



TOWN OF NISKAYUNA

NY State Unified Solar Permit Application

One Niskayuna Circle, Niskayuna NY 12309

Phone: 518-386-4522 Fax: 518-386-4592

Email: buiding@niskayuna.org

The Town of Niskayuna has adopted the NYS Unified Solar Permit Application in order to streamline solar installations for its residents while providing consistent and thorough review of solar photovoltaic (PV) permitting applications and installations. Upon approval of this application and supporting documentation, the Town of Niskayuna will issue a building permit for the solar PV installation described herein.

ADDRESS

Address of Installation _____

Building Permit # _____

Project Value _____

PROJECT ELIGIBILITY FOR UNIFIED PERMITTING PROCESS

In order to be eligible for the unified permitting process, the proposed solar PV installation system must meet the established eligibility criteria below. By submitting this application, the applicant attests that the proposed project:

- Yes No 1. Has a rated DC capacity of 25 kW or less.
- Yes No 2. Is not subject to review by an Architectural or Historical Review Board.
(If review has already been issued answer YES and attach a copy)
- Yes No 3. Does not need a zoning variance or special use permit.
(If variance or permit has already been issued answer YES and attach a copy)
- Yes No 4. Is mounted on a permitted roof structure or a legal accessory structure, or is ground mounted on the applicant's property. (If proposed system is mounted on a legal accessory structure, a diagram showing the existing electrical connection to structure must be attached).
- Yes No 5. Has a Solar Installation Contractor who complies with all licensing and other requirements of the Town of Niskayuna and the State of New York.
- Yes No 6. Proposes to mount solar panels parallel to the roof surface if the structure is a sloped roof

If the answer is "No" to any of the eligibility criteria above, the project is not eligible for the Unified Solar Permit and must be processed through a conventional Building Permit application to the Town of Niskayuna. Building Permit applications may be downloaded at <http://www.niskayuna.org/building-inspector/pages/downloadable-forms> or obtained in person in the Niskayuna Building Department (One Niskayuna Circle, Niskayuna NY, 12309) Monday – Friday from 8 a.m. to 5 p.m.

SUBMITTAL INSTRUCTIONS

For projects meeting the eligibility criteria, the following documents will constitute an acceptable Unified Solar Permit Application package:

- This NY State Unified Solar Permit Application form, with all fields completed and bearing relevant signatures.
- A Town of Niskayuna Building and Zoning Permit to accompany this Application form.
- Required Construction Documents for the solar PV system type being installed (see Supplemental Instructions)

Completed permit applications can be submitted to the Town of Niskayuna Building Department *in person* at One Niskayuna Circle, Niskayuna NY 12309 or *via email* to building@niskayuna.org.

Permitting fees are due upon issuance of permit. Fees can be in the form of cash or check. Checks should be made payable to Town of Niskayuna.

APPLICATION REVIEW TIMELINE

The Town of Niskayuna will provide feedback within 14 calendar days of receiving incomplete or inaccurate applications. Permit determinations will usually be issued within 10-14 calendar days upon receipt of complete and accurate applications.

FOR FURTHER INFORMATION

Questions about this permitting process may be directed to Niskayuna Building Department at 518-386-4522.

PROPERTY OWNER

Property Owner's First Name Last Name Title

Property Address

City State Zip

Section Block Lot Number

EXISTING USE

Single Family 2-4 Family Commercial Other

PROVIDE THE TOTAL SYSTEM CAPACITY RATING (SUM OF ALL PANELS)

Solar PV System: _____ kW DC

SELECT SYSTEM CONFIGURATION

Make sure your selection matches the Construction Documents included with this application.

- | | |
|--|--|
| <input type="checkbox"/> Supply side connection with microinverters | <input type="checkbox"/> Load side connection with DC optimizers |
| <input type="checkbox"/> Supply side connection with DC optimizers | <input type="checkbox"/> Load side connection with microinverters |
| <input type="checkbox"/> Supply side connection with string inverter | <input type="checkbox"/> Load side connection with string inverter |

SOLAR INSTALLATION CONTRACTOR & ELECTRICIAN

Contractor Business Name

Contractor Business Address City State Zip

Contractor Contact Name Phone Number

Contractor License Number(s) Contractor Email

Electrician Business Name

Electrician Business Address City State Zip

Electrician Contact Name Phone Number

Electrician License Number(s) Electrician Email

SIGNATURES

Both the homeowner and the prime Installer must sign below to affirm that all answers are correct and that this permit meets all the conditions and requirements of the NYS Unified Solar Permit.

Property Owner's Signature Date

Solar Installation Company Representative Signature Date



TOWN OF NISKAYUNA

NY State Unified Solar Permit Application SUPPLEMENTAL INSTRUCTIONS

The information below is published to guide applicants through the NYS Unified Solar Permit Application process for solar photovoltaic (PV) projects 25 kW in size or smaller. This supplement provides information about the requirements for plan review, required fees, and inspections.

PERMITS AND APPROVALS REQUIRED

The following permits are required *prior* to installation of a solar PV system with a nameplate DC power output of 25 kW or less:

- a) Unified Solar Permit
- b) Town of Niskayuna Building and Zoning Permit

Planning review is not required for solar PV installations of this size.

Fire Department approval is not required for solar PV installations of this size.

SUBMITTAL REQUIREMENTS

In order to submit a complete permit application for a new solar PV system, the applicant must include:

- a) A Completed NY State Unified Solar Permit Application form which includes confirmed eligibility for the Unified Solar Permitting process (pages 1 & 2 of this document).
- b) A Completed Town of Niskayuna Building and Zoning Permit Application.
- c) Construction Documents, with listed attachments. Construction Documents must be stamped and signed by a New York State Registered Architect or New York State Licensed Professional Engineer.

The Town of Niskayuna, through adopting the Unified Solar Permitting process, requires contractors to provide construction documents, such as the examples included in the Understanding Solar PV Permitting and Inspecting in New York State document. Should the applicant wish to submit Construction Documents in another format, ensure that the submittal includes the following information:

- Manufacturer/model number/quantity of solar PV modules and inverter(s).
 - String configuration for solar PV array, clearly indicating the number of modules in series and strings in parallel (if applicable).
 - Combiner boxes: Manufacturer, model number, NEMA rating.
 - From array to the point of interconnection with existing (or new) electrical distribution equipment: identification of all raceways (conduit, boxes, fittings, etc.), conductors and cable assemblies, including size and type of raceways, conductors, and cable assemblies.
 - Sizing and location of the EGC (equipment grounding conductor).
 - Sizing and location of GEC (grounding electrode conductor, if applicable).
 - Disconnecting means of both AC and DC including indication of voltage, ampere, and NEMA rating.
 - Interconnection type/location (supply side or load side connection)
 - For supply side connections only, indication that breaker or disconnect meets or exceeds available utility fault current rating kAIC (amps interrupting capacity in thousands).
 - Ratings of service entrance conductors (size insulation type AL or CU), proposed service disconnect, and overcurrent protection device for new supply side connected solar PV system (reference NEC 230.82, 230.70).
 - Rapid shutdown device location/method and relevant labeling.
- d) For Roof Mounted Systems: A roof plan showing roof layout, solar PV panels and the following fire safety items: approximate location of roof access point, location of code-compliant access pathways, code exemptions, solar PV system fire classification, and the locations of all required labels and markings.
 - e) Construction drawings with the following information:
 - The type of roof covering and the number of roof coverings installed.
 - Type of roof framing, size of members, and spacing.
 - Weight of panels, support locations, and method of attachment.

- Framing plan and details for any work necessary to strengthen the existing roof structure.
 - Site-specific structural calculations.
- f) Where an approved racking system is used, provide documentation showing manufacturer of the racking system, maximum allowable weight the system can support, attachment method to roof or ground, and product evaluation information or structural design for the rack.

PLAN REVIEW

Permit applications can be submitted to the Town of Niskayuna Building Department *in person* at One Niskayuna Circle, Niskayuna NY 12309 or *via email* to building@niskayuna.org

FEES

Residential Permit Fees are a minimum of \$50 for projects valuing \$1000 or less. For projects over \$1000 in value, the permit fee is \$50 for the first \$1000 value and \$10 for every \$1000 of additional value (for example a \$9000 installation would be \$50 + \$80, or a \$130 permit fee).

Commercial Permit Fees are a minimum of \$100 for projects valuing \$1000 or less. For projects over \$1000 in value, the permit fee is \$100 for the first \$1000 value and \$10 for every \$1000 of additional value (for example a \$9000 installation would be \$100 + \$80, or a \$180 permit fee).

The Building Department usually calculates the fee after the permit has been submitted and collects payment once the permit is approved and ready to be issued.

INSPECTIONS

Once all permits to construct the solar PV installation have been issued and the system has been installed, it must be inspected before final approval is granted and the Building Permit can be closed.

On-site inspections can be scheduled by contacting the Town of Niskayuna Building Department by telephone at 518-386-4522. Inspection requests received during normal business hours are typically scheduled for the same or next business day. If a next business day inspection is not available, inspections will be scheduled within a five-day window.

A third party Electrical Inspection must be performed prior to scheduling a final inspection with the Town of Niskayuna. The results of the Electrical Inspection must be sent to the Town of Niskayuna Building Department (building@niskayuna.org) or the Building Permit will not be closed out and renewal fees will apply.

In order to receive final approval, the following inspections are required:

1. Rough Framing/ Electrical

During a rough framing/electrical inspection (if required), the applicant must demonstrate that the work in progress complies with relevant codes and standards. The purpose of the rough inspection is to allow the inspector to view aspects of the system that may be concealed once the system is complete, such as:

- Framing requirements for support of PV system.
- Wiring concealed by new construction.
- Portions of the system that are contained in trenches or foundations that will be buried upon completion of the system.

The Town of Niskayuna will perform a rough framing inspection, if required. The Town does not perform Electrical Inspections. It is the responsibility of the applicant to contact a third party Electrical Inspector for a Rough Electrical Inspection before the components are buried or concealed and to provide safe access (including necessary climbing and fall arrest equipment) to the inspector.

2. Final Electrical

The applicant must contact a third party Electrical Inspector and the Town of Niskayuna Building Department when ready for a final inspection. During this inspection, the inspector will review the complete installation to ensure compliance with codes and standards, as well as confirming that the installation matches the records included with the permit application. The applicant must have ready, at the time of inspection, the following materials and make them available to the inspector:

- Final Electrical Inspection Report
- Copies of as-built drawings and equipment specifications, if different than the materials provided with the application.

- Photographs of key hard to access equipment, including;
 - Example of array attachment point and flashing/sealing methods used.
 - Opened rooftop enclosures, combiners, and junction boxes.
 - Bonding point with premises grounding electrode system.
 - Supply side connection tap method/device.
 - Module and microinverter/DC optimizer nameplates.
 - Microinverter/DC optimizer attachment.

The Town of Niskayuna has available for reference the Understanding Solar PV Permitting and Inspecting in New York State document, found here: <http://www.niskayuna.org/building-inspector/pages/downloadable-forms>.

The inspection checklist provides an overview of common points of inspection that the applicant should be prepared to show compliance. Common checks include the following:

- Number of solar PV modules and model number match plans and specification sheets number match plans and specification sheets.
- Array conductors and components are installed in a neat and workman-like manner.
- Solar PV array is properly grounded & secured.
- Electrical boxes and connections are suitable for environment.
- Array is fastened and sealed according to attachment detail.
- Conductor’s ratings and sizes match plans.
- Appropriate signs are properly constructed, installed and displayed, including the following:
 - Sign identifying PV power source system attributes at DC disconnect.
 - Sign identifying AC point of connection.
 - Rapid shutdown device meets applicable requirements of NEC 690.12.
- Equipment ratings are consistent with application and installed signs on the installation, including the following:
 - Inverter has a rating as high as max voltage on PV power source sign.
 - DC-side overcurrent circuit protection devices (OCPDs) are DC rated at least as high as max voltage on sign.
 - Inverter is rated for the site AC voltage supplied and shown on the AC point of connection sign.
 - OCPD connected to the AC output of the inverter is rated at least 125% of maximum current on sign and is no larger than the maximum OCPD on the inverter listing label.
 - Sum of the main OCPD and the inverter OCPD is rated for not more than 120% of the buss bar rating.

UNIFIED SOLAR PERMITTING RESOURCES

The jurisdiction has adopted the New York Unified Solar Permit process.

It is recommended to review the “Understanding Solar PV Permitting and Inspecting in New York State” document, which includes sample construction documents, inspection checklists, design review checklists, and a labelling guide.

DEPARTMENTAL CONTACT INFORMATION

For additional information regarding this permit process, please consult our departmental website at <http://www.niskayuna.org/building-inspector/pages/downloadable-forms> or contact the Town of Niskayuna Building Department at 518-386-4522.

