

1. Viewpack

Documents:

[38 BURNELL ST - PERGOLA AND SOLAR PANELS.PDF](#)

CERTIFICATE OF APPROPRIATENESS

for structural work.

NOTE: It is strongly recommended that the applicant be familiar with the HDC guidelines, Building with Nantucket in Mind, prior to submittal of application. Please see other side for submittal requirements. Incomplete applications will not be reviewed by the HDC.

This is a contractual agreement and must be filled out in ink. An application is hereby made for issuance of a Certificate of Appropriateness under Chapter 395 of the Acts and Resolves of Mass., 1970, for proposed work as described herein and on plans, drawings and photographs accompanying this application and made a part hereof by reference.

The certificate is valid for three years from date of issuance. No structure may differ from the approved application. Violation may impede issuance of Certificate of Occupancy.

PROPERTY DESCRIPTION

TAX MAP N°: 73 PARCEL N°: 123
Street & Number of Proposed Work: 38 BURNELL ST
Owner of record: TIMOTHY CARRUTHERS
Mailing Address: PO BOX 7950 SCOTSET MA 02504
Contact Phone #: 781 325 0128 E-mail: TIMOTHY@CARRUTHERS.COM

AGENT INFORMATION (if applicable)

Name: ACK SMART
Mailing Address: GLOLD SOUTH RD #500 NANTUCKET MA 02554
Contact Phone #: 781 325 0128 E-mail: SOLAR@ACKSMART.COM

FOR OFFICE USE ONLY
Date application received:
Fee Paid: \$
Must be acted on by:
Extended to:
Disapproved:
Approved:
Chairman:
Member:
Member:
Member:
Member:
Member:
Notes - Comments - Restrictions - Conditions

DESCRIPTION OF WORK TO BE PERFORMED

See reverse for required documentation.

- Checkboxes for New Dwelling, Addition, Garage, Driveway/Apron, Commercial, Historical Renovation, Deck/Patio, Steps, Shed, Color Change, Fence, Gate, Hardscaping, Move Building, Demolition, Revisions to previous Cert. No., Pool, Other NEW BERGOLA + SOLAR PANELS TO GARAGE ROOF

Size of Structure or Addition: Length: Sq. Footage 1st floor: Decks/Patio: Size: 1st floor 2nd floor
Width: Sq. footage 2nd floor: Size: 1st floor 2nd floor
Sq. footage 3rd floor:

Difference between existing grade and proposed finish grade: North South East West
Height of ridge above final finish grade: North South East West

Additional Remarks: REVISIONS: 1. East Elevation 2. South Elevation 3. West Elevation 4. North Elevation
EXPAND EXISTING SOLAR PANELS (9) TO TOTAL OF 18.

Is there an HDC survey form for this building attached? Yes N/A *Cloud on drawings and submit photographs of existing elevations.

DETAIL OF WORK TO BE PERFORMED

Foundation: Height Exposed Block Block Parged Brick (type) Poured Concrete Piers
Masonry Chimney: Block Parged Brick (type) Other
Roof Pitch: Main Mass /12 Secondary Mass /12 Dormer /12 Other

Roofing material: Asphalt 3-Tab Architectural Wood (Type: Red Cedar, White Cedar, Shakes, etc.) RED CEDAR
Fence: Height: Type: Length:

Skylights (flat only): Manufacturer Rough Opening Size Location
Gutters: Wood Aluminum Copper Leaders (material)

Leaders (material and size):
Sidewall: White cedar shingles Clapboard (exposure: inches) Front Side Other

Trim: A. Wood Pine Redwood Cedar Other
B. Treatment Paint Natural to weather Other
C. Dimensions: Fascia Rake Soffit (Overhang) Corner boards Frieze
Window Casing Door Frame Columns/Posts: Round Square

Windows*: Double Hung Casement All Wood Other
True Divided Lights(muntins), single pane SDL's (Simulated Divided Lights) Manufacturer

Doors* (type and material): TDL SDL Front Rear Side
Garage Door(s): Type Material
Hardscape materials: Driveways Walkways Walls

* Note: Complete door and window schedules are required.

COLORS

Sidewall Clapboard (if applicable) Roof
Trim Sash Doors
Deck Foundation Fence Shutters

* Attach manufacturer's color samples if color is not from HDC approval list.

I hereby authorize the agent named above to act on my behalf to make changes in the specifications or the plans contained in this application in order to bring the application into compliance with the HDC guidelines. I hereby agree to abide by and comply with the terms and conditions of this application. I hereby agree that the submission of any revisions to this application will initiate a new sixty-day review period.

Date 7/3/2020 Signature of owner of record Signed under penalties of perjury



THIS CHECKLIST IS TO BE SUBMITTED WITH ALL HDC APPLICATIONS

REQUIRED WITH ALL APPLICATIONS:

1. Completed Application Form: Description of ALL work must be indicated on application form.
2. Property Owner's Signature: Current owner's signature preferred; if the agent is signing the application written authorization from the owner (letter, fax, email) must be provided.
3. Application Fee: See back of application for fee schedule or call the office.
4. Locus Map (4 copies): Location Map must include north arrow, parcel boundaries, primary and secondary streets. (Town GIS Map Site) <http://www.mapgeo.com/NantucketMA/>.
5. Site Plan (4 Copies): must include the following: lot dimensions, north arrow, all existing structures, proposed work (highlighted) with dimension to lot lines, scale, driveway, grade changes, and *placement of HVAC units, electrical boxes, fuel tanks, etc.*
6. 8-1/2" x 11" Copies of ALL Application Materials: Must include the following: application form (reduced 64%), locus map, plot plan, all elevations and floor plans, window schedule, photographs, other relevant supporting material. All material **MUST BE LEGIBLE** (font size no smaller than 12), collated and stapled.
7. Photographs: Required of ALL applications for alterations to an existing structure. Photographs must be clear and labeled with application address or contextual address.
8. Electronic submission: All documents submitted to the HDC office must also be converted to Adobe Acrobat format <http://www.adobe.com/pdf/>; this is free software that may have come pre-loaded on your computer. Electronic copies can also be created using the scanner located in the Department of Inspectional Services.

REQUIRED WHERE APPLICABLE :

1. Supplemental Information for Historic Buildings: It is the applicant's responsibility to research the historical status of any and ALL buildings. Additional information may be obtained from the Nantucket Historical Association Library. If not historic, denote on application.
2. Exterior Elevations and Floor Plans (4 copies): Must be Y.-inch scale and include all affected sides of the building, cardinal points (N, S, E, W), dimensions, heights, floor and ceiling heights, elevations of finished grade, window details and placement of HVAC units, electrical boxes, fuel tanks, etc. *All changes from approved or existing design must be clouded on drawings.* All material **MUST BE LEGIBLE**, collated and stapled. Reduced sets should maintain a font size of 12.
3. As-Built Plans (1copy): of existing elevations
4. Hardscaping Plans (4 copies): To legible scale. This includes fences, decks, porches, arbors, retaining walls, tennis courts, swimming pool, driveways, gazebos etc. All material **MUST BE LEGIBLE**, collated and stapled.
5. Topographic Map: Must show existing and proposed grade for any change of more than one foot in height on grade. Retaining walls must be applied for separately (see hardscaping plan).
6. Door and Window Schedule (4 copies): Must include window type (true divided, simulated divided), number of lights, dimensions, materials, manufacturers type name and type number.
7. I UNDERSTAND THAT A TRUE DIVIDED LIGHT WINDOW/DOOR IS DEFINED AS MULTIPLE INDIVIDUAL SINGLE PANES OF GLASS (i.e., NOT DOUBLE-PANED OR INSULATED) ASSEMBLED IN THE SASH/DOOR USING MUNTINS.
(initial to indicate read and understand)
8. Abutter Notification Materials – Abutters list from Assessors Office, certified mail stubs, and a copy of letter are required for all applications for changes of 1000 square feet or more except in the Nantucket Historic Core and 'Sconset Historic Core where the requirement for new construction is 100 square feet.
9. Approvals from Planning Board, Zoning Board of Appeals, Conservation Commission etc.



HISTORIC DISTRICT COMMISSION

2 Fairgrounds Road
Nantucket, Massachusetts 02554

Telephone: 508.325.7587
Email: hdcsubmissions@nantucket-ma.gov

COMMISSIONERS

Ray Pohl
Chairman

Diane Coombs
Vice-Chairman

Val Oliver

Abigail Camp

John McLaughlin

ASSOCIATE COMMISSIONERS

Stephen Welch

TJ Watterson

Jesse Dutra

STAFF

Cathy Flynn
Land Use Specialist
cflynn@nantucket-ma.gov

Waiver of the HDC 10 Day Hearing Requirement

I ACK Smart (Tim Carruthers)

AS AGENT FOR Timothy Carruthers

STREET ADDRESS 38 Burnell St

MAP/PARCEL 73/123

UNDERSTAND THAT THE ABOVE REFERENCED APPLICATION SUBMITTED ON
9/3/2020

WILL NOT BE REVIEWED BY THE HISTORIC DISTRICT COMMISSION, DUE TO THE
COVID-19 PANDEMIC, WITHIN THE 10 DAY PERIOD AS REQUIRED BY:

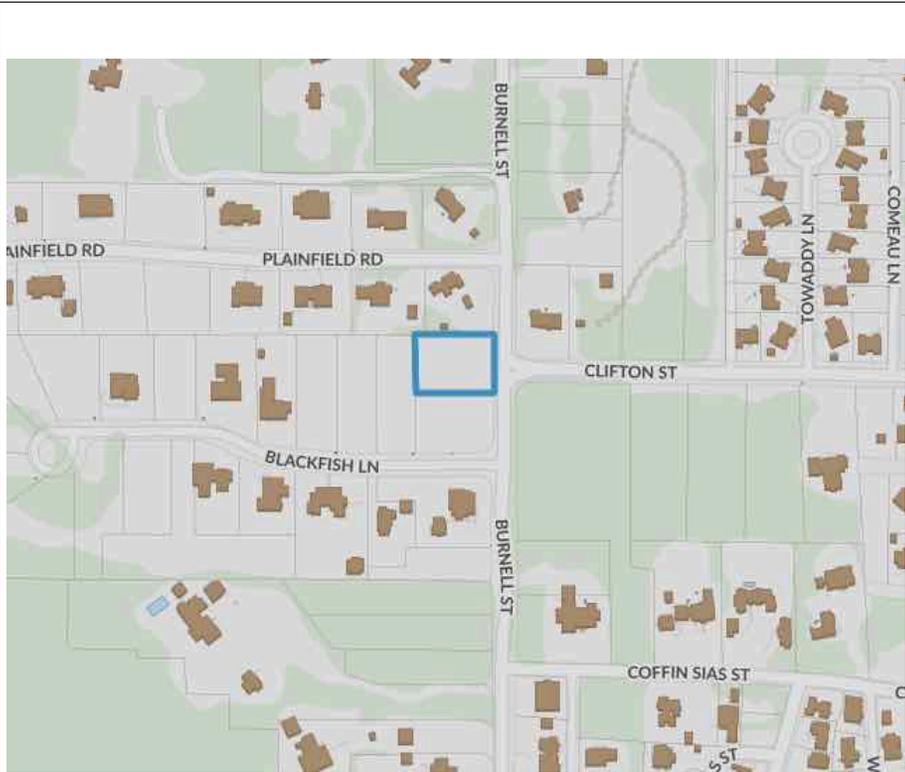
**SECTION 8 of the HDC enabling legislation: ... The Commission shall meet
within ten (10) days of the receipt of an application for a certificate of
appropriateness or permit for removal...**

AND I AGREE TO A WAIVER OF THE ABOVE MENTIONED REQUIREMENT.

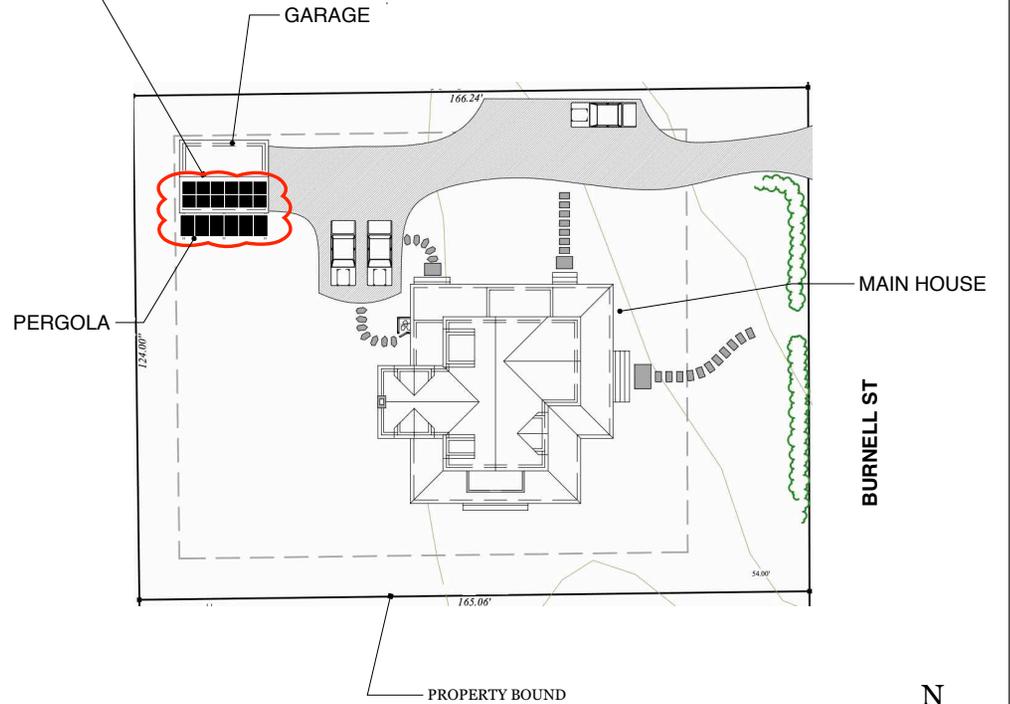
9/3/2020

Signature

Date



PROPOSED LOCATION OF (18) ALL BLACK SOLAR PV MODULES
 (3) ADDITIONAL TO GARAGE SOUTH ROOF (NEW TOTAL OF 12)
 (6) ADDITIONAL TO TOP OF PERGOLA



locus map
 Scale: not to scale

ZONING CLASS: SR20
 Front Setback: 30 ft
 side/rear setback: 10 ft

Site Plan
 Scale: 1" = 30' 0"



GIS & SITE PLAN

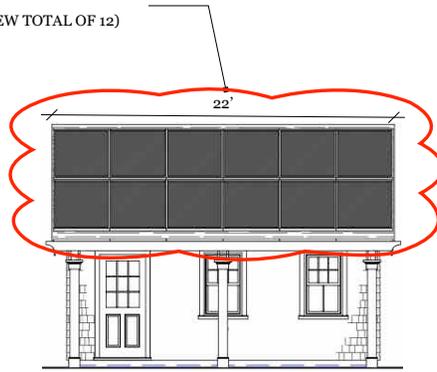
ROOFTOP SOLAR ARRAY
 6.66 KW DC, 7.6 KW AC

OWNER:	TIMOTHY CARRUTHERS
SITE ADDRESS:	38 BURNELL ST
CITY, STATE, ZIP:	SCONSET, MA 02564
MAP: 73	PARCEL: 123

REVISIONS	
MM/DD/YY	REMARKS
1 9/3/2020	SUBMITTED FOR HDIC & PERMITTING REVIEW.
2	
3	
4	
5	

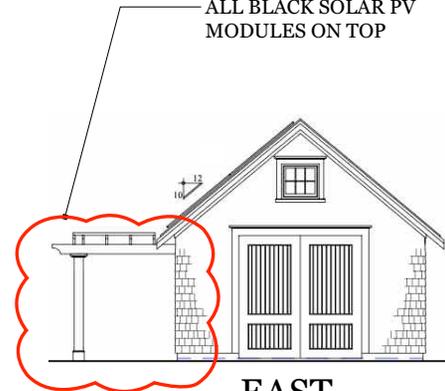
PV 01

PROPOSED INSTALLATION OF (18) ALL BLACK SOLAR PV MODULES
 (3) ADDITIONAL TO GARAGE SOUTH ROOF (NEW TOTAL OF 12)
 (6) ADDITIONAL TO TOP OF PERGOLA



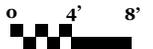
SOUTH

PROPOSED PERGOLA WITH (6) ALL BLACK SOLAR PV MODULES ON TOP



EAST

Scale: 1/8" = 1' 0"



ELEVATIONS
 ROOFTOP SOLAR ARRAY
 6.66 KW DC, 7.6 KW AC

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1 9/3/2020	SUBMITTED FOR HDIC & PERMITTING REVIEW.
2	
3	
4	
5	

PV 02



EXISTING SOLAR ARRAY



VIEW FROM BURNELL ST



VIEW FROM BLACKFISH LN

GARAGE NOT VISIBLE FROM BLACKFISH LN



PHOTOS	OWNER:	TIMOTHY CARRUTHERS
	SITE ADDRESS:	38 BURNELL ST
ROOFTOP SOLAR ARRAY 6.66 KW DC, 7.6 KW AC	CITY, STATE, ZIP:	SCONSET, MA 02564
	MAP: 73	PARCEL: 123

REVISIONS	
MM/DD/YY	REMARKS
1	9/3/2020
2	SUBMITTED FOR HDIC & PERMITTING REVIEW.
3	
4	
5	

SOLARIA®

Solaria PowerXT® | DC Panel



Solaria PowerXT®-370R-PD

Achieving 20.5% efficiency, Solaria PowerXT solar panels are one of the highest power panels in the residential and commercial solar market. Compared to conventional panels, Solaria PowerXT panels have fewer gaps between the solar cells; this leads to higher power and superior aesthetics. Solaria PowerXT Pure Black™ panels are manufactured with black backsheet and frames, enhancing a home or building's architectural beauty.

Higher Efficiency, Higher Power

Solaria PowerXT panels achieve up to 20.5% efficiency, conventional panels achieve 15% - 17% efficiency. Solaria PowerXT panels are one of the highest power panels available.

Lower System Costs

Solaria PowerXT panels 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 panel quadrants, which dramatically lowers the shading losses and boosts energy yield.

Improved Aesthetics

Compared to conventional panels, Solaria PowerXT panels 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.

PID Resistant

Solaria PowerXT panels are PID resistant. This insures stable and predictable energy production over time.

About Solaria

Established in 2000, The Solaria Corporation has created one of the industry's most respected IP portfolios, with over 250 issued and pending patents in PV solar cell and module technology. Headquartered in Oakland, California, Solaria has developed a technology platform that unlocks the potential of solar energy.



The Solaria Corporation 1700 Broadway, Oakland, CA 94612 P: (510) 270-2507 www.solaria.com
Product specifications are subject to change without notice.

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SOL-DAT-0003 Rev 04 3-2020

SOLARIA®

Solaria PowerXT®-370R-PD

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

Solaria PowerXT-	365R-PD	370R-PD
Max Power (P _{max})	[W] 365	370
Efficiency	[%] 20.2	20.5
Open Circuit Voltage (V _{oc})	[V] 48.0	48.3
Short Circuit Current (I _{sc})	[A] 9.58	9.60
Max Power Voltage (V _{mp})	[V] 39.9	40.2
Max Power Current (I _{mp})	[A] 9.16	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] 269	272
Open Circuit Voltage (V _{oc})	[V] 45.1	45.4
Short Circuit Current (I _{sc})	[A] 7.73	7.74
Max Power Voltage (V _{mp})	[V] 36.7	37.0
Max Power Current (I _{mp})	[A] 7.32	7.35

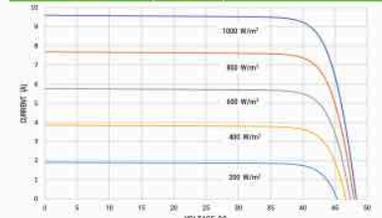
Temperature Characteristics

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

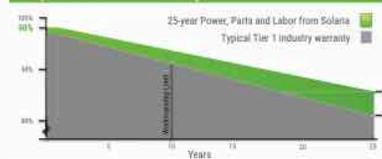
Design Parameters

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

IV Curves vs. Irradiance (370W Panel)



Comprehensive 25-Year Warranty



Mechanical Characteristics

Cell Type	Monocrystalline Silicon
Dimensions (L x W x H)	63.8" x 43.9" x 1.57"
	1621mm x 1116mm x 40mm
Weight	21 kg / 46 lbs
Glass Type / Thickness	AR Coated, Tempered / 3.2mm
Frame Type	Black Anodized Aluminum
Cable Type / Length	12 AWG PV Wire (UL) / 1000mm
Connector Type	MC4
Junction Box	IP67 / 4 diodes
Front Load	5400 Pa / 113 psf*
Rear Load	3600 Pa / 75 psf*

Certifications / Warranty

Certifications	UL 1703/IEC 61215/IEC 61730/CEC CAN/CSA-C22.2
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Fire Type (UL 1703)

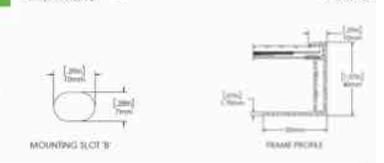
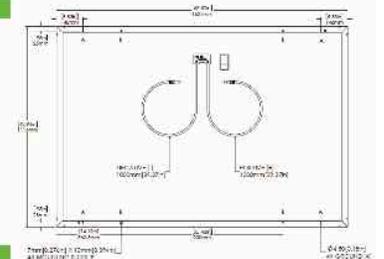
1

Warranty 25 years*

*Warranty details at www.solaria.com

Packaging

Stacking Method	Horizontal / Palletized
Panels / Pallet	25
Pallet Dims (L x W x H)	65.7" x 45.3" x 48.4"
	1668mm x 1150mm x 1230mm
Pallet Weight	590 kg / 1300 lbs
Pallets / 40-ft Container	28
Panels / 40-ft Container	700



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PV MODULE SPECIFICATIONS

ROOFTOP SOLAR ARRAY
6.66 KW DC, 7.6 KW AC

OWNER:	TIMOTHY CARRUTHERS	REVISIONS		REMARKS	
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MAP: 73	PARCEL: 123	3			
		4			
		5			

PV 04