

Application to the HISTORIC DISTRICT COMMISSION, Nantucket, Massachusetts, for a

CERTIFICATE OF APPROPRIATENESS

for structural work.

All blanks must be filled in using BLUE OR BLACK INK (no pencil) or marked N/A.

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°: 43 PARCEL N°: 5
Street & Number of Proposed Work: 7 Shawkemo Road
Owner of record: Blacebridge Young
Mailing Address: 35 Wykeham Road
Newtown, MA 02465
Contact Phone #: 508-221-0231 E-mail: pat@ericsquebu.com

AGENT INFORMATION (if applicable)

Name: Timothy Holmes / SunWind LLC
Mailing Address: PO Box 700
Brewster, MA 02631
Contact Phone #: 781-246-6350 E-mail: THolmes@sunwindllc.com

FOR OFFICE USE ONLY

Date application received: _____ Fee Paid: \$ _____
Must be acted on by: _____
Extended to: _____
Approved: _____ Disapproved: _____
Chairman: _____
Member: _____
Member: _____
Member: _____
Member: _____

Notes - Comments - Restrictions - Conditions

DESCRIPTION OF WORK TO BE PERFORMED

See reverse for required documentation.

- 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 (Zoning District _____) Roof Other Ground Mount Solar Array (not visible)
- 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

Historic Name: _____
Original Date: _____ (describe)
Original Builder: _____
Is there an HDC survey form for this building attached? Yes N/A

- REVISIONS***
1. East Elevation
 2. South Elevation
 3. West Elevation
 4. North Elevation

*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.) _____

Fence: Height: _____
Type: _____
Length: _____

Solar Panels
Skylights (flat only): Manufacturer LG All Black Rough Opening 3'-3" x 5'-6" Size _____ Location _____
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 September 20, 2021 Signature of owner of record Timothy Holmes

Signed under penalties of perjury



HISTORIC DISTRICT COMMISSION

2 Fairgrounds Road
Nantucket, Massachusetts 02554

Telephone: 508.325.7587

Email: hdcsubmissions@nantucket-ma.gov

COMMISSIONERS

Ray Pohl
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John McLaughlin

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STAFF

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

Waiver of the HDC 10 Day Hearing Requirement

I _____ Timothy Holmes President SunWind, LLC _____

AS AGENT FOR _____ Bracebridge Young _____

STREET ADDRESS _____ 7 Shawkemo Road _____

MAP/PARCEL _____ 43 - 5 _____

UNDERSTAND THAT THE ABOVE REFERENCED APPLICATION SUBMITTED ON

_____ September 20, 2021 _____

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.

Timothy Holmes

Signature

9-20-2021

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: Bracebridge Young
7 Shawkemo Road
Nantucket, MA 02554

Assessors Map Number: 43
Lot Number: 5

Property ID: 2346

Year Built: 1996

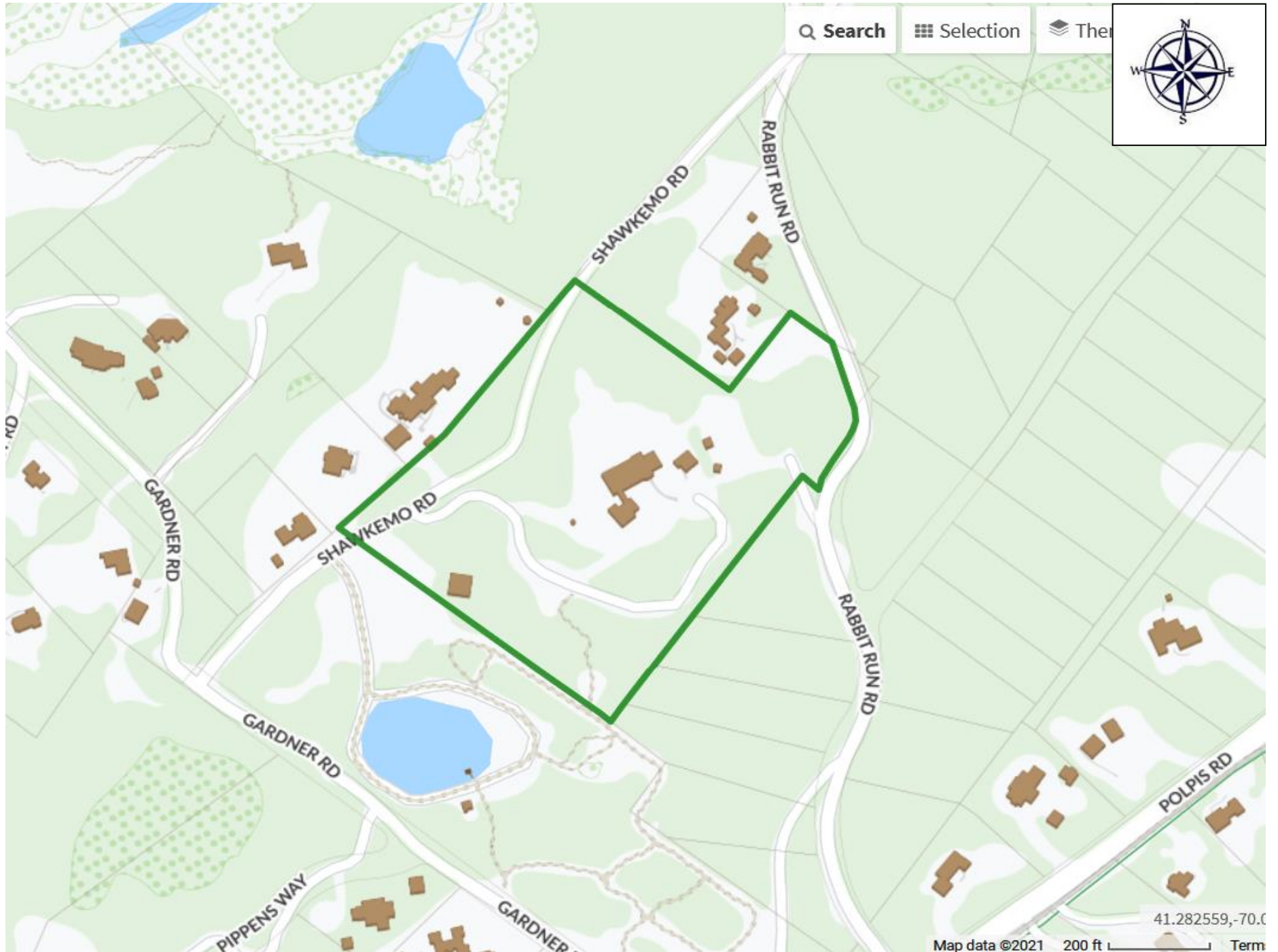
Use: 1090

Description: Multi Houses MO1

Zone: LUG3

Property Size: .45 Acres

Locus Map of 7 Shawkemo Road



7 Shawkemo Road Nantucket MA 02554



4 solar arrays with 60 panels per array 13' x 83' each (1,080 SF each)

The Solar Array will not be visible from any public road or traveled way

LG NeON[®] 2 Black

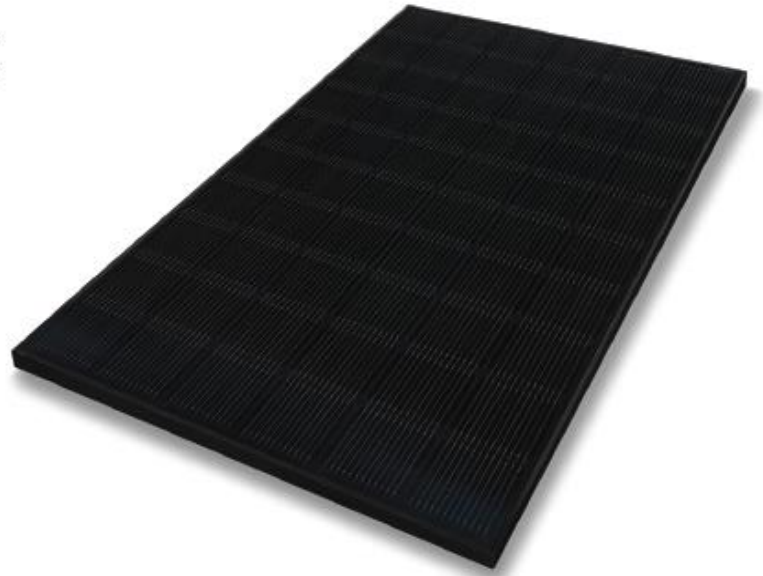
LG375N1K-A6



60

375W

The LG NeON[®] 2 is LG's best selling solar module and one of the most powerful and versatile modules on the market today. The cells are designed to appear all-black at a distance, and the performance warranty guarantees 90.6% of labeled power output at 25 years.



Features



Enhanced Performance Warranty

LG NeON[®] 2 Black has an enhanced performance warranty. After 25 years, LG NeON[®] 2 Black is guaranteed at least 90.6% of initial performance.



25-Year Limited Product Warranty

The NeON[®] 2 Black is covered by a 25-year limited product warranty. In addition, up to \$450 of labor costs will be covered in the rare case that a module needs to be repaired or replaced.



Solid Performance on Hot Days

LG NeON[®] 2 Black performs well on hot days due to its low temperature coefficient.



Roof Aesthetics

LG NeON[®] 2 Black has been designed with aesthetics in mind using thinner wires that appear all black at a distance.

When you go solar, ask for the brand you can trust: LG Solar

About LG Electronics USA, Inc.

LG Electronics is a global leader in electronic products in the clean energy markets by offering solar PV panels and energy storage systems. The company first embarked on a solar energy source research program in 1985, supported by LG Group's vast experience in the semi-conductor, LCD, chemistry and materials industries. In 2010, LG Solar successfully released its first MonoX[®] series to the market, which is now available in 32 countries. The NeON[®] (previous MonoX[®] NeON), NeON[®]2, NeON[®]2 Bifacial won the "Intersolar AWARD" in 2013, 2015 and 2016, which demonstrates LG's leadership and innovation in the solar industry.



General Data

| | |
|----------------------------------|--------------------------------|
| Cell Properties (Material/Type) | Monocrystalline/N-type |
| Cell Maker | LG |
| Cell Configuration | 60 Cells (6 x 10) |
| Module Dimensions (L x W x H) | 1,740mm x 1,042mm x 40mm |
| Weight | 18.6 kg |
| Glass (Material) | Tempered Glass with AR Coating |
| Backsheet (Color) | White |
| Frame (Material) | Anodized Aluminium |
| Junction Box (Protection Degree) | IP 68 with 3 Bypass Diodes |
| Cables (Length) | 1,100mm x 2EA |
| Connector (Type/Maker) | MC 4/MC |

Certifications and Warranty

| | |
|-------------------------------|---|
| Certifications* | IEC 61215-1/-1-1/2 : 2016, IEC 61730-1/2 : 2016, UL 61730-1 : 2017, UL 61730-2 : 2017 |
| | ISO 9001, ISO 14001, ISO 50001 |
| | OHSAS 18001 |
| Salt Mist Corrosion Test | IEC 61701:2012 Severity 5 |
| Ammonia Corrosion Test | IEC 62716 : 2013 |
| Module Fire Performance | Type 1 (UL 61730) |
| Fire Rating | Class C (UL 790, UL/ORD C 1703) |
| Solar Module Product Warranty | 25 Year Limited |
| Solar Module Output Warranty | Linear Warranty* |

*Improved 1st year 98.5%, from 2-24th year: 0.33%/year down, 90.6% at year 25
 **In Progress

Temperature Characteristics

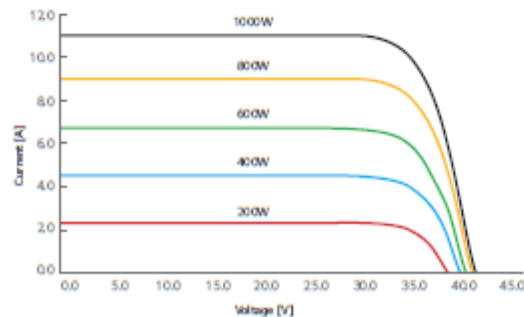
| | | |
|-------|--------|--------|
| MMOT* | [°C] | 42 ± 3 |
| Pmax | [%/°C] | -0.34 |
| Voc | [%/°C] | -0.26 |
| Isc | [%/°C] | 0.03 |

*MMOT (Nominal Module Operating Temperature): Irradiance 800 W/m², Ambient temperature 20°C, Wind speed 1 m/s, Spectrum AM 1.5

Electrical Properties (NMOT)

| Model | | LG370N1C-A6 | LG375N1C-A6 | LG380N1C-A6 |
|-----------------------------|-----|-------------|-------------|-------------|
| Maximum Power (Pmax) | [W] | 277 | 281 | 285 |
| MPP Voltage (Vmpp) | [V] | 32.8 | 33.2 | 33.5 |
| MPP Current (Impp) | [A] | 8.45 | 8.48 | 8.49 |
| Open Circuit Voltage (Voc) | [V] | 39.3 | 39.4 | 39.4 |
| Short Circuit Current (Isc) | [A] | 9.09 | 9.13 | 9.16 |

I-V Curves



Electrical Properties (STC*)

| Model | | LG370N1C-A6 | LG375N1C-A6 | LG380N1C-A6 |
|-----------------------------------|-----|-------------|-------------|-------------|
| Maximum Power (Pmax) | [W] | 370 | 375 | 380 |
| MPP Voltage (Vmpp) | [V] | 34.9 | 35.3 | 35.7 |
| MPP Current (Impp) | [A] | 10.61 | 10.63 | 10.65 |
| Open Circuit Voltage (Voc, ± 5%) | [V] | 41.7 | 41.8 | 41.9 |
| Short Circuit Current (Isc, ± 5%) | [A] | 11.31 | 11.35 | 11.39 |
| Module Efficiency | [%] | 20.4 | 20.7 | 21.0 |
| Bifaciality Coefficient of Power | [%] | 10 | | |
| Power Tolerance | [%] | 0 ~ +3 | | |

*STC (Standard Test Condition): Irradiance 1000W/m², cell temperature 25°C, AM 1.5

Operating Conditions

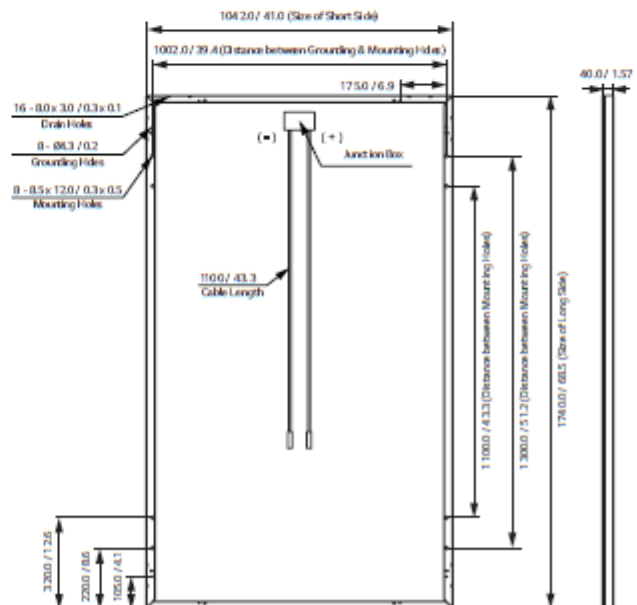
| | | |
|-------------------------------|----------|-----------|
| Operating Temperature | [°C] | -40 ~ +85 |
| Maximum System Voltage | [V] | 1,000 |
| Maximum Series Fuse Rating | [A] | 20 |
| Mechanical Test Load* (Front) | [Pa/psf] | 5,400 |
| Mechanical Test Load* (Rear) | [Pa/psf] | 4,000 |

*Based on IEC 61215-2 : 2016 (Test Load = Design Load x Safety Factor (1.5))
 Mechanical Test Loads 6,000Pa / 5,400Pa based on IEC 61215 : 2005

Packaging Configuration

| | | |
|--------------------------------------|------|-----------------------|
| Number of Modules per Pallet | [EA] | 25 |
| Number of Modules per 40' Container | [EA] | 650 |
| Number of Modules per 53' Container | [EA] | 850 |
| Packaging Box Dimensions (L x W x H) | [mm] | 1,790 x 1,120 x 1,213 |
| Packaging Box Dimensions (L x W x H) | [in] | 70.5 x 44.1 x 47.8 |
| Packaging Box Gross Weight | [kg] | 500 |
| Packaging Box Gross Weight | [lb] | 1,102 |

Dimensions (mm/inch)





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/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/acrobat/>; 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 1/4-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. 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. 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.

(initial to indicate read and understand)