HISTORIC PRESERVATION COMMISSION

Marc Elrich
County Executive

Sandra I. Heiler
Chairman

Date: March 25, 2019

MEMORANDUM

TO: Diane Schwartz Jones
Department of Permitting Services
FROM: Dan Bruechert
Historic Preservation Section
Maryland-National Capital Park & Planning Commission
SUBJECT: Historic Area Work Permit: #865591 – Solar Panel Installation

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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 March 13, 2019 Historic Preservation Commission meeting.

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

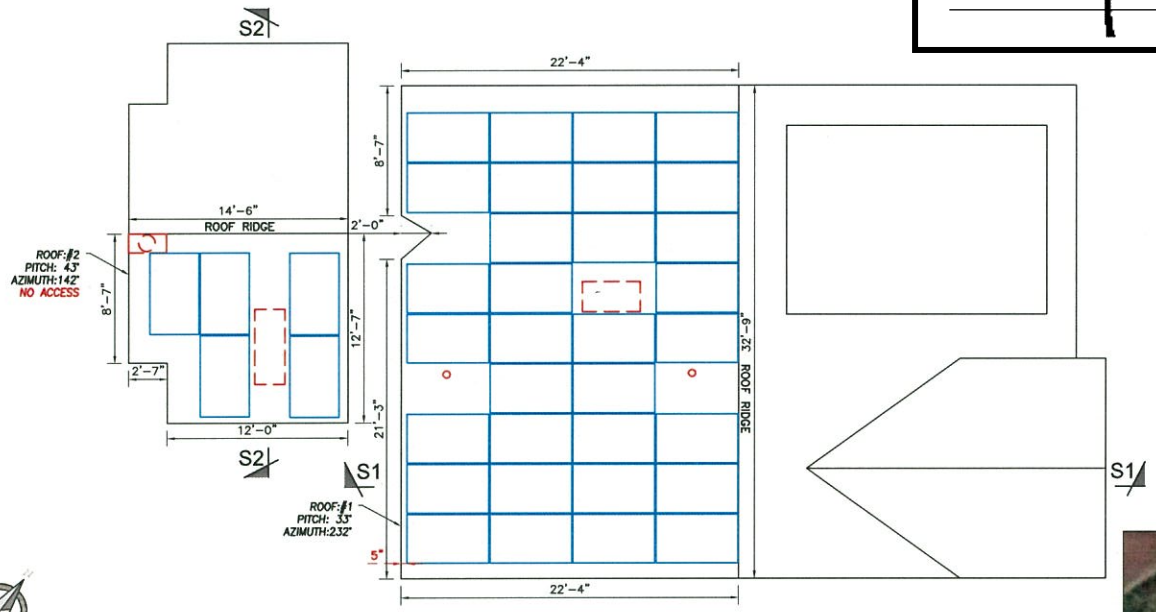
THE BUILDING PERMIT FOR THIS PROJECT SHALL BE ISSUED CONDITIONAL UPON ADHERENCE TO THE ABOVE APPROVED HAWP CONDITIONS AND MAY REQUIRE APPROVAL BY DPS OR ANOTHER LOCAL OFFICE BEFORE WORK CAN BEGIN.

Applicant: Frederick Feinstein
Address: 7114 Sycamore Ave., Takoma Park

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 301.563.3400 or dan.bruechert@montgomeryplanning.org to schedule a follow-up site visit.

REVIEWED
By Dan.Bruechert at 12:16 pm, Mar 25, 2019

APPROVED
Montgomery County
Historic Preservation Commission



SOLAR PANEL LAYOUT
Scale: 1/8" =1'-0"

NOTES:

1. THE SYSTEM SHALL INCLUDE [37] SILFAB SLA–MONOCRYSTALLINE 300W MODULES.
2. SNAPNRACK SOLAR MOUNT RAIL WILL BE INSTALLED IN ACCORDANCE WITH SNAPNRACK INSTALLATION MANUAL.
3. DIMENSIONS MARKED (*) ARE ALONG ROOF SLOPE.
4. REFER TO STRUCTURAL DRAWING FOR SECTIONS MARKED AND ADDITIONAL NOTES.

SolarEnergyWorld
Because Tomorrow Matters
Solar Energy World LLC.
5681 Main Street
Elkridge, MD 21075
(888) 497-3233

Stamp

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 50459, EXPIRATION DATE:January 12, 2021.
*STAMPED AND SIGNED FOR STRUCTURES ONLY.

Revisions

REV	DESCRIPTIONS	BY	DATE
01	--------	--	--

Project Name and Address
Fred Feinstein and Karen Collins
7114 Sycamore Ave.
Takoma Park, MD 20912
11.10 kW

Drawn by	Sheet
CBK	A001
Date: 19-DEC-2018	
Scale: AS NOTED	

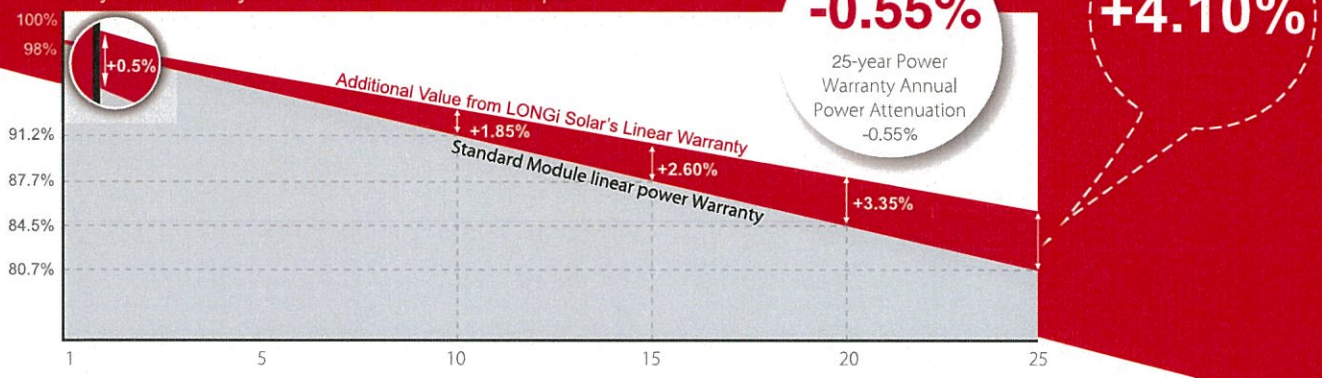
LR6-60PB

295~315M

Hi-MO1 High Efficiency Low LID Mono PERC Technology (60C/All Black Module)

Aesthetic appearance with black frame and backsheet, best suited for rooftop installation

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



-0.55%
25-year Power Warranty Annual Power Attenuation -0.55%

+4.10%

Complete System and Product Certifications

IEC 61215, IEC61730, UL1703

ISO 9001:2008: ISO Quality Management System

ISO 14001: 2004: ISO Environment Management System

TS62941: Guideline for module design qualification and type approval

OHSAS 18001: 2007 Occupational Health and Safety

Positive power tolerance (0 ~ +5W) guaranteed

High module conversion efficiency (up to 19.3%)

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

Better energy yield with excellent low irradiance performance and temperature coefficient

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

Adaptable to harsh environment: passed rigorous salt mist and ammonia tests

Robust frame (40mm) withstands mechanical loading of 5400Pa for snow load on front and 2400Pa for wind load on rear side

APPROVED

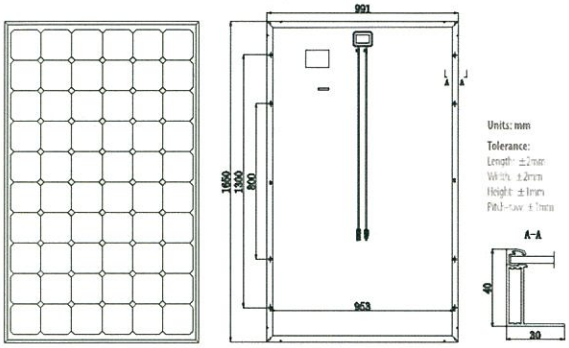
Montgomery County

Historic Preservation Commission

Room 201, Building 8, Sandhill Plaza, Lane 2290, Zuchongzhi Road, Pudong District, Shanghai, 201203
Tel: +86-21-61047332 Fax: +86-21-61047377 E-mail: module@longi-silicon.com
Facebook: www.facebook.com/LONGi Solar

LR6-60PB **295~315M**

Design（mm）



Mechanical Parameters

Cell Orientation: 60（6×10）

Junction Box: IP67, three diodes

Output Cable: 4mm², 1000mm in length

Connector: MC4 or MC4 comparable

Weight: 18.5kg

Dimension: 1650×991×40mm

Packaging: 26pcs per pallet

Operating Parameters

Operational Temperature: -40℃ ~ +85℃

Power Output Tolerance: 0 ~ +5 W

Maximum System Voltage: DC1000V (IEC&UL)

Maximum Series Fuse Rating: 20A

Nominal Operating Cell Temperature: 45±2℃

Application Class: Class A

Electrical Characteristics

Test uncertainty for Pmax: ±3%

Model Number	LR6-60PB-295M		LR6-60PB-300M		LR6-60PB-305M		LR6-60PB-310M		LR6-60PB-315M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	295	218.5	300	222.2	305	225.9	310	229.6	315	233.4
Open Circuit Voltage (Voc/V)	39.9	37.2	40.1	37.4	40.2	37.5	40.3	37.6	40.5	37.8
Short Circuit Current (Isc/A)	9.69	7.81	9.81	7.91	9.94	8.01	9.98	8.04	10.10	8.14
Voltage at Maximum Power (Vmp/V)	32.6	30.1	32.8	30.3	33.0	30.5	33.2	30.7	33.4	30.9
Current at Maximum Power (Imp/A)	9.05	7.26	9.15	7.34	9.24	7.41	9.35	7.50	9.43	7.56
Module Efficiency(%)	18.0		18.3		18.7		19.0		19.3	

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

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

Temperature Ratings（STC）

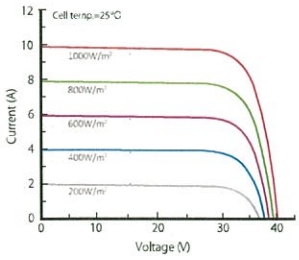
Temperature Coefficient of Isc	+0.057%/℃
Temperature Coefficient of Voc	-0.286%/℃
Temperature Coefficient of Pmax	-0.370%/℃

Mechanical Loading

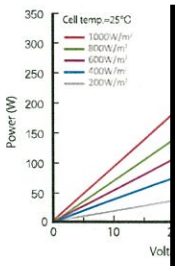
Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

I-V Curve

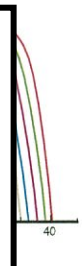
Current-Voltage Curve (LR6-60PB-305M)



Power-Voltage Curve (LR6-60PB-305M)



Current-Voltage Curve (LR6-60PB-305M)



APPROVED

Montgomery County

Historic Preservation Commission

LONGi Solar

Room 201, Buildi… …ghai, 201203

Tel: + 86-21-61047332 Fax: +86-21-61047377 E-mail: module@longi-silicon.com

Facebook: www.facebook.com/LONGi-Solar

Note: Due to continuous technical innovation, R&D and improvement, techni… …modification accordingly. LONGi Solar have the sole right to make such modification at anytime without further notice; Demanding party shall re… …quest 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.

REVIEWED

By Dan.Bruechert at 12:17 pm, Mar 25, 2019

INVERTERS

solaredge

Single Phase Inverter
with HD-Wave Technology for North America

SE3000H-US / SE3800H-US / SE5000H-US /
SE6000H-US / SE7600H-US / SE10000H-US / SE11400

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Optimized installation with HD-Wave technology

- Specifically designed to work with power optimizers
- Record-breaking efficiency
- Fixed voltage inverter for longer strings
- Integrated arc fault protection and rapid shutdown for NEC 2014 and 2017, per article 690.11 and 690.12
- UL1741 SA certified, for CPUC Rule 21 grid compliance
- Extremely small
- High reliability without any electrolytic capacitors
- Built-in module-level monitoring
- Outdoor and indoor installation
- Optional: Revenue grade data, ANSI C12.20 Class 0.5 (0.5% accuracy)

HD wave

www.solaredge.us