



HISTORIC DISTRICT COMMISSION

2 Fairgrounds Road
Nantucket, Massachusetts 02554
Telephone: 508.325.7587
Email: plus@nantucket-ma.gov

COMMISSIONERS

Ray Pohl
Chair

Abigail Camp
Vice-Chair

Diane Coombs

Val Oliver

John McLaughlin

ASSOCIATE COMMISSIONERS

Jesse Dutra

Carrie Thornewill

Stephen Welch

STAFF

Cathy Flynn
HDC Compliance
Coordinator/Land Use
Specialist
cflynn@nantucket-ma.gov

Waiver of the HDC 10 Day Hearing Requirement

I Timothy Holmes President SunWind, LLC

AS AGENT FOR Robert Lapiene

STREET ADDRESS 13 Bayberry Lane

MAP/PARCEL 666666 67 / 64

UNDERSTAND THAT THE ABOVE REFERENCED APPLICATION SUBMITTED ON

July 11th, 2023

WILL NOT BE REVIEWED BY THE HISTORIC DISTRICT COMMISSION, DUE
INCREASE DEMAND, 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...**

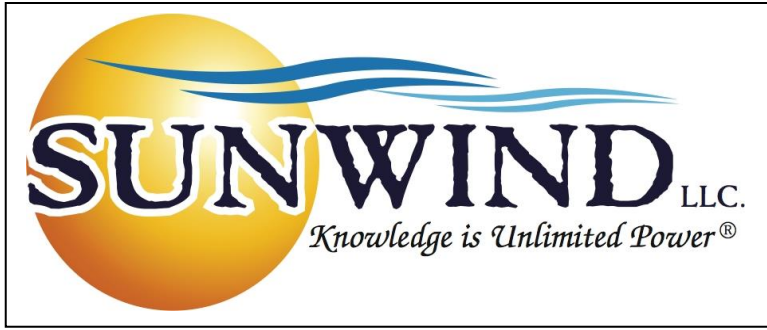
AND I AGREE TO A WAIVER OF THE ABOVE MENTIONED REQUIREMENT.

Timothy Holmes President SunWind, LLC

Signature

July 11, 2023

Date



300 Cranberry Highway
Orleans, MA 02653
508-246-6350
tholmes@sunwindllc.com

Nantucket Historic District Commission
Certificate of Appropriateness Application
Proposed Solar System

Client: Robert Lapiene
13 Bayberry Lane
Nantucket, MA 02554

Assessors Map Number: 67
Lot Number: 64

Property ID: 5329

Year Built: 1989

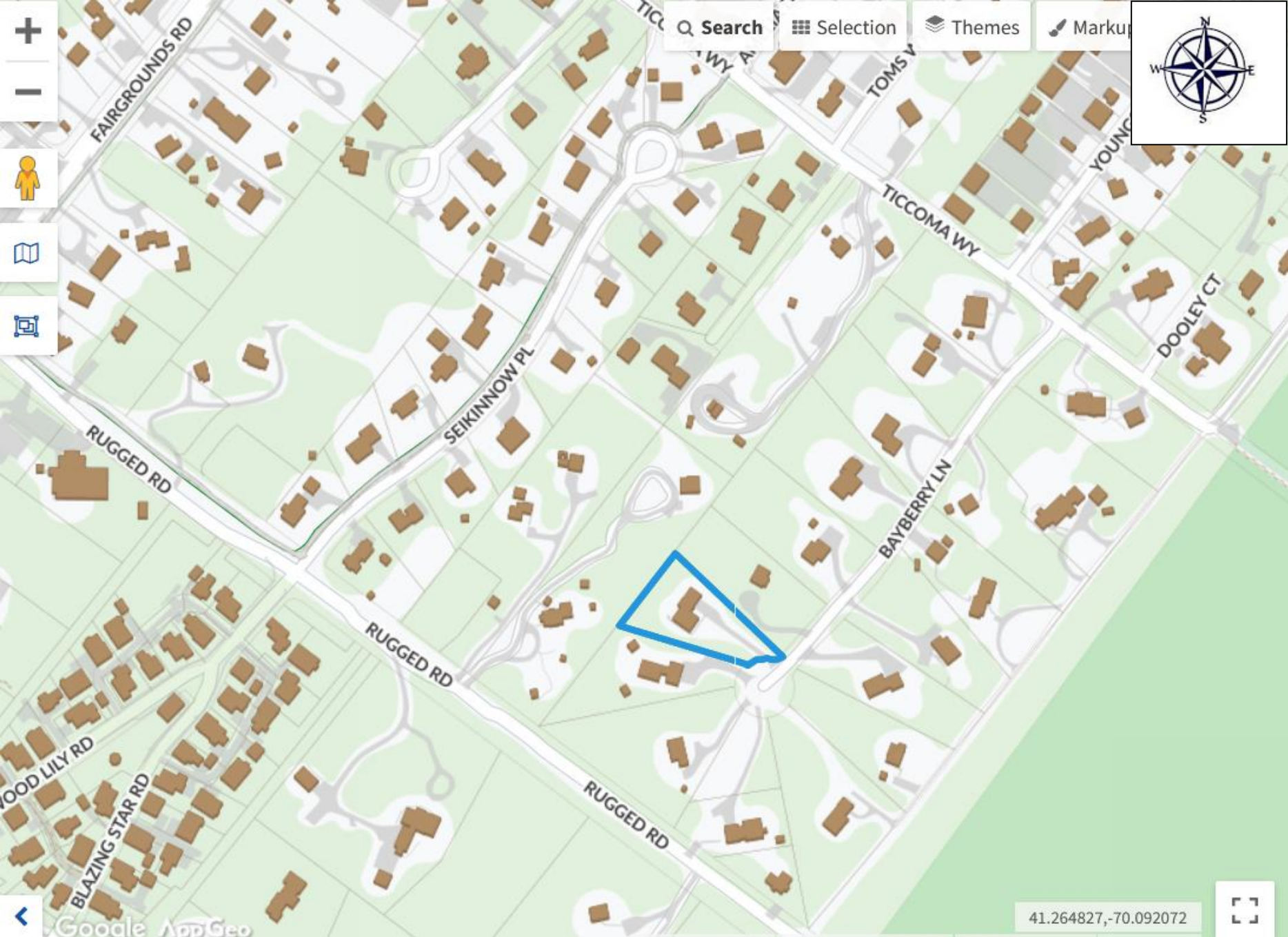
Use: 1010

Description: Single Fam M01

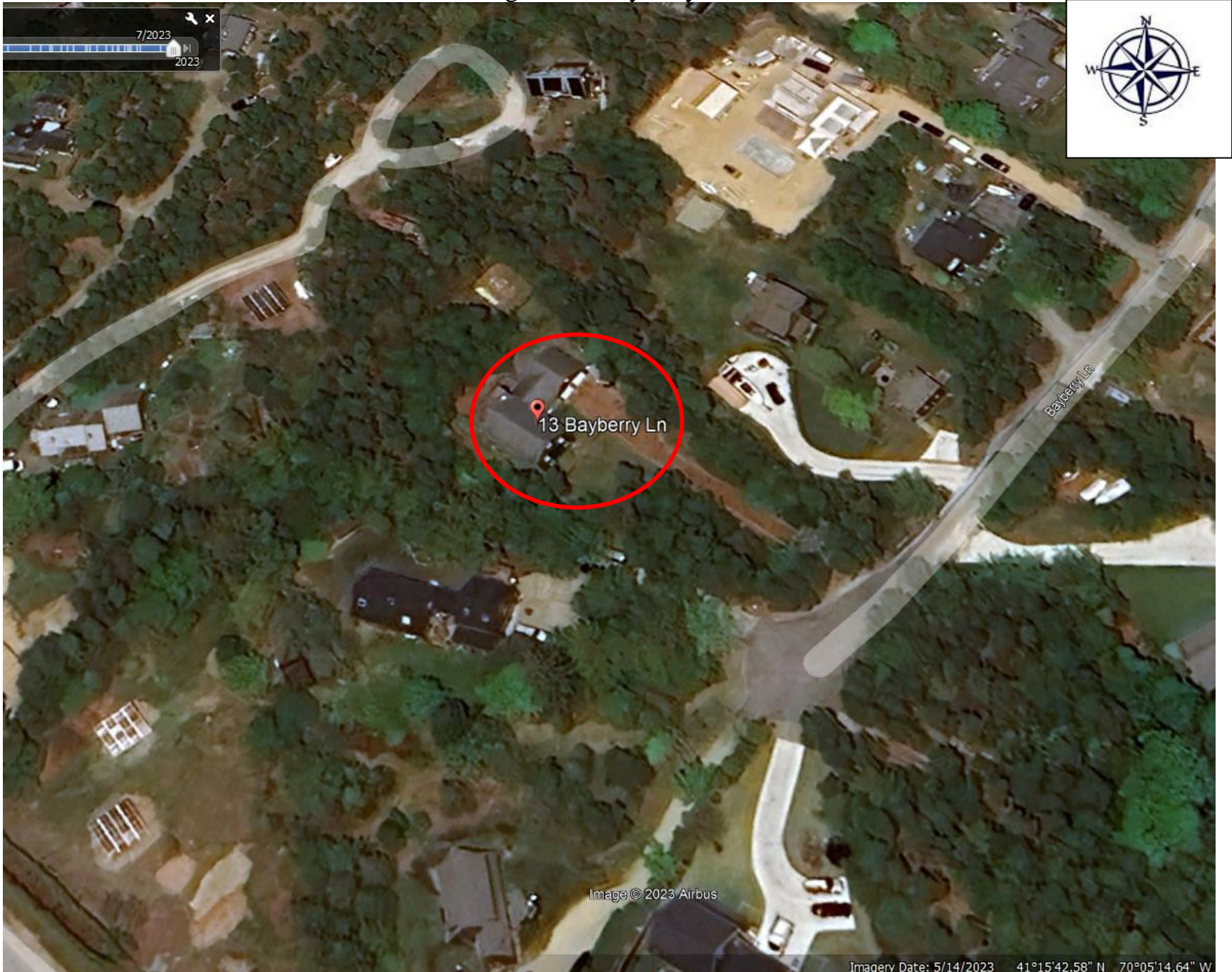
Zone: R20

Property Size: 0.90 Acres

Locus Map 13 Bayberry Lane



Satellite Image of 13 Bayberry Lane



Proposed Solar System Location



Solar Panels to be "all Black" installed on the southwest facing roof.
Not Visible From Street



Q.PEAK DUO BLK ML-G10+

385-405

ENDURING HIGH PERFORMANCE



BREAKING THE 20% EFFICIENCY BARRIER
Q.ANTUM DUO Z Technology with zero gap cell boosts module efficiency up to 20.9%.



THE MOST THOROUGH TESTING PROGRAM!
Q CELLS is the first solar module manufacturer to give quality programs in the industry. The new 4th independent certification institute TÜV Rheinland



INNOVATIVE ALL-WEATHER TECHNOLOGY
Optimal yields, whatever the weather with excellent low-light and temperature behavior.



ENDURING HIGH PERFORMANCE
Long-term yield security with Anti LID Technology Technology¹, Hot-Spot Protect and Traceable Gu



EXTREME WEATHER RATING
High-tech aluminum alloy frame, certified for high snow (5400 Pa) and wind loads (4000 Pa).



A RELIABLE INVESTMENT
Inclusive 25-year product warranty and 25-year linear performance warranty².

¹ APT test conditions according to IEC/TS 62804-1:2015, method A (-1500V, 96h)
² See data sheet on site for further information.



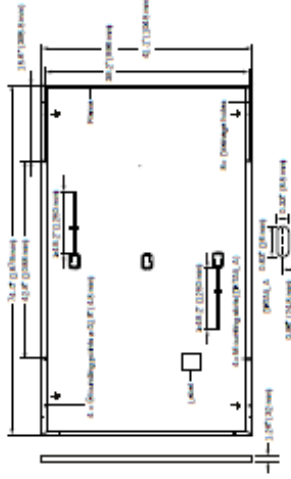
THE IDEAL SOLUTION FOR:



Rooftop arrays on residential buildings

MECHANICAL SPECIFICATION

| | |
|--------------|---|
| Format | 74.0 in x 41.1 in x 1.26 in (including frame) (1,879 mm x 1,045 mm x 32 mm) |
| Weight | 48.5 lbs (22.0 kg) |
| Front Cover | 0.13 in (3.2 mm) thermally pre-stressed glass with anti-reflection technology |
| Back Cover | Composite film |
| Frame | Black anodized aluminum |
| Cell | 6 x 22 monocrystalline QUANTUM solar half cells |
| Junction Box | 2.09 - 3.98 in x 1.26 - 2.36 in x 0.59 - 0.71 in (53 - 101 mm x 32 - 60 mm x 15 - 18 mm), IP67, with bypass diodes |
| Cable | 4 mm ² Solar cables (4) ≥ 49.2 in (1,250 mm), (1) ≥ 49.2 in (1,250 mm) |
| Connector | SM441 MC4; IP68 |

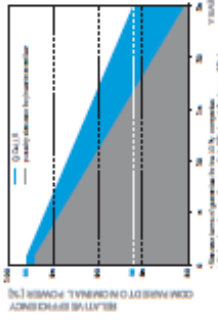


ELECTRICAL CHARACTERISTICS

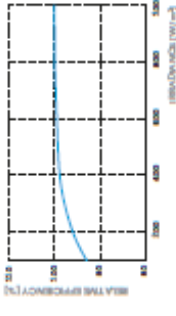
| POWER CLASS | 385 | 390 | 395 | 400 | 405 | |
|---|-----------|-------|-------|-------|-------|-------|
| MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC* (POWER TOLERANCE +5W / -0W) | | | | | | |
| Power at MPP | P_{MPP} | 385 | 390 | 395 | 400 | 405 |
| Short Circuit Current | I_{SC} | 11.04 | 11.07 | 11.10 | 11.14 | 11.17 |
| Open Circuit Voltage | V_{OC} | 45.19 | 45.23 | 45.27 | 45.30 | 45.34 |
| Current at MPP | I_{MPP} | 10.59 | 10.65 | 10.71 | 10.77 | 10.83 |
| Voltage at MPP | V_{MPP} | 36.36 | 36.62 | 36.88 | 37.13 | 37.39 |
| Efficiency ¹ | η | 219.6 | 219.9 | 220.1 | 220.4 | 220.6 |
| MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT² | | | | | | |
| Power at MPP | P_{MPP} | 288.8 | 292.6 | 296.3 | 300.1 | 303.8 |
| Short Circuit Current | I_{SC} | 8.90 | 8.92 | 8.95 | 8.97 | 9.00 |
| Open Circuit Voltage | V_{OC} | 42.62 | 42.65 | 42.69 | 42.72 | 42.76 |
| Current at MPP | I_{MPP} | 8.35 | 8.41 | 8.46 | 8.51 | 8.57 |
| Voltage at MPP | V_{MPP} | 34.59 | 34.81 | 35.03 | 35.25 | 35.46 |
| ¹ Measurement tolerance: P_{MPP} ± 3%, I_{SC} , V_{OC} ± 5% at STC: 1000W/m ² , 25 ± 2 °C, AM1.5 according to IEC 60904-3 + 3800W/m ² , NMOT, Spectrum AM1.5 | | | | | | |

G CELLS PERFORMANCE WARRANTY

All least 98% of nominal power during first year. Thereafter min. 0.5% degradation per year. At least 93.5% of nominal power up to 10 years. At least 86% of nominal power up to 25 years.



All data within measurement tolerance. Full warranties in accordance with the warranty terms of the G CELLS sales organization of your respective country.



² Typical module performance under low irradiance conditions in comparison to STC conditions (25 °C, 1000W/m²)

TEMPERATURE COEFFICIENTS

| | | | | | | | |
|--------------------------------------|----------|-------|-------|--------------------------------------|---------|-------|-----------------------|
| Temperature Coefficient of i_{SC} | α | [%/K] | +0.04 | Temperature Coefficient of V_{OC} | β | [%/K] | -0.27 |
| Temperature Coefficient of P_{MPP} | γ | [%/K] | -0.34 | Nominal Module Operating Temperature | NMOT | [°F] | 109 ± 5.4 (43 ± 3 °C) |

PROPERTIES FOR SYSTEM DESIGN

| | | | | |
|--|----------|------------------------------|---|---|
| Maximum System Voltage V_{sys} | [V] | 1000 (IEC) / 1000 (UL) | PV module classification | Class II |
| Maximum Series Fuse Rating | [A DC] | 20 | Fire Rating based on ANSI / UL 61730 | TYPE 2 |
| Max. Design Load, Push / Pull ¹ | [lbs/ft] | 75 (3600 Pa) / 55 (2660 Pa) | Permitted Module Temperature on Continuous Duty | -40 °F up to +185 °F (-40 °C up to +85 °C) |
| Max. Test Load, Push / Pull ² | [lbs/ft] | 113 (5400 Pa) / 84 (4000 Pa) | | |

¹ See Installation Manual

QUALIFICATIONS AND CERTIFICATES

UL 61730, CE compliant,
Quality Controlled PV - TUV Rheinland,
IEC 61215/2016, IEC 61730/2016,
U.S. Patent No. 9,803,215 (patent cell),
GCRV Certification ongoing



Note: Installation instructions must be followed. See the installation and operating manual or contact our technical service department for further information on approved installation and use of this product.

Hanwha Q Cells America Inc.

400 Spectrum Center Drive, Suite 1400, Irvine, CA 92618, USA | TEL +1 949 746 50 06 | EMAIL inquiry@us.qcells.com | WEB www.q-cells.us

Horizontal 76.4 in 43.3 in 48.0 in 105.6 lbs 24 24 32

packaging 1940 mm 1100 mm 1220 mm 793 kg pallets pallets pallets modules



Planning and Land Use Services
2 Fairgrounds Road, Nantucket, Massachusetts 02554
Telephone: 508.325.7587, Fax: 508.228.7298
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/Nantucket/MA/>.
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. 3-1/2" 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/acrobat/>; this is free software that may have come pre-installed 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 (1 copy): 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. (initial to indicate read and understand)
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.
8. Abutler 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 Scorsset Historic Core where the requirement for new construction is 100 square feet.
9. Approvals from Planning Board, Zoning Board of Appeals, Conservation Commission etc.