



HISTORIC PRESERVATION COMMISSION

Marc Elrich
County Executive

Robert Sutton
Chairman

Date: May 29, 2024

MEMORANDUM

TO: Rabbiah Sabbakhan
Department of Permitting Services

FROM: Dan Bruechert
Historic Preservation Section
Maryland-National Capital Park & Planning Commission

SUBJECT: Historic Area Work Permit #1068991 - Solar Panel Installation

The Montgomery County Historic Preservation Commission (HPC) has reviewed the attached application for a Historic Area Work Permit (HAWP). This application was **Approved** at the May 22, 2024 HPC meeting.

The HPC staff has reviewed and stamped the attached construction drawings.

THE BUILDING PERMIT FOR THIS PROJECT SHALL BE ISSUED CONDITIONAL UPON ADHERENCE TO THE ABOVE APPROVED HAWP CONDITIONS AND MAY REQUIRE APPROVAL BY DPS OR ANOTHER LOCAL OFFICE BEFORE WORK CAN BEGIN.

Applicant: Marcel Schmidt
Address: 10124 Meadowneck Ct., Silver Spring

This HAWP approval is subject to the general condition that the applicant will obtain all other applicable Montgomery County or local government agency permits. After the issuance of these permits, the applicant must contact this Historic Preservation Office if any changes to the approved plan are made. Once work is complete the applicant will contact Dan Bruechert at 301.563.3408 or dan.bruechert@montgomeryplanning.org to schedule a follow-up site visit.





Prepared by:
Colette Hayward
Maryland Solar Solutions, Inc.
410-363-4300
colette@marylandsolarsolutions.com

Quote #: 4353558

A personalized Solar Electric
Analysis for:

Marcel Schmidt,
10124 Meadowneck Ct, Silver Spring
MD 20910
240-421-2850
moschmi.1@gmail.com



APPROVED
Montgomery County
Historic Preservation Commission
[Signature]

Solar Energy System Proposal

REVIEWED
By Dan.Bruechert at 10:17 am, May 29, 2024

Dear Marcel,

Maryland Solar Solutions, Inc. is privileged to present your Solar Energy System Proposal.

Best Regards,

Colette Hayward

Maryland Solar Solutions, Inc.

Recommended System Option

80%
Consumption Offset

\$53,717
Lifetime Electricity Bill Savings

\$16,706
Net Cost of this solar system

\$39,496
Estimated net savings over system lifetime



Imagery © Nearmap

Your Solution

REC Pure-R Black Series

7.140 kW of Solar Power
17 x REC420AA Pure-R
420 Watt panels
Up to **22.2%** Module efficiency
8,437 kWh per year

with **20 Year +5 ProTrust***
Product Warranty.

*ProTrust available through REC
Certified Solar Professionals



SolarEdge HD Wave Inverter

SolarEdge Technologies Ltd.
7.6 kW Total Inverter Rating
1 x SE7600H-US [240V]

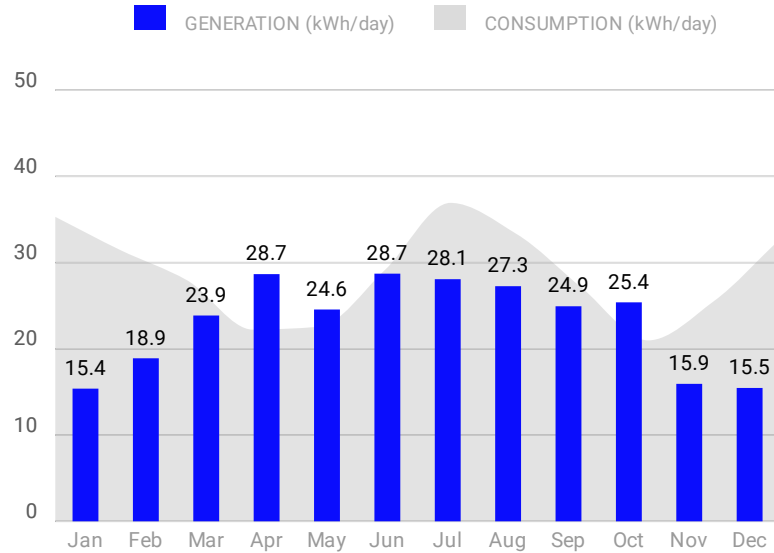


REVIEWED

By Dan.Bruechert at 10:17 am, May 29, 2024

System Performance

80%
Energy From Solar



<p>44% Self-consumption</p>	<p>56% Export to grid</p>
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System Performance Assumptions: System Total losses: 9.1%, Inverter losses: 1.0%, Optimizer losses: 1.4%, Shading losses: 20.3%, Performance Adjustment: 0%, Output Calculator: System Advisor Model 2020.03.20 v2, Panel Orientations: 17 panels with Azimuth 176 and Slope 28.

The solar

portable.

APPROVED

Montgomery County
Historic Preservation Commission



Environmental Benefits

ns. It just silently generates pure, clean energy.



REVIEWED

By Dan.Bruechert at 10:17 am, May 29, 2024

Each Year

80%
Of CO₂, SO_x & NO_x

3 tons
Avoided CO₂ per year

Over System Lifetime

63,734 Car miles avoided	660 Trees planted	73 Long haul flights avoided
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SOLAR'S MOST TRUSTED



REC ALPHA PURE-R SERIES PRODUCT SPECIFICATIONS

APPROVED
Montgomery County
Historic Preservation Commission

REVIEWED

By Dan.Bruechert at 10:17 am, May 29, 2024

COMPACT PANEL SIZE

9 A PANEL CURRENT
COMPATIBLE WITH MLPE

430 WP
223 W/M²



ELIGIBLE



LEAD FREE
ROHS COMPLIANT

EXPERIENCE



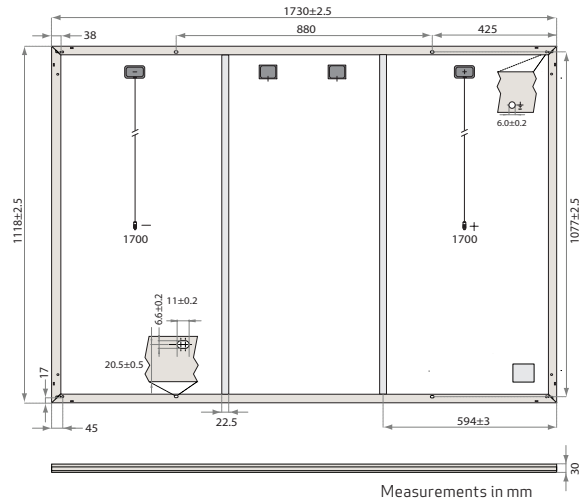
PERFORMANCE

REC ALPHA PURE-R SERIES

PRODUCT SPECIFICATIONS

GENERAL DATA

Cell type:	80 half-cut REC heterojunction cells with lead-free, gapless technology
Glass:	3.2 mm solar glass with anti-reflective surface treatment in accordance with EN 12150
Backsheet:	Highly resistant polymer (black)
Frame:	Anodized aluminum (black)
Junction box:	4-part, 4 bypass diodes, lead-free IP68 rated, in accordance with IEC 62790
Connectors:	Stäubli MC4 PV-KBT4/KST4 (4 mm ²) in accordance with IEC 62852, IP68 only when connected
Cable:	4 mm ² solar cable, 1.7 + 1.7 m in accordance with EN 50618
Dimensions:	1730 x 1118 x 30 mm (1.93 m ²)
Weight:	21.5 kg
Origin:	Made in Singapore



ELECTRICAL DATA

Product Code*: RECxxxAA Pure-R

	312	320	327
Power Output - P _{MAX} (Wp)	312	320	327
Nominal Power Voltage - V _{MPP} (V)	46.6	47.1	47.6
Nominal Power Current - I _{MPP} (A)	6.70	6.78	6.88
Open Circuit Voltage - V _{OC} (V)	55.8	56.0	56.3
Short Circuit Current - I _{SC} (A)	7.12	7.18	7.24

Values at standard test conditions (STC: air mass AM 1.5, irradiance 1000 W/m², temperature 25°C), based on a production spread with a tolerance of P_{MAX}, V_{OC} & I_{SC} ±3% within one watt class. Nominal module operating temperature (NMOT: air mass AM 1.5, irradiance 800 W/m², temperature 20°C, windspeed 1 m/s). * Where xxx indicates the nominal power class (P_{MAX}) at STC above.

MAXIMUM RATINGS

Operational temperature:	-40 ... +85°C
System voltage:	1000 V
Test load (front):	+ 7000 Pa (713 kg/m ²)*
Test load (rear):	- 4000 Pa (407 kg/m ²)*
Series fuse rating:	25 A
Reverse current:	25 A

* See installation manual for mounting instructions.
Design load = Test load / 1.5 (safety factor)

WARRANTY

	Standard	REC ProTrust
Installed by an REC Certified Solar Professional	No	Yes
System Size	All	≤25 kW 25-500 kW
Product Warranty (yrs)	20	25
Power Warranty (yrs)	25	25
Labor Warranty (yrs)	0	25
Power in Year 1	98%	98%
Annual Degradation	0.25%	0.25%
		92%

conditions apply

CERTIFICATIONS (PENDING)

IEC 61215:2016, IEC 61730:2016, UL 61730	
IEC 62804	PID
IEC 61701	Salt Mist
IEC 62716	Ammonia Resistance
ISO 11925-2	Ignitability (EN 13501-1 Class E)
IEC 62782	Dynamic Mechanical Load
IEC 61215-2:2016	Hailstone (35mm)
IEC 62321	Lead-free acc. to RoHS EU 863/2015
ISO 14001, ISO 9001, IEC 45001, IEC 62941	



TEMPERATURE RATINGS*

Nominal Module Operating Temperature:	44°C (±2°C)
Temperature coefficient of P _{MAX} :	-0.26 %/°C
Temperature coefficient of V _{OC} :	-0.24 %/°C
Temperature coefficient of I _{SC} :	0.04 %/°C

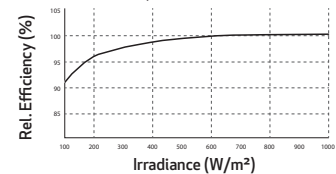
*The temperature coefficients stated are linear values

DELIVERY INFORMATION

Panels per pallet:	33
Panels per 40 ft GP/high cube container:	858 (26 pallets)

LOW LIGHT BEHAVIOUR

Typical low irradiance performance of module at STC:



REVIEWED

By Dan.Bruechert at 10:24 am, May 29, 2024

REC is committed to empowering consumers with clean, affordable solar power. As Solar's Most Trusted, REC is committed to high quality, innovation, and a low carbon footprint in the solar materials and solar panels it manufactures. Headquartered in Norway with operational headquarters in Singapore, REC also has regional hubs in North America, Europe, and Asia-Pacific.

