

B. SMITH WOOD

HARVARD HISTORICAL COMMISSION

13 AYER ROAD • HARVARD, MASSACHUSETTS 01451



APPLICATION FOR CERTIFICATE

Please read attached instructions and contact a member of the Harvard Historical Commission before you complete this form.

CERTIFICATE OF: ☒ APPROPRIATENESS ☐ NON-APPLICABILITY ☐ HARDSHIP

CONTACT INFORMATION:

| | |
|---------------------|-----------------------------------|
| Property Address | 11 MASS AVENUE, HARVARD, MA 01451 |
| Property Owner Name | BRANDON SMITH WOOD |
| Applicant Name | BRANDON SMITH WOOD, |
| Applicant Address | 11 MASS AVENUE, HARVARD, MA 01451 |
| Telephone | 978-869-8445 |
| E-Mail Address | brandon.smithwoode@gmail.com |

DESCRIPTION OF WORK PROPOSED: (You may attach additional pages to describe your proposed work)

If project consists of several different tasks, begin by listing each task, then describe each task in detail including drawings, plans, and photos as necessary. You may attach additional pages to describe your proposed work.

I HAVE CONTRACTED WITH BLUESEL HOME SOLAR/SUNRA SOLAR DIVISION TO INSTALL A 14.8 KW DC ROOF-MOUNTED SOLAR INSTALLATION, USING 40 SOLAR PV PANELS: NO PANELS ON NORTH-FACING ROOF/18 PANELS ON EAST-FACING ROOF 4, 6 & 7. / 4 PANELS ON SOUTH-FACING ROOFS 2 & 5 AND 18 PANELS ON ROOFS 1 & 3. THE SOLAR PANELS ARE ALL BLACK PER THE TOWN OF HARVARD HISTORICAL COMMISSION REQUIREMENT. THE SOLAR INSTALLATION WILL BE LOW PROFILE & AESTHETICALLY PLEASING TO THE EYE.
THANK YOU FOR YOUR CONSIDERATION.

DAVE JUDELSON, MY SOLAR SALES CONSULTANT, WILL ATTEND THE HARVARD HISTORIC COMMISSION HEARINGS AT 7 PM SEP. 2 & OCT. 7. HIS CONTACT INFORMATION IS: TEL 781-799-4743 / EMAIL djudelson@bluesel.com

LIST OF ATTACHMENTS: (Please check off the listed items when attached)

| | | | |
|------------------------------|--|----------------------------------------------------------------|-------------------------------------|
| Site Plan (showing changes) | | Construction Drawings | |
| Photos taken from street | | Building material samples | |
| Photos of areas to be worked | | RASTER IMAGE, LAYOUT DRAWINGS, & PRE & POST ELEVATION DRAWINGS | <input checked="" type="checkbox"/> |

APPLICANT SIGNATURE (Sign to submit application)

+ PRE & POST ELEVATION DRAWINGS / DATE

8/27/20

GRANT OF EXTENSION. (With the following signature, the applicant grants permission to the Commission to review the application at its next scheduled monthly meeting in lieu of holding a Special meeting.)

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INSTRUCTIONS: HHC APPLICATION FOR CERTIFICATE

WHAT CHANGES REQUIRE THE APPROVAL OF THE HISTORICAL COMMISSION?

If your property is located in either of Harvard's Historic Districts, and you wish to modify any part or feature that is visible from a public way, you must first get the approval of the Harvard Historical Commission (HHC). Alterations include, but are not limited to, changing windows and doors, changing a paint color, new additions, partial or complete demolitions, new fences, new paved walkways, new steps, and adding solar panels. Approval is not required for any in-kind repairs, repainting the same color, interior changes or landscaping. For a complete list see the Harvard Historic District bylaw (Chap 48) or the HHC Design Guidelines on the HHC website. You may also ask for guidance from an HHC Advocate who will be assigned to you when you contact the HHC.

WHAT IS THE APPROVAL PROCESS?

1. SUBMIT AN APPLICATION

Download an application form from the HHC website, or get one from the Town Clerk. Complete and submit the application in triplicate (one for the Town Clerk, one for the HHC, and one for the Building Inspector). **NOTE: The application process begins when you submit your completed Application (with any attachments) to the Town Clerk who will time-stamp the Application and notify the Historical Commission.** In order to be considered complete, the application must include:

- a. Your name, address, and a detailed description of your project, and
- b. Pictures, scaled drawings and plans detailed enough to show the architectural design, examples of materials to be used, paint colors, and a plot plan (if applicable to the project).

If you submit your application during the two week period following the HHC monthly meeting (usually the 1st Wednesday of the month), please check-off the "Grant of Extension" box to avoid having to call a Special Meeting. This will *not* extend the 60 day length of the overall decision process for your application.

2. HHC DETERMINES WHETHER PROPOSED WORK MUST BE REVIEWED AND IF SO, WHETHER IT IS SUBSTANTIAL.

If your project is determined to be **non-applicable**, your application does not require formal review by the HHC and you will be granted a *Certificate of Non-Applicability* enabling you to proceed with your project.

If the project requires review, the HHC will determine at its next meeting whether your proposed work is a(n):

- a. **Substantial** change which requires HHC review and approval and a public hearing; or
- b. **Insubstantial** change that requires HHC review and approval, but not a public hearing.

If your application is determined to be **Substantial**, a hearing will be held at the next HHC meeting, and a legal notice will be published in the local newspaper at least 14 days before the hearing. You will be billed \$25 for an abutters list from the assessor's office and \$50 for the legal notice from the newspaper. A notice of the public hearing will be mailed to abutters, the Town Clerk, the Planning Board, and the Building Inspector. Please obtain an abutters' list with a 300 ft radius, in mailing label format, for a residential certificate and an all district abutters list for a commercial property.

If your application is determined to be **Insubstantial**, your application will be reviewed at the next HHC meeting without a public hearing. Notice will be mailed to abutters at least 10 days before the meeting, advising your neighbors that your application will be reviewed without public hearing unless a resident requests within the 10 day period that it be reviewed in a public hearing. If no requests for a public hearing are received, the Commission will proceed with a review without a public hearing during the next monthly meeting.

3. HHC REVIEWS and DECIDES

At its next meeting, HHC will review your application and related information and decide whether your proposal is:

- a. **Approved** – HHC will issue a Certificate of Appropriateness which may include conditions, and is good for 2 years. A copy will be sent to you, the Town Clerk and the Building Inspector. You may proceed with the project.
- b. **Disapproved** – HHC will state the reasons why it is inappropriate, and may describe what would be approved on a subsequent application. A copy will be sent to you, the Town Clerk and the Building Inspector. In some cases, HHC may make suggestions for changes that would make the application acceptable and give you 14 days to modify your application after which it will be approved. To pursue this option, you may need to request an extension to the 60-day limit mentioned below. In some cases, if your application is disapproved, HHC may consider granting you a hardship, see "What if I have a Hardship?" below.

HOW LONG DOES THIS PROCESS TAKE?

It takes a maximum of 60 days, unless extended with your permission. HHC must get its decision to the Town Clerk within 60 days of the time you filed your completed application. If the HHC does not meet this deadline, they will send you a Certificate of Hardship for failure to act, and you can proceed with the project.

WHAT IF I HAVE A HARDSHIP?

If your situation is so unusual that it would create a hardship if you were not allowed to proceed, then HHC may grant you a Certificate of Hardship if it feels your project is not a detriment to the public welfare, or substantially derogates the intent or purpose of the Historic District bylaw. An example of a hardship that might be allowed is if your building is visible on all four sides from a public way so that you have no place to make an alteration that may be inappropriate. If you wish to request a hardship, check the Hardship box on your application.

Note: This Q&A provides highlights of the HHC process in general. For added details, please refer to the Harvard Bylaw and the HHC Design Guidelines on the HHC website.



RESIDENTIAL SOLAR
PHOTOVOLTAIC INSTALLATION:

SMITHWOOD, BRANDON
11 MASS AVE.,
HARVARD, MA 01451

MODULES:
SOLARIA POWERXT®-370R-PD

DIMENSION = (L x W x D) 63.82 x 43.9 x 1.57 IN

TOTAL SYSTEM SIZE:
40 MODULE X 370W = 14.8 KW
EST PROD = 11,473 KWH/YR

AVERAGE TSRF = 60%

INVERTER:
1 x SOLAREDGE SE10000H-US-240
w/ P370 POWER OPTIMIZERS

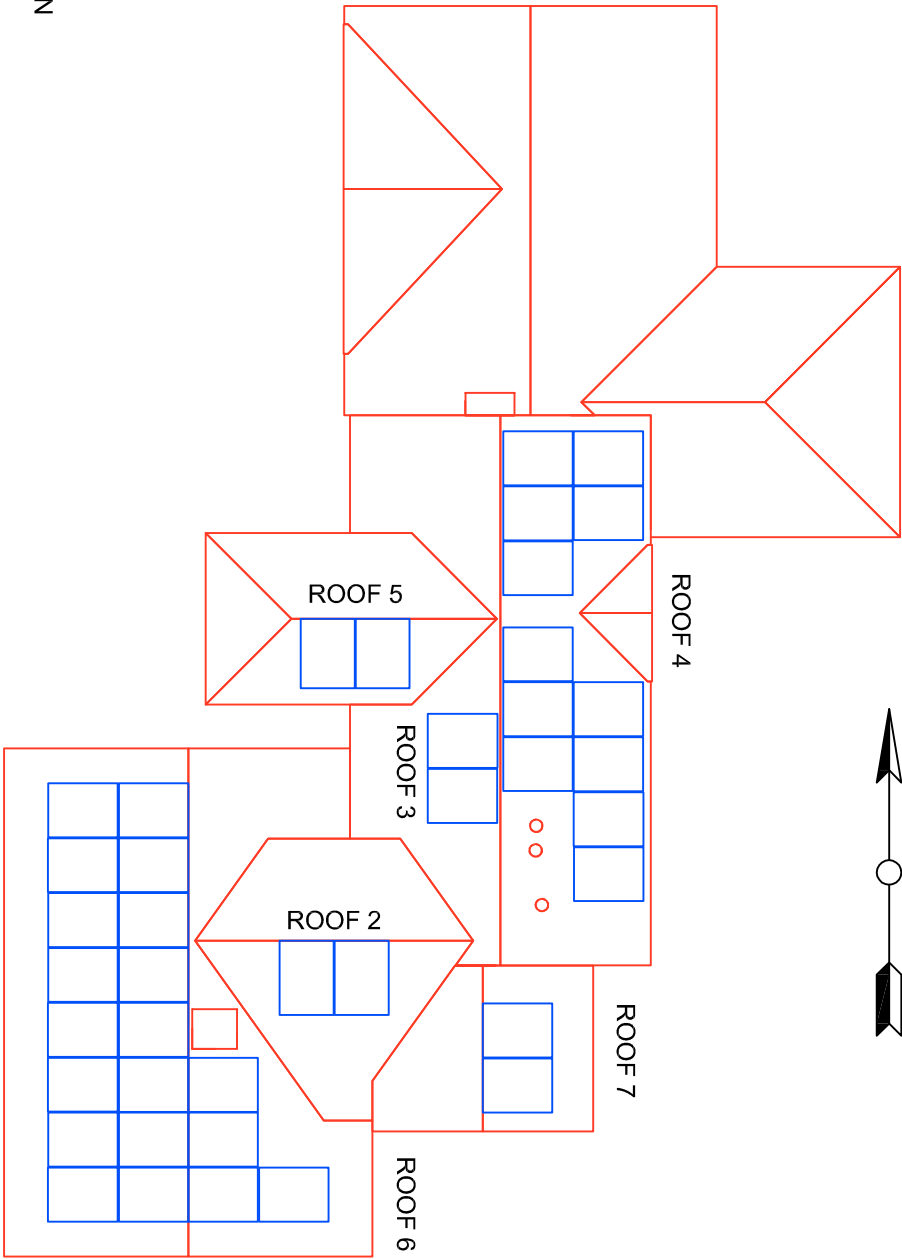
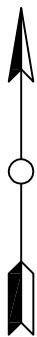
HARVARD, MA
WIND SPEED = 125 MPH
SNOW LOAD = 50 PSF

| ROOF NO. | ROOF TILT | AZIMUTH | NO. OF PANELS | SHADE |
|----------|-----------|---------|------------------|-------|
| 1 | 30 | 251 | 16 | 19% |
| 2 | 23 | 161 | 2 | 30% |
| 3 | 30 | 251 | 2 | 14% |
| 4 | 30 | 71 | 12 | 22% |
| 5 | 30 | 161 | 2 | 26% |
| 6 | 30 | 71 | 4 | 24% |
| 7 | 30 | 71 | 2 | 17% |

SUNPOWER®

by BlueSel Home Solar

17 JUAN SEBASTIAN DRIVE, SUITE 12, SANDWICH, MA 02563
600 WEST CUMMINGS PARK, SUITE 4200, WOBURN, MA 01801
PHONE (781) 261-8130, WWW.BLUESEL.COM



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| | | | | | |
|-----------------------------------|--------------|------------------|------------|----------------|----------------------------|
| NAME: | DRAWN BY: OC | DATE: 08-24-2020 | SCALE: N/A | SHEET: 2 OF 10 | BORDER: C |
| SMITHWOOD, BRANDON - 11 MASS AVE. | | | | | DWG NUMBER-REV 05631-04 |

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 11 MASS AVE.,
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EXISTING NORTH ELEVATION

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by BlueSel Home Solar

| | | | | |
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| DRAWN BY: OC | DATE: 08-24-2020 | SCALE: N/A | SHEET: 3 OF 10 | BORDER: C |
| NAME: | SMITHWOOD, BRANDON - 11 MASS AVE. | | | |
| DWG NUMBER-REV | 05631-04 | | | |

RESIDENTIAL SOLAR
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HARVARD, MA 01451

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EXISTING EAST ELEVATION

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| | | | | |
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| DRAWN BY: OC | DATE: 08-24-2020 | SCALE: N/A | SHEET: 6 OF 10 | BORDER: C |
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| | | | | 05631-04 |

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EXISTING SOUTH ELEVATION

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by BlueSel Home Solar

| | | | | |
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| DRAWN BY: OC | DATE: 08-24-2020 | SCALE: N/A | SHEET: 7 OF 10 | BORDER: C |
| NAME: SMITHWOOD, BRANDON - 11 MASS AVE. | | | | DWG NUMBER-REV 05631-04 |

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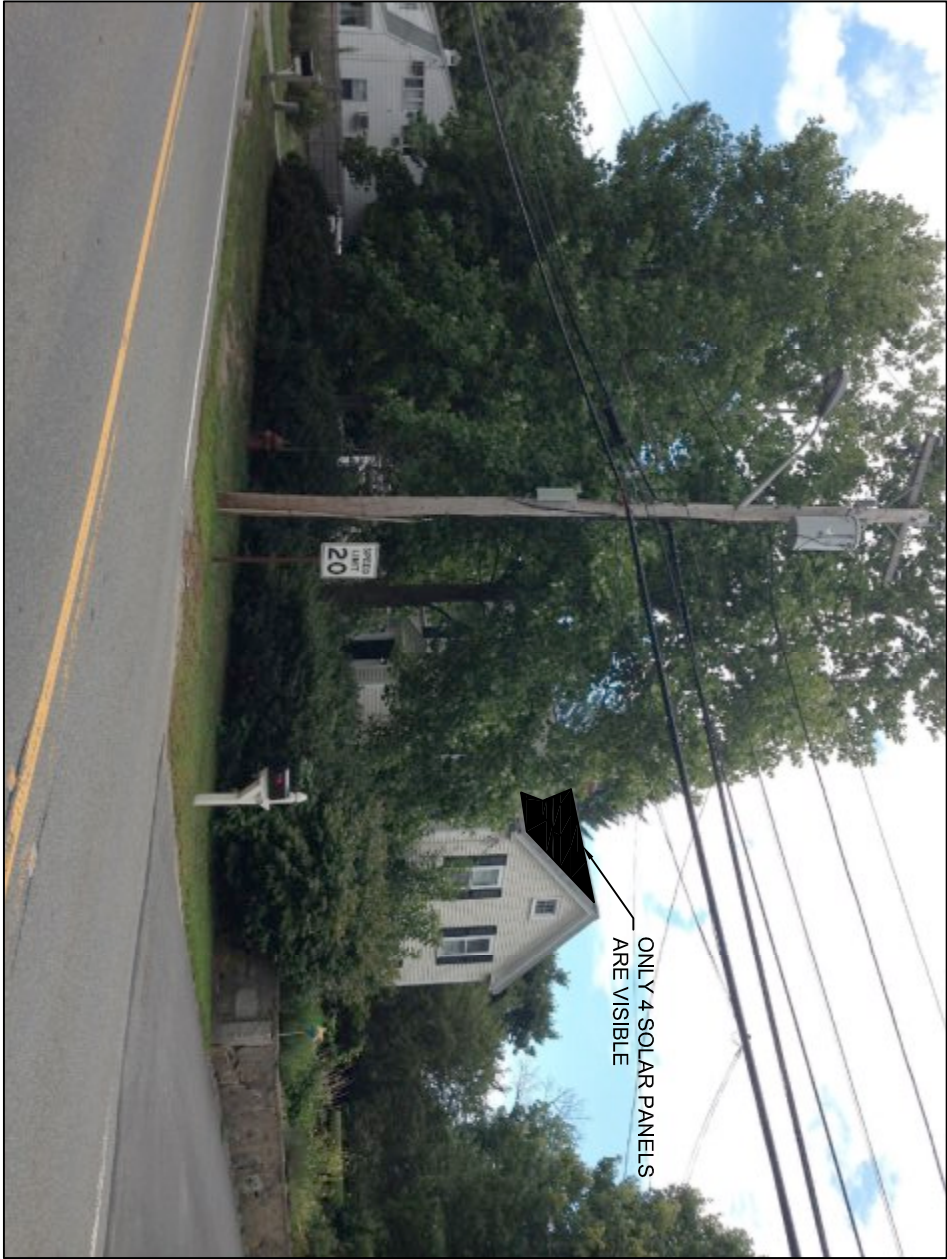
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by **BlueSel Home Solar**

| | | | | |
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| DWG NUMBER-REV | 05631-04 | | | |



Solaria PowerXT®-370R-PD

Achieving 20% efficiency, Solaria PowerXT solar modules are one of the highest power modules in the residential solar market. Compared to conventional modules, Solaria PowerXT modules have fewer gaps between the solar cells; this leads to higher power and superior aesthetics. Solaria PowerXT pure black residential modules are manufactured with black backsheet and frames, enhancing a home's architectural beauty.

Developed in California, Solaria's patented cell cutting and module assembly takes processed solar wafers and turns them into PowerXT solar modules. The process starts by creating a highly reliable PowerXT cell where busbars and ribbon interconnections are eliminated. Solaria then packages the cells into the PowerXT solar module, reducing inactive space between the cells. This process leads to an exceptionally cost effective and efficient solar module.

Higher Efficiency, Higher Power

Solaria PowerXT modules achieve up to 20% efficiency; conventional modules achieve 15% – 17% efficiency. Solaria PowerXT modules are one of the highest power modules available.

Lower System Costs

Solaria PowerXT modules produce more power per square meter area. This reduces installation costs due to fewer balance of system components.

Improved Shading Tolerance

Sub-strings are interconnected in parallel, within each of the four module quadrants, which dramatically lowers the shading losses and boosts energy yield.

Improved Aesthetics

Compared to conventional modules, Solaria PowerXT modules have a more uniform appearance and superior aesthetics.

Durability and Reliability

Solder-less cell interconnections are highly reliable and designed to far exceed the industry leading 25 year warranty.



About Solaria

Established in 2000, The Solaria Corporation has created one of the industry's most respected IP portfolios, with over 100 patents encompassing materials, processes, applications, products, manufacturing automation and equipment. Headquartered in Fremont, California, Solaria has developed a technology platform that unlocks the potential of solar energy allowing it to be ubiquitous and universally accessed.



Performance at STC (1000W/m², 25° C, AM 1.5)

| Solaria PowerXT- | | 360R-PD | 370R-PD |
|------------------------------------------|-----|---------|---------|
| Max Power (P _{max}) | [W] | 360 | 370 |
| Efficiency | [%] | 19.9 | 20.5 |
| Open Circuit Voltage (V _{oc}) | [V] | 47.7 | 48.3 |
| Short Circuit Current (I _{sc}) | [A] | 9.56 | 9.60 |
| Max Power Voltage (V _{mp}) | [V] | 39.5 | 40.2 |
| Max Power Current (I _{mp}) | [A] | 9.13 | 9.20 |
| Power Tolerance | [%] | -0/+3 | -0/+3 |

Performance at NOCT (800W/m², 20°C Amb, Wind 1 m/s, AM 1.5)

| | | | |
|------------------------------------------|-----|------|------|
| Max Power (P _{max}) | [W] | 265 | 272 |
| Open Circuit Voltage (V _{oc}) | [V] | 44.8 | 45.4 |
| Short Circuit Current (I _{sc}) | [A] | 7.71 | 7.74 |
| Max Power Voltage (V _{mp}) | [V] | 36.3 | 37.0 |
| Max Power Current (I _{mp}) | [A] | 7.30 | 7.35 |

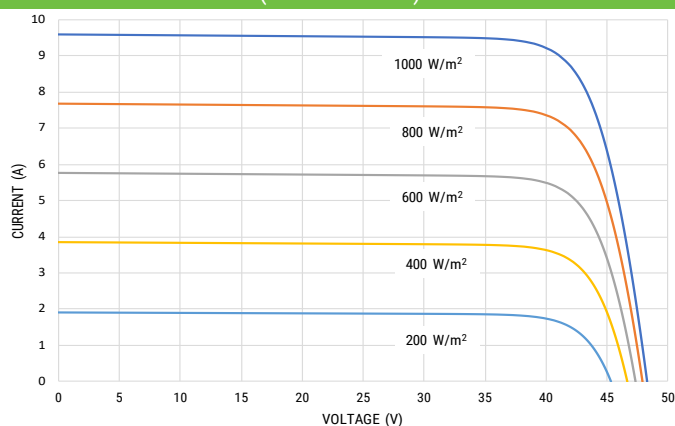
Temperature Characteristics

| | | |
|----------------------------------|----------|---------|
| NOCT | [°C] | 45 +/-2 |
| Temp. Coeff. of P _{max} | [% / °C] | -0.39 |
| Temp. Coeff. of V _{oc} | [% / °C] | -0.29 |
| Temp. Coeff. of I _{sc} | [% / °C] | 0.04 |

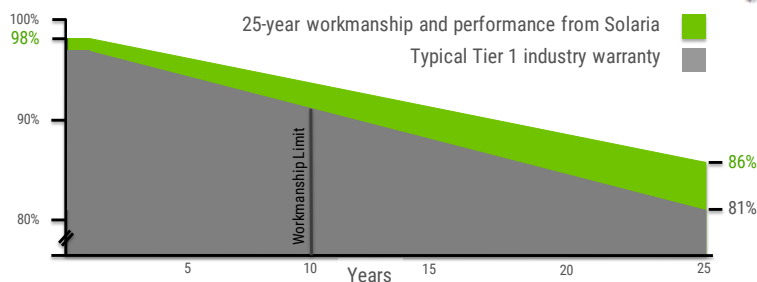
Design Parameters

| | | |
|-----------------------|------|------------|
| Operating temperature | [°C] | -40 to +85 |
| Max System Voltage | [V] | 1000 |
| Max Fuse Rating | [A] | 15 |
| Bypass Diodes | [#] | 4 |

IV Curves vs. Irradiance (370W Module)



Comprehensive 25-Year Warranty



Mechanical Characteristics

| | |
|------------------------|-------------------------------|
| Cell Type | Monocrystalline Silicon |
| Dimensions (L x W x H) | 1621 mm x 1116 mm x 40 mm |
| Weight | 21 kg / 46 lbs |
| Glass Type / Thickness | AR Coated, Tempered / 3.2 mm |
| Frame Type | Black Anodized Aluminum |
| Cable Type / Length | 12 AWG PV Wire (UL) / 1000 mm |
| Connector Type | MC4 |
| Junction Box | IP67 / 4 diodes |
| Front Load | 5400 Pa / 113 psf* |
| Rear Load | 3600 Pa / 75 psf* |

* Refer to Solaria Installation Manual for details

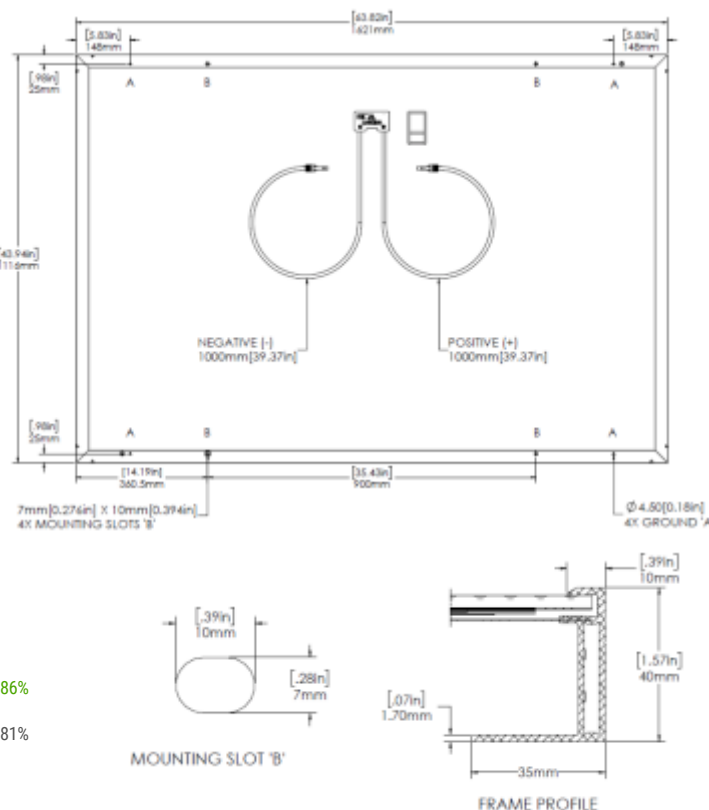
Certifications / Warranty

| | |
|--------------------------|--------------------------------------------------|
| Certifications | UL 1703/IEC 61215/IEC 61730/CEC CAN/CSA-C22.2 |
| Fire Type (UL 1703) | 1 |
| Power & Product Warranty | 25 years* |

* Warranty details at www.solaria.com

Packaging

| | |
|---------------------------|-------------------------|
| Stacking Method | Horizontal / Palletized |
| Pcs / Pallet | 25 |
| Pallet Dims | 1668 x 1150 x 1230 mm |
| Pallet Weight | 590 kg / 1300 lbs |
| Pallets / 40-ft Container | 28 |
| Pcs / 40-ft Container | 700 |





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MODULES:
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DIMENSION = (L x W x D) 63.82 x 43.9 x 1.57 IN

TOT AL SYSTEM SIZE:
40 MODULE X 370W = 14.8 KW
EST PROD = 11,473 KWH/YR

AVERAGE TSRF = 60%

INVERTER:
1 x SOLAREDGE SE10000H-US-240
w/ P370 POWER OPTIMIZERS

HARVARD, MA
WIND SPEED = 125 MPH
SNOW LOAD = 50 PSF

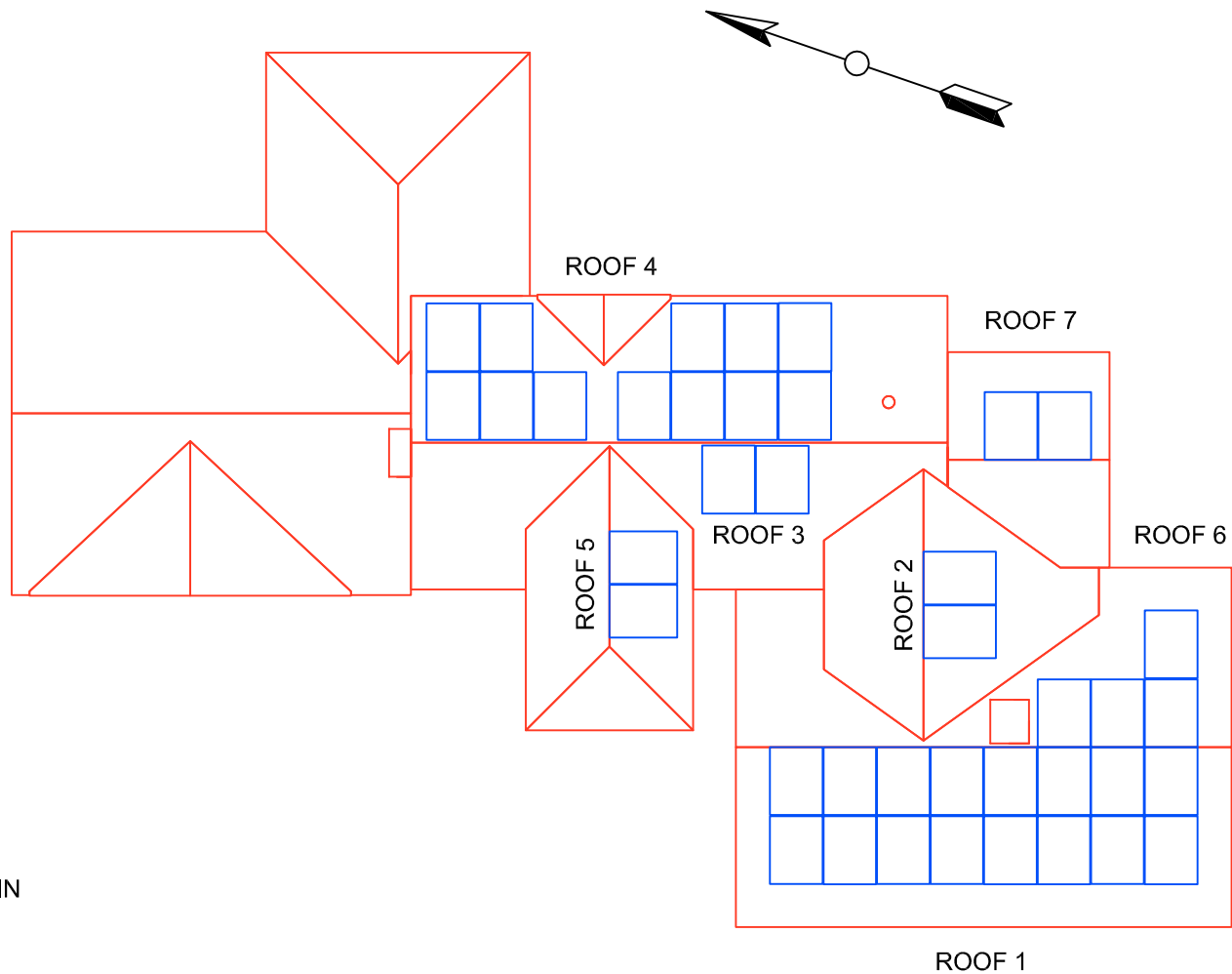
| ROOF NO. | ROOF TILT | AZIMUTH | NO. OF PANELS | SHADE |
|----------|-----------|---------|---------------|-------|
| 1 | 30 | 251 | 16 | 19% |
| 2 | 23 | 161 | 2 | 30% |
| 3 | 30 | 251 | 2 | 14% |
| 4 | 30 | 71 | 12 | 22% |
| 5 | 30 | 161 | 2 | 26% |
| 6 | 30 | 71 | 4 | 24% |
| 7 | 30 | 71 | 2 | 17% |

SUNPOWER®

by BlueSel Home Solar

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600 WEST CUMMINGS PARK, SUITE 4200, WOBURN, MA 01801
PHONE (781) 281-8130, WWW.BLUESEL.COM

| | | | | |
|--------------------------------------------|------------------|------------|----------------|----------------------------|
| DRAWN BY: OC | DATE: 09-23-2020 | SCALE: N/A | SHEET: 1 OF 10 | BORDER: C |
| NAME: SMITHWOOD, BRANDON - 11 MASS AVE. | | | | DWG NUMBER-REV 05631-07 |



**RESIDENTIAL SOLAR
PHOTOVOLTAIC INSTALLATION:**

SMITHWOOD, BRANDON
11 MASS AVE.,
HARVARD, MA 01451

MODULES:
SOLARIA POWERXT®-370R-PD

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| | | | | |
|--------------------------------------------|------------------|------------|----------------|----------------------------|
| DRAWN BY: OC | DATE: 09-23-2020 | SCALE: N/A | SHEET: 2 OF 10 | BORDER: C |
| NAME: SMITHWOOD, BRANDON - 11 MASS AVE. | | | | DWG NUMBER-REV 05631-07 |

RESIDENTIAL SOLAR PHOTOVOLTAIC INSTALLATION:

SMITHWOOD, BRANDON
11 MASS AVE.,
HARVARD, MA 01451

MODULES:
SOLARIA POWERXT®-370R-PD

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HARVARD, MA
WIND SPEED = 125 MPH
SNOW LOAD = 50 PSF



EXISTING NORTH ELEVATION

SUNPOWER®

17 JAN SEBASTIAN DRIVE, SUITE 12, SANDWICH, MA 02563
600 WEST CUMMINGS PARK, SUITE 4200, WOBURN, MA 01801
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by BlueSel Home Solar

| | | | | |
|--------------------------------------------|------------------|------------|----------------|----------------------------|
| DRAWN BY: OC | DATE: 09-23-2020 | SCALE: N/A | SHEET: 3 OF 10 | BORDER: C |
| NAME: SMITHWOOD, BRANDON - 11 MASS AVE. | | | | DWG NUMBER-REV 05631-07 |

**RESIDENTIAL SOLAR
PHOTOVOLTAIC INSTALLATION:**

SMITHWOOD, BRANDON
11 MASS AVE.,
HARVARD, MA 01451

MODULES:
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HARVARD, MA
WIND SPEED = 125 MPH
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PROPOSED NORTH ELEVATION

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by BlueSel Home Solar

| | | | | |
|--------------------------------------------|------------------|------------|----------------|----------------------------|
| DRAWN BY: OC | DATE: 09-23-2020 | SCALE: N/A | SHEET: 4 OF 10 | BORDER: C |
| NAME: SMITHWOOD, BRANDON - 11 MASS AVE. | | | | DWG NUMBER-REV 05631-07 |

RESIDENTIAL SOLAR
PHOTOVOLTAIC INSTALLATION:

SMITHWOOD, BRANDON
11 MASS AVE.,
HARVARD, MA 01451

MODULES:
SOLARIA POWERXT®-370R-PD

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HARVARD, MA
WIND SPEED = 125 MPH
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EXISTING EAST ELEVATION

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by BlueSel Home Solar

| | | | | |
|--------------------------------------------|------------------|------------|----------------|----------------------------|
| DRAWN BY: OC | DATE: 09-23-2020 | SCALE: N/A | SHEET: 5 OF 10 | BORDER: C |
| NAME: SMITHWOOD, BRANDON - 11 MASS AVE. | | | | DWG NUMBER-REV 05631-07 |

RESIDENTIAL SOLAR PHOTOVOLTAIC INSTALLATION:

SMITHWOOD, BRANDON
11 MASS AVE.,
HARVARD, MA 01451

MODULES:
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DIMENSION = (L x W x D) 63.82 x 43.9 x 1.57 IN

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HARVARD, MA
WIND SPEED = 125 MPH
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PROPOSED EAST ELEVATION

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|--------------------------------------------|------------------|------------|----------------|----------------------------|
| DRAWN BY: OC | DATE: 09-23-2020 | SCALE: N/A | SHEET: 6 OF 10 | BORDER: C |
| NAME: SMITHWOOD, BRANDON - 11 MASS AVE. | | | | DWG NUMBER-REV 05631-07 |

RESIDENTIAL SOLAR PHOTOVOLTAIC INSTALLATION:

SMITHWOOD, BRANDON
11 MASS AVE.,
HARVARD, MA 01451

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HARVARD, MA
WIND SPEED = 125 MPH
SNOW LOAD = 50 PSF



EXISTING SOUTH ELEVATION

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|--------------------------------------------|------------------|------------|----------------|----------------------------|
| DRAWN BY: OC | DATE: 09-23-2020 | SCALE: N/A | SHEET: 7 OF 10 | BORDER: C |
| NAME: SMITHWOOD, BRANDON - 11 MASS AVE. | | | | DWG NUMBER-REV 05631-07 |

RESIDENTIAL SOLAR PHOTOVOLTAIC INSTALLATION:

SMITHWOOD, BRANDON
11 MASS AVE.,
HARVARD, MA 01451

MODULES:
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DIMENSION = (L x W x D) 63.82 x 43.9 x 1.57 IN

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PROPOSED SOUTH ELEVATION

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|--------------------------------------------|------------------|------------|----------------|----------------------------|
| DRAWN BY: OC | DATE: 09-23-2020 | SCALE: N/A | SHEET: 8 OF 10 | BORDER: C |
| NAME: SMITHWOOD, BRANDON - 11 MASS AVE. | | | | DWG NUMBER-REV 05631-07 |

RESIDENTIAL SOLAR PHOTOVOLTAIC INSTALLATION:

SMITHWOOD, BRANDON
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HARVARD, MA 01451

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HARVARD, MA
WIND SPEED = 125 MPH
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EXISTING WEST ELEVATION

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|--------------------------------------------|------------------|------------|----------------|----------------------------|
| DRAWN BY: OC | DATE: 09-23-2020 | SCALE: N/A | SHEET: 9 OF 10 | BORDER: C |
| NAME: SMITHWOOD, BRANDON - 11 MASS AVE. | | | | DWG NUMBER-REV 05631-07 |

RESIDENTIAL SOLAR PHOTOVOLTAIC INSTALLATION:

SMITHWOOD, BRANDON
11 MASS AVE.,
HARVARD, MA 01451

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PROPOSED WEST ELEVATION

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|--------------------------------------------|------------------|------------|-----------------|----------------------------|
| DRAWN BY: OC | DATE: 09-23-2020 | SCALE: N/A | SHEET: 10 OF 10 | BORDER: C |
| NAME: SMITHWOOD, BRANDON - 11 MASS AVE. | | | | DWG NUMBER-REV 05631-07 |

NOTICE OF DECISION

The Harvard Historical Commission has denied the application for

CERTIFICATE OF APPROPRIATENESS

for a property in the Harvard Common Local Historic District
at 11 Massachusetts Avenue at a public hearing on October 7, 2020.

This denial is for the Application for Certificate of Appropriateness received by the Town Clerk, on August 27, 2020 and an addendum submitted on October 4, 2020 from Brandon Smithwood, to install 40 solar panels on various aspects of the roof of his residence at 11 Massachusetts Avenue, as specified in the application, including 16 the panels to be placed on the main roof facing Mass Ave.

The commission made the difficult decision to deny the application after a public hearing on October 7 and considering the *Design Guidelines* suggesting that solar panels not be oriented toward a public way and not be placed on the main roof but instead on a subsidiary roof(s) so as to appear less significant. The home is a prominent one in a prominent area of the Harvard Common Historic District surrounded by similar structures. While the commission was supportive of panels on other roofs on the structure, the main roof is totally exposed to and visible from the street, library and town cemetery. The applicant was not inclined to consider alternate arrangements for the panels which might have been acceptable to the commission. The commission therefore denied the application in its entirety. The commission's reasoning for this decision is explained in more detail in a letter to the applicant dated October 8, 2020 which is incorporated into this decision.

Signed for the Commission:

Pamela Marston

Pamela Marston
Chair, Harvard Historical Commission

October 8, 2020
Mr. Brandon Smithwood
11 Mass Avenue
Harvard, MA 01451

**RE: DECISION OF THE HARVARD HISTORICAL COMMISSION ON
APPLICATION FOR CERTIFICATE OF APPROPRIATENESS FOR 11
MASS AVENUE**

Dear Mr. Smithwood:

Thank you very much for submitting your Application For Certificate Of Appropriateness seeking approval for the installation of multiple roof-mounted solar panels for your home at 11 Mass Avenue in Harvard. The Harvard Historical Commission appreciated you taking the time to put together a thorough and thoughtful application. As explained below, the Commission carefully considered the merits of your application, but regrettably could not approve your application and issue you a Certificate of Appropriateness. The Commission would certainly entertain, as allowable by rule, any subsequent applications or modified applications you may wish to submit to help advance your project while also maintaining the integrity and harmony of the Harvard Common Historic District.

Procedural History And Decision

On August 27, 2020 you filed an Application For Certificate Of Appropriateness (Application) for 11 Mass Avenue with the Harvard Historical Commission (HHC) seeking "...to install a 14.8 kw dc roof-mounted solar installation, using 40 solar pv panels: no panels on North-facing roof/ 18 panels on East-facing roof 4,6 + ./ 4 panels on South-facing roofs 2 + 5 / and 18 panels on roofs 1 + 3." You further indicated that the prospective panels would be black in color which you indicated would be HHC compliant.

The HHC duly processed your Application and promptly placed it on the agenda for the September 2020 HHC meeting. At that meeting the HHC determined that the prospective panel installation was Substantial in nature and therefore would be reviewed in the context of a public hearing before a vote on the Certificate of Appropriateness. Abutters were notified of the prospective changes and all requirements of Notice were met. Shortly before the October 2020 HHC meeting you forwarded to HHC an addendum to the Application which had detailed designs of the roof and panels which were numbered and labeled, as well as where the panels were to be mounted, their dimensions and tilt. The addendum also included pictures of the property from the North, East, South and West elevations each angle having 2 pictures, one with, and one without the prospective panels. At the October 7, 2020 HHC meeting a public hearing was held wherein you presented your Application again, the Application was made open for public commentary, HHC Commissioners asked questions and deliberated and ultimately voted 4-0 not to approve your Application.

In reaching its Decision the HHC considered all the evidence it had before it to include the Application, addendum and multiple presentations, and applied that evidence in light

of the bylaws of the Town of Harvard; the HHC Design Guidelines; Massachusetts General Laws c. 40C et. seq., as well as design guidelines of surrounding similarly situated towns which the HHC thought persuasive. Further, the HHC also looked to relevant case law which has illuminated the application of the factors to weigh and consider, specifically in the context of solar panels in historical districts. First Parish In Bedford et al. v. Historic District Commission of The Town of Bedford, 16-1844-A (Middlesex Sup. Ct. 2017). Lastly, the HHC considered the General Court's mandate that "the Commonwealth strongly encourages the use of solar and to protect solar access." MGL c. 40C § 7.

At the outset, the HHC strongly supports the use of solar and whenever feasible to help facilitate solar access within its Districts. In fact approximately 10 installations have been approved in recent years. However, the HHC also has to balance this laudable endeavor with its purpose "[t]o preserve and protect the historic assets of Harvard, its buildings, structures, places, sites, and surrounding settings of historical or architectural significance." § 48-1. The HHC looked to page 21-22 of its Guidelines which stand for the proposition that solar panels on a modern structure is always preferable to being mounted on a historic structure. Moreover, the HHC guidelines place particular emphasis on solar panels not being orientated toward a public way whenever possible. These guidelines are consistent with the guidelines of other similarly situated communities to include Concord, Natick, Newton and Arlington. Other factors the HHC has to consider is the historic value and significance of a site, building or structure as well as the size and shape of the building or structure to the land on which it sits in relation to the buildings and structures in the vicinity. Consistent with this approach, solar panels that have been approved in the districts have been either not visible from a public way, pole mounted, and/or attached to subsidiary buildings.

In considering the Application the HHC took all of this into account. The HHC took no issue with the panels to be affixed on Roofs 2, 3, 4, 5, and 7. These roofs and panels to be placed thereon were not orientated toward a public way, were discreet and consistent with HHC guidelines and the Commonwealth's promotion of solar. The HHC only took issue with Roof 1. Roof 1 is situated on the main structure (not a subsidiary building) and is by far the most prominent of the entire structure. It faces in a South-Westerly direction directly onto Mass Ave in the heart of the District. Roof 1 is totally exposed, low-hanging and with little frontage between the Roof and the street it seemingly overhangs Mass Ave. It is prominent in the direct periphery of anyone driving or walking Northbound on Mass Ave. Moreover, it is only somewhat less prominent traveling Mass Ave Southbound. The roof also stands flush and completely exposed to the historic cemetery and Library in an almost perpendicular manner directly across the street.

At the October 7, 2020 meeting the HHC sought to explore possible alternative options to Roof 1, to include possible additional panels on Roof 4, other roofs, or the possibility of a freestanding panel on the property. Unfortunately, you did not seem open to considering alternative options. It was not made clear to the HHC as to whether such additional options, although perhaps not personally optimal were nonetheless functionally viable, allowing for a revision to the application that would have been acceptable. Therefore, in weighing the evidence and applying the factors cited above the HHC had to deny the Application in whole.

The HHC once again thanks you very much for your Application. We hope to continue to work with you to help you achieve your solar goals that we share and support not only as Commissioners but as neighbors and members of the community. We look forward to exploring additional options to meet your needs consistent with our charge to the District.

Sincerely,

Pam Marston
Chair, Harvard Historical Commission