Street



7 ACROSS THE STREET

**Irvington Train Station
7 N Astor Street**



8 NEIGHBORING BUILDING

12 N Astor Street



VICINITY/PHOTO LOCATION
N.T.S.



9 NEIGHBORING COMPLEX

27 N Buckhout St



10 NEIGHBORING PROPERTY

85 Main Street



11 VIEW DOWN THE STREET

N Astor Street

Proposed Solar Panels
Array 1 Array 2

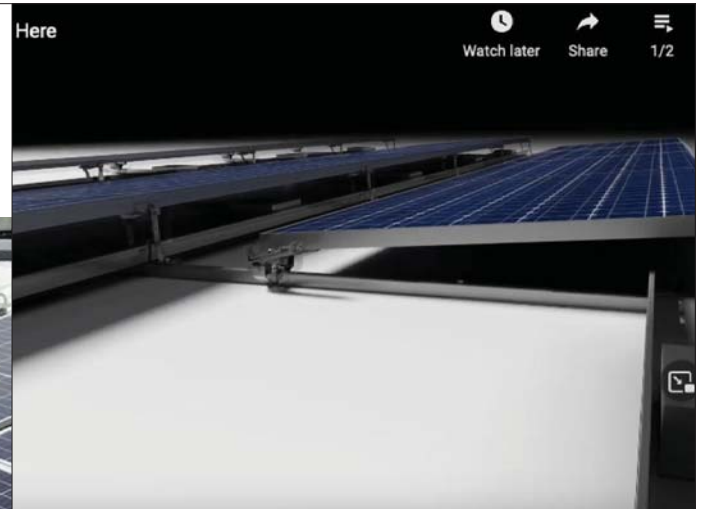
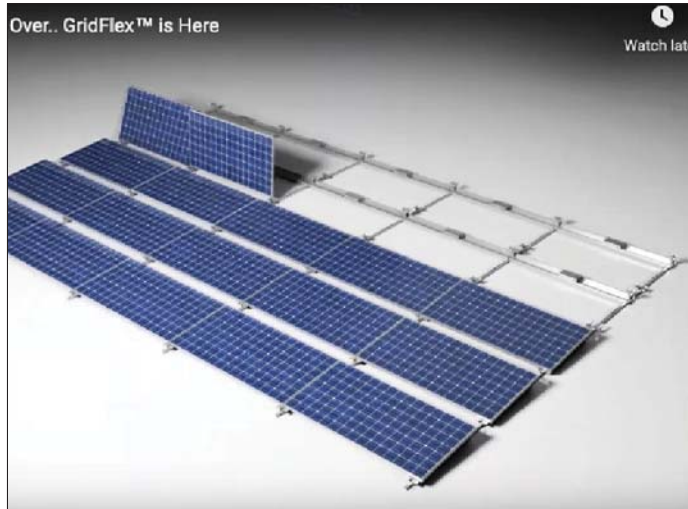


AERIAL VIEW OF BUILDING WITH SOLAR PANELS RENDERING

Proposed Solar Panels
Array 2 Array 1

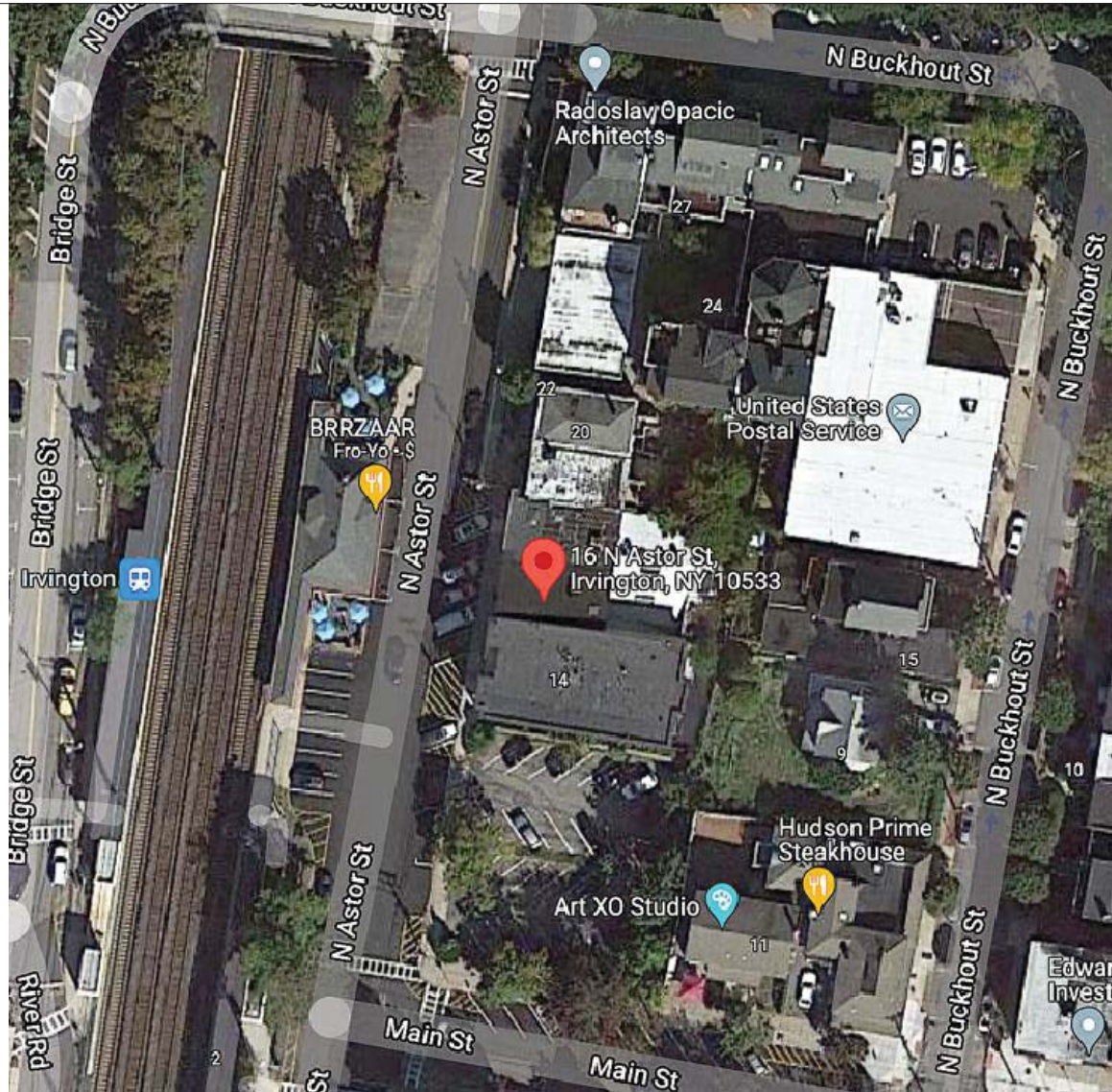


AERIAL VIEW OF BUILDING WITH SOLAR PANELS RENDERING



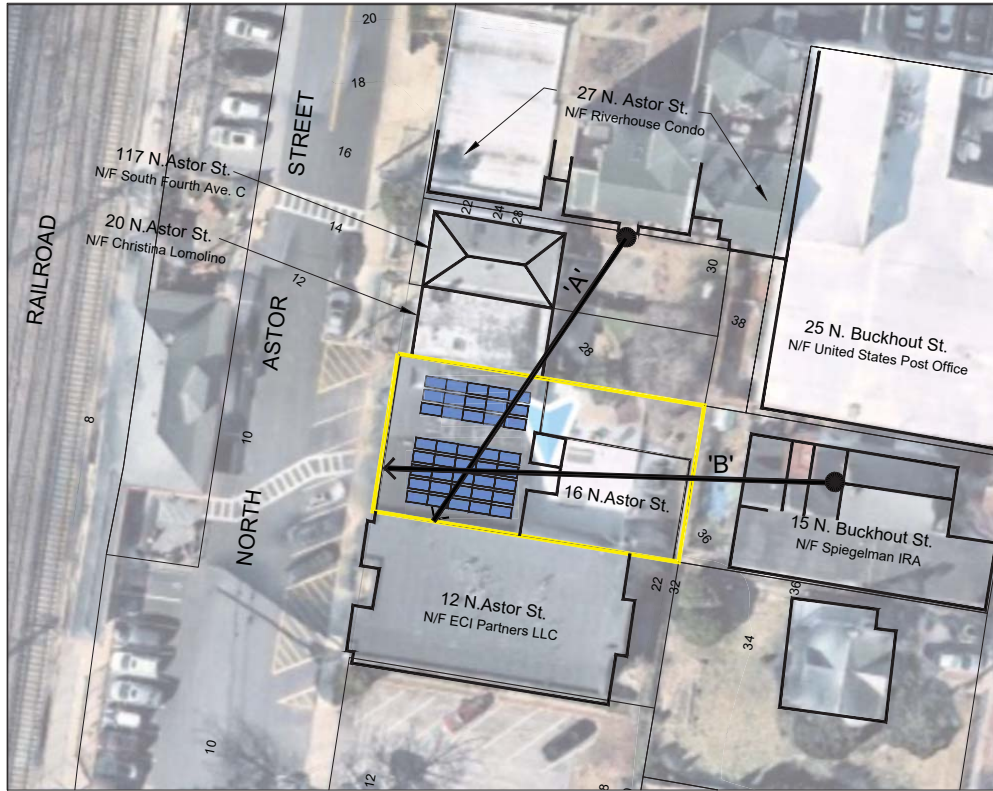
TYPICAL FLAT ROOF IMAGES

N.T.S.

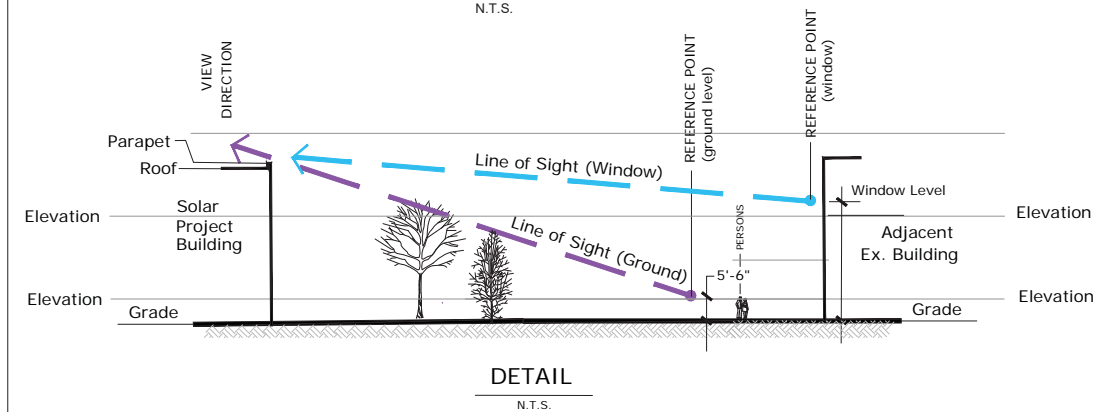


AERIAL PHOTO OF TREE COVERAGE

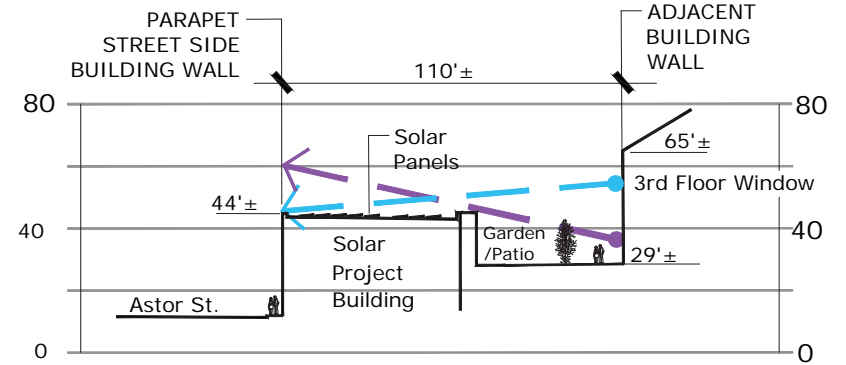
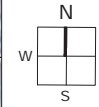
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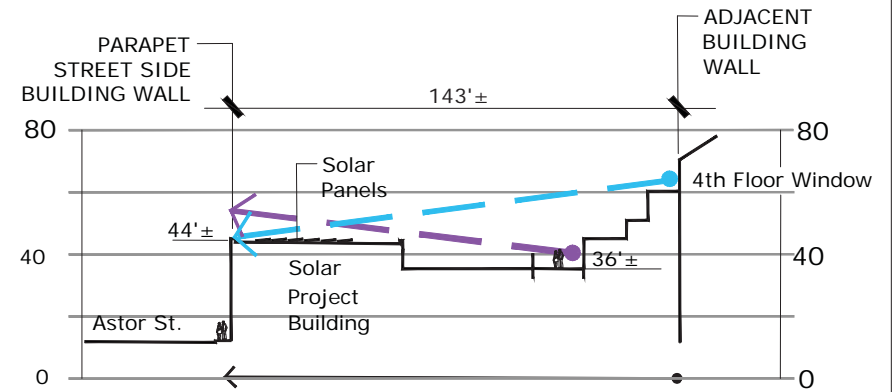
Key Map
N.T.S.



DETAIL
N.T.S.



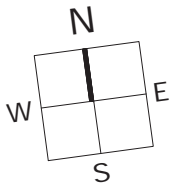
Line of Sight 'A' - Cross Section Profile
1"=40' (Horiz. and Vert.)



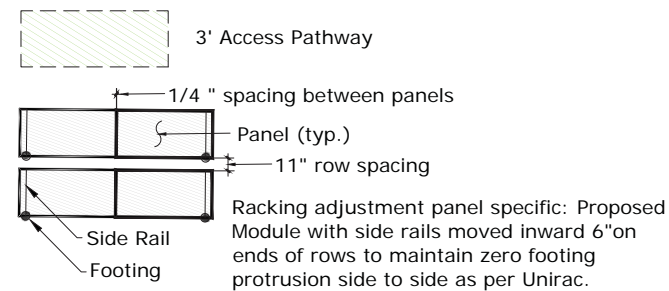
Line of Sight 'B' - Cross Section Profile
1"=40' (Horiz. and Vert.)

Line of Sight- Cross Section Profile Plan

Steinmetz Residence
16 N Astor St,
Irvington, NY 10533



Legend:



Unauthorized alteration or addition to a document prepared by a licensed Professional Engineer is a violation of Section 7209, Sub-Division 2 of the New York State Education Law.



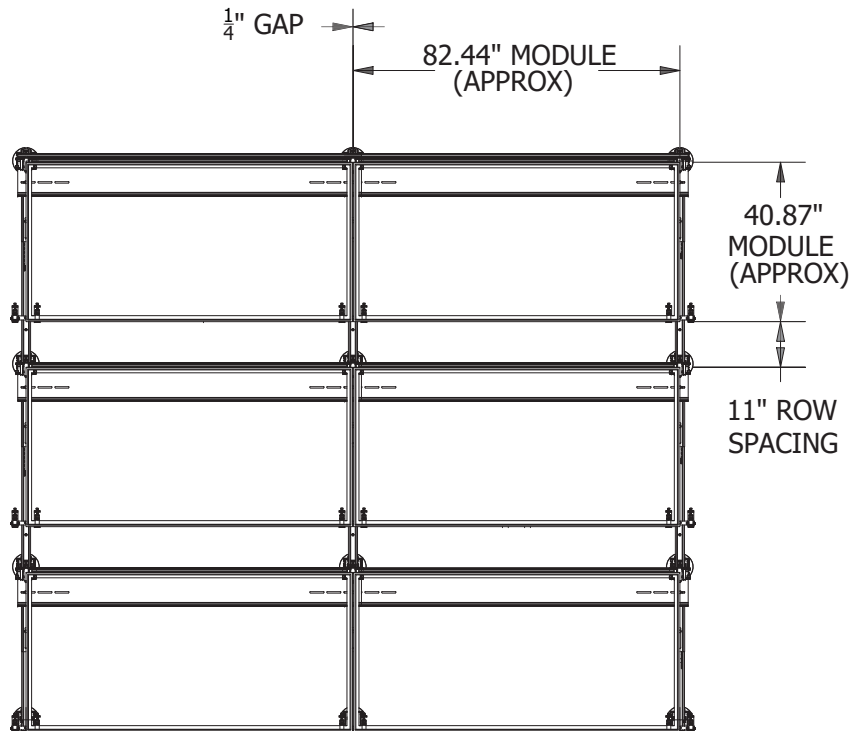
Sect. 2.40 , Block 12 , Lot 4

JOB #20-0004

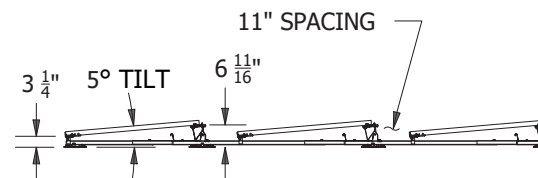
Array 2
-Azimuth: 97°
-Tilt: 5°



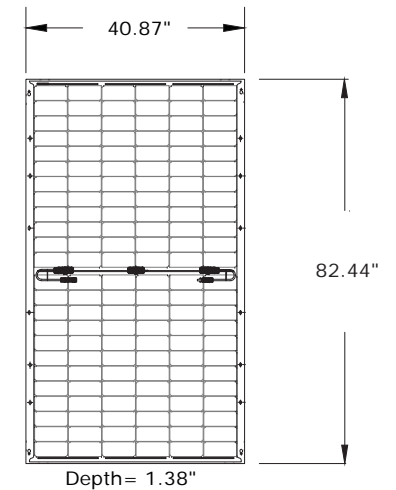
Page 61



UNIRAC GRIDFLEX 5°
PLAN VIEW,
TYPICAL ARRAY LAYOUT
N.T.S.



UNIRAC GRIDFLEX 5°
RIGHT SIDE VIEW,
TYPICAL ARRAY LAYOUT
N.T.S.



Solar Panel
Longi 144 cell
LR4-72H 425~455M
N.T.S.

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510 N. State Rd.
Briarcliff Manor, NY
914.762.7622
sunrisesolarllc.com

Racking Layout Plan
Steinmetz Residence
16 North Astor Street,
Irvington, New York 10533
Sect. 2.40 , Block 12 , Lot 4

DATE	VER.	BY	CHKD.	REMARKS
12/30/21	V1	MMS		
JOB #20-0004				

SYSTEM DESCRIPTION:
-40 Photovoltaic Panels
-Longi 450W Residential DC Modules
-System size -18.00 kW DC SYSTEM
-15.2 kW AC

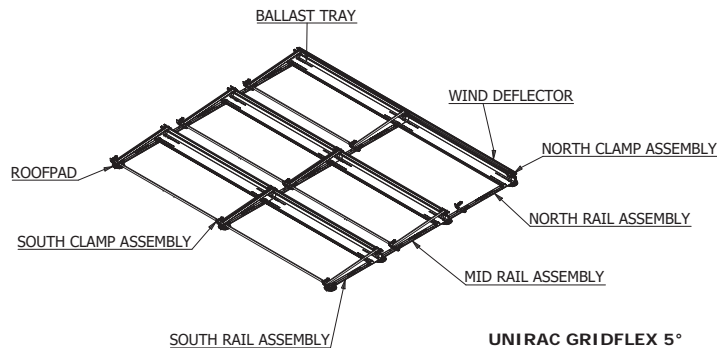
Array 1
-Azimuth: 97°
-Tilt: 5°

Array 2
-Azimuth: 97°
-Tilt: 5°



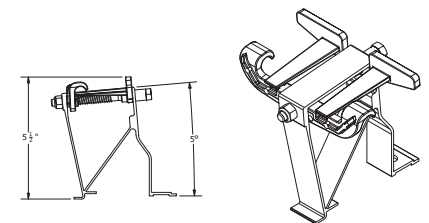
S-3

**RACKING
LAYOUT
PLAN**



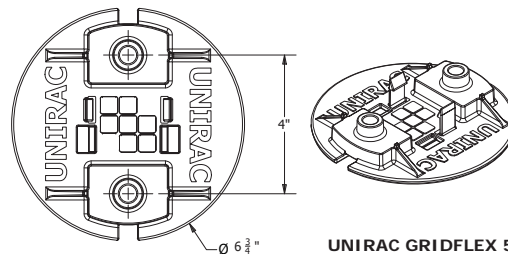
NOTE:

1. BALLAST AND WIND DEFLECTOR ARE TO BE DETERMINED BY THE ENGINEER.



UNIRAC GRIDFLEX 5°
NORTH CLAMP ASSEMBLY DETAIL

N.T.S.

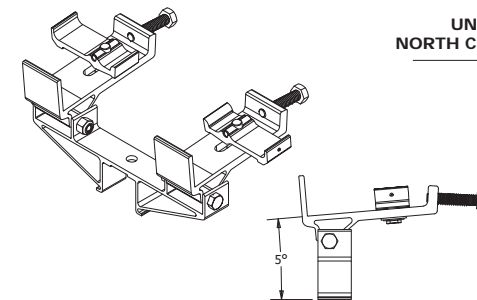


**UNIRAC GRIDFLEX 5°
ROOFPAD DETAIL**

N.T.S.

NOTE: N.T.S.

1. ROOFPADS MAY BE STACKED (UP TO 4) TO ACCOMMODATE ROOF UNDILATIONS.
2. ROOFPAD STACKING NOT ALLOWED ON SOUTH END OF THE ARRAY.



UNIRAC GRIDFLEX 5° SOUTH CLAMP ASSEMBLY DETAIL

N.T.S.

Unauthorized alteration or addition to a document prepared by a licensed Professional Engineer is a violation of Section 7209, Sub-Division 2 of the New York State Education Law.



Racking Detail Plan

Steinmetz Residence
16 North Astor Street,
Irvington, New York 10533

Sect. 2.40 , Block 12 , Lot 4

[illegible]

SYSTEM DESCRIPTION:

- 40 Photovoltaic Panels
- Longi 450W Residential DC Modules
- System size -18.00 kW DC SYSTEM
-15.2 kW AC

Array 1
-Azimuth: 97°
-Tilt: 5°

Array 2
-Azimuth: 97°
-Tilt: 5°



S-4

RACKING DETAIL PLAN

