



New York City Solar PV Standardized Checklist of Filing Materials

[NYSolar Smart](#) is a strategic effort led by Sustainable CUNY, of the City University of New York (CUNY), which is supported by the U.S. Department of Energy SunShot Initiative Rooftop Solar Challenge as well as the NY-Sun Initiative. Under these initiatives, Sustainable CUNY worked with the Department of Buildings (DOB), Fire Department (FDNY), Con Edison, and New York State Energy Research and Development Authority (NYSERDA) to provide this comprehensive list of forms and materials that solar PV installers will need to submit in order to navigate the permitting and interconnection processes in NYC.

Each item on the checklist is listed according to the agency that requires it. The left column of each table provides the item required for filing, while the middle “Helpful Tips” column provides additional details. The “Signed By” column lists who must sign each form. Not all forms are required for every project, and there are likely additional forms required that are project specific. Some exceptions are noted in the header of the left column of each table. Where available, a link is provided to the agency page with an online version of the form.

NYC Department of Buildings

The DOB segment below includes checklists for four processes: (1) Licensing Requirements necessary to operate in New York City, (2) Construction Permit, required before beginning installation, (3) Construction Sign-off, required following the completion of the installation, and (4) Electrical Permit, required before beginning installation. In general, filing can be done in person at a DOB Borough Office or online through the [NYC Development Hub](#). Projects filing for the Property Tax Abatement (PTA) must be filed through the Development Hub Professional Certification of Objections process.

NYC Licensing Checklist	
Requirements	Helpful Tips
NYC General Contractor License	General Liability, Disability, and Workers’ Compensation Insurance are required. Certificates of insurance must be submitted to DOB’s licensing unit and an Insurance Tracking Number obtained prior to applying for the NYC General Contractor License.
NYC Master Electrician	Required to submit electrical permits for solar PV. The NYC Master Electrician must work for a registered NYC Electrical Firm. Please see the NYC Electrical Code for requirements.
NYC Master Plumber	Required to submit plumbing permits for solar thermal
New York State Registered Architect or Professional Engineer	Required to submit building permits and FDNY variances. Considered applicant of record. Anyone can prepare applications, but license numbers and seals are required on forms and officially submit to DOB & FDNY.
NYC Certified Asbestos Investigator	The NYC DEP requires a Certified Asbestos Investigator to verify if there is asbestos containing material (ACM) in the area construction is taking place unless the building was built per plans approved after April 1, 1987. The asbestos forms must be submitted through ARTS (Asbestos Reporting and Tracking System), and signed/sealed by the Certified Asbestos Investigator. See Title 15, Chapter 1 Rules of the City of New York
NYC Registered Special Inspector and Special Inspector Agency	In order to complete the TR1 and TR8, a Special Inspector must sign them and inspect the installation to make sure it complies with the code items selected on the forms. PE’s and RA’s often hold this registration. The Special Inspector must also work for a Registered Special Inspector Agency. IMPORTANT – Special Inspectors cannot work for the general contractor. They must be a third party.
Home Improvement Contractor & Home Improvement SalesPerson Licenses	The NYC Department of Consumer Affairs issues HIC and HIS licenses. HIC licenses are required for a person or business engaged in the construction, repair, remodeling, or addition to any land or building used as a residence (1, 2, 3, or 4 family dwelling or individual unit/condo in a multiple dwelling). HIS licenses are required for every individual who negotiates a home improvement contract with a property owner. .

DOB Construction Permit Checklist		
Required For Most Projects	Helpful Tips	Signed By
PW1 – Plan/Work Approval	Specific project zoning information, block, and lot numbers needed to complete this form can be found on ZoLa (Zoning and Land Use Map) or BIS. If e-filing, it is automatically generated and the AOS1 is signed instead of the PW1. PW1 User Guide .	Owner & PE/RA (NA if e-filing, use AOS1)
PW2 – Work Permit Application	Can submit with the PW1 with all other plan application documents or after PW1 is approved and you want the work permit issued. Usually, the contractor signs the PW2 and it is notarized. If the PE/RA signs, they do not need notarization but they do need insurances.	Contractor & Notary or PE/RA
PW3 – Cost Estimate	Application fees are based on construction and system costs. Item 7 does not need to be notarized until the Final PW3 during construction-sign off.	Owner & PE/RA
TR1 – Technical Report: Statement of Responsibility	Complete sections: ‘Structural Stability’, ‘Fire Stop/Resistant’, ‘Energy Progress Inspections’, and ‘Final.’ ‘Flood Zone Compliance’ is applicable if in a Special Flood Hazard Area. Use 3B column. Must complete Special Inspection Agency Number field, which is a certification the PE/RA may have.	PE/RA, may need Owner
TR8 – Technical Report: Statement of Responsibility	Typically ‘Air Sealing and Insulation – Visual’ section needs to be completed for solar. Use 3B column.	PE/RA
EF1 -- E-filing Job Application Cover Sheet	Generated through e-filing system	None
Asbestos Abatement Form More info on Asbestos Rules and Regulations	Asbestos documents must be submitted to DEP (Dept. of Environmental Protection) through ARTS by Certified Asbestos Investigators. Once approval is received, the document with a DEP seal must be submitted to DOB. <ul style="list-style-type: none"> • ACP7/ACP21 - There is asbestos containing material (ACM) where construction work will occur. <i>“An asbestos project is defined as any form of work that will disturb more than 25 linear feet or more than 10 square feet of asbestos containing material.”</i> A licensed Asbestos Abatement Handler must be hired to remediate it. The ACP7 is submitted to DEP through ARTS. After removal, DEP will issue an ACP21 completion letter which will be submitted to DOB • ACP5 -Minor Project-asbestos could be on the property but work does not disturb more than 25 linear feet or 10 sq. feet (most common) • Exemption - If the building was constructed per plans approved on or after April 1, 1987, the project is exempt and no form is required These forms do not count as the survey. The Certified Asbestos Investigator must keep on record official reports (Survey requirements).	Certified Asbestos Investigator
Architectural Drawings & Electrical Diagram *The elements in the notes are generally required by DOB and FDNY. Multiple items/drawings can be shown on the same page or additional pages depending on designer preference.	Drawings must be signed & sealed by a PE/RA on every page. There are DOB Drawing Standards for title blocks, notes and Plan Examination Guidelines , that include a more comprehensive list of requirements than the following. Plot/Site Plan: identify all required unobstructed access points and clear paths per NYC Fire Code and identify any components which pre-existing components are not compliant. If applying for a FDNY variance, use (1) to indicate unobstructed Rooftop Access Locations and Landings, (2) Clear Path Clearances, (3) Rooftop Door Opening, (4) Fire Escape Clearances. - Show: all existing and proposed equipment, adjoining building outlines and heights, roof covering and drainage work, pertinent trees, structures, city services, utilities, and other potential hazards on the building/site. Roof Plan: Show the modules in place, other equipment and structures, pertinent to or having impact on code compliance of the system whether or not related to solar system. Specified dimensions are important. - Show meter location, AC disconnect, inverter, compass, and dimensions - Show structural work if reinforcement is necessary to sustain added loads - Show the foundation and/or anchorage of the solar system (racking) Structural & Wind Analysis: Acknowledge the support frame and structural connections are designed to resisting wind forces and the roof is capable of	PE/RA

DOB Construction Permit Checklist		
Required For Most Projects	Helpful Tips	Signed By
	<p>supporting the solar system load.</p> <p>Elevation/Zoning View: show building and panel height. The NYC Zoning Resolution details rules on panel height depending on the zoning district.</p> <p>Electrical Diagram: See Con Edison requirements</p> <p>Tenant Protection Plan: If the building will be occupied as a dwelling unit during construction, specific note statements must be detailed for egress, safety, noise restrictions, etc. per NYC Administrative Code Section 28-104.8.4. <i>(These statements are not required for 1-2 single family homes).</i></p> <p>Energy Analysis: Solar is not exempt from the NYC Energy Conservation Code (NYCECC) except for non-PTA projects and installs that do not drill holes in the roof or affect other items in the NYCECC. An analysis must be shown in the plan notes listing the elements affecting the energy code like IA6 penetrating the building envelope. Please read the code for an example format to put on the plans. The following statement must be indicated on the plans, <i>"To the best of my knowledge, belief, and professional judgment this application is in compliance with the NYCECC."</i></p> <p>Flood Zones: If project is in a Special Flood Hazard Area demonstrate compliance with Appendix G of the NYC Building Code. All new equipment must be installed above the flood line (Design Flood Elevation).</p>	
Sometimes Required	Helpful Tips	Signed By
PTA4 – Property Tax Abatement (preliminary)	For projects requesting the PTA. On the preliminary PTA4 skip: section 3, section 8, and signatures	Not required
FDNY Variance Approval Letter	If variance to Fire Code requested and approved, submit approval letter	FDNY
AOS1 – Professional / Owner Signature	Development Hub Full Service and PTA projects only. Automatically generated through e-filing. If used, the PW1 does not need to be signed.	Owner & PE/RA
POC1 – Professional & Owner Certification	Professionally certified application process only	Owner & PE/RA
PC1 – Required Items Checklist	Professionally certified application process only	PE/RA
PW1B – Schedule B Plumbing, Sprinkler, Standpipe	Required for solar thermal only	PE/RA
Plumbing Riser Diagram	Required for solar thermal only	PE/RA

DOB Construction Sign-Off Checklist		
Required for All Projects	Helpful Tips	Signed By
	<i>*These must be submitted to Borough Office if non-PTA project.</i>	
PW7 – Letter of Completion Folder Review Request	Section 2 - enter PE, RA, or filing representative's info depending on who signs the form. Section 3 - select the first box "Letter of Completion."	PE/RA or filing rep
Final PW3 – Cost Affidavit	Re-submit PW3 with final cost even if costs did not change from original PW3 submission. Notary of owner signature is required on the Final PW3.	Notary, Owner & PE/RA
Final TR1 -- Technical Report	Complete sections: Structural Stability, Fire Stop/Resistant, Energy Progress Inspections, and Final. Flood Zone Compliance is applicable if in a Special Flood Hazard Area. Use 3C column.	Owner & PE/RA
Final TR8 -- Technical Report	Complete: Air Sealing & Insulation - Visual, Use 3C column	PE/RA
Final PTA4 -- Property Tax Abatement (PTA projects only)	All fields and dates must be completed on the Final. Section 8 is the date of utility final acceptance of interconnection or the electrical inspection pass/sign-off date, whichever is later (both must be complete before submitting construction sign-off request). kW on the plans must match kW on Section 9. Section 10E should not include the 30% Federal Tax Credit. The PW3 Section 3 cost must match Section 10C of the Final PTA4.	Owner & PE/RA

DOB Construction Sign-Off Checklist		
Utility Interconnection Letter (PTA only)	Submit copy of Final Letter of Acceptance from utility or PDF of the email stating permission to operate the system	
EN2 – Energy Analysis	The EN2 is a required item unless the project is exempt from the NYCECC (NYC Energy Conservation Code). This information will need to be noted on section 10 on the PW1. When penetrating the building envelope (roof), solar installations do affect the NYCECC. Exemption can only be claimed on non-PTA projects and installs that do not drill holes in the roof or affect other items in the NYCECC. By signing the form, the PE/RA certifies construction was completed per the Energy Analysis detailed on the plans.	PE/RA

DOB <i>ELECTRICAL</i> Permit Checklist		
Required for All Projects	Helpful Tips	Signed By
ED16A – Electrical Application	<p><i>*Electrical Permit filed separately than construction permit</i></p> <p>Can be submitted online using the Development Hub e-filing system. Must be filed by a licensed NYC Master Electrician. Equipment must be UL listed. The permit will be issued immediately without a plan review. If a solar PTA job, bring the approved set of plans from the Development Hub along with Equipment Specification Sheets from the manufacturers of the panels, inverters, and racking. Electrical diagrams are required to be included with the plan set submitted to the Hub on PTA jobs.</p> <p>On non-PTA jobs, electrical diagrams are not required unless over 1,000 kVA. 1,000+ kVA projects must seek Electrical Advisory Board approval before beginning construction.</p>	NYC Licensed Electrician

Permit Expiration Date Policy
Permits will expire one year from the date the permit was issued; or the expiration date of the general liability insurance policy provided to the Department’s Licensing Unit, whichever is earlier. More Information

NYC Fire Department

When materials are filed with DOB, plan examiners will check to confirm that projects comply with the NYC Fire Code. If you anticipate that a project will not be compliant with the [2014 Fire Code](#), a Fire Code variance request also known as a

modification request can be filed with FDNY. To expedite your permitting process, this should be done *before* filing with DOB. Variance request documents are listed below. For a complete explanation of the process, [see this FDNY bulletin](#).

Rooftop Access Variance Request Checklist		
Required Documents	Helpful Tips	Signed By
FDNY TM-5: Application For Rooftop Access Variance/Plan Review	Submitted by mail or in person. Section 7: It is encouraged to apply for modifications with FDNY prior to filing with DOB. If you do file with DOB first, answer yes to section 7 and attach required documentation. If you have not filed with DOB yet, answer no.	Owner & PE/RA
Original Plans detailing rooftop access pathways	3 hard copies, 11x17, submitted with engineer or architect seal. See FDNY Bulletin for Plan requirements .	PE/RA
Photographs of the existing/proposed conditions on roof top	Include photographs for each section of the roof. Each non-compliant feature must be clearly shown in a photograph. All photographs must be marked with the date the photograph was taken and plans should be marked to indicate the location and direction of the photograph.	
Narrative Description describing nature of modification	Requirements on TM5	
Certificate of Occupancy	Required for all applications, except when the C of O is not available.	
DOB Object Sheet / CCD-1 (when applicable)	Issued if DOB rejected plan set	

Existing Violations/Non-Compliant Roof Conditions
<p>Please be aware that all existing code violations or non-compliant elements in the area you are working must be resolved before starting construction on a solar system. Existing elements that are grandfathered in to newer codes must be brought into code compliance in order to complete an alteration. Some existing DOB Violations can be found on BIS (Buildings Information System) by searching for the property.</p> <p>Existing roof/building elements that are not up to the current Fire Code will need to be brought into code before or during a solar panel installation or you may request a Fire Code Variance from FDNY. Example: If the door on a parapet does not provide 6’ clear path access per the current code, because the building was built many years ago, a variance will have to be received or the parapet door reconstructed to meet current code.</p>

Con Edison

The application for utility interconnection and many of the required forms are completed online through [Con Edison’s Energy Services Project Center](#). The Project Center’s [user guide](#) provides instructions on using the online interface. Electronic

customer signatures are accepted. The documentation required to complete the process is listed below. Con Edison also maintains a short list of requirements [here](#).

Interconnection Application Checklist		
Required Documents	Helpful Tips	Signed By
Preliminary Interconnection Review (Optional Email Request)	<p>CUNY and Con Edison recommend submitting this email request prior to contracting for systems over 200kW as there could be large costs with utility grid upgrades. However, it can be completed for any system size. A brief engineering review and list of estimated costs (if any) for interconnecting a large system on the grid will be conducted by Con Edison.</p> <p>Note: For many systems over 300kW, Con Edison performs a Coordinated Electric System Interconnection Study (engineering review) after the Interconnection Application is received to complete a more intensive study on electric system impacts and the costs of solutions to overcome those system issues.</p>	
Letter of Authorization from Customer	Can be electronic through Project Center. If manually signed, scan & upload it. Customer's letterhead preferred.	Owner & Installer
Appendix A: Standardized Contract	Can be electronic through Project Center. For projects >25kW, Con Ed will ask customer to manually sign prior to final letter of acceptance issuance.	Owner
Appendix B: NYS Standardized Application for Single Phase Attachment of Parallel Generation	Can be electronic through Project Center. For projects >25kW, Con Ed will ask customer to manually sign prior to final letter of acceptance issuance.	Owner
Three Line Electrical Diagram	Include: AC kW (sum of inverter ratings), meter/account number, utility voltage, size and number of conductors including grounds, equipment location (e.g. basement, roof), inverter connection on load side of meter, (no taps in meter pan or CT cabinet allowed), AC disconnect and/or dedicated circuit breaker, drawing block with installer/customer info, and NEC labeling requirements	
Manufacturer's Data Sheet for equipment	One/Two page specification sheet for panels and inverters are sufficient. Do not need full technical manual or racking specifications.	
Application G - Application for Net Metering or Standby Service and/or Buy-Back Service	Used to select rate schedule and list Remote Net Meter satellite accounts. PV installers complete Sections 1, 2, 3, 4 & 8.	Owner
Verification of equipment certification to UL 1741	If equipment is not on PSC approved list , UL 1741 approval & in some cases NRTL test reports may be required. If the equipment is on the PSC approved list, this documentation is not required. If it is UL listed but not on the PSC approved list, the manufacturer's data sheet could be uploaded again if it shows UL 1741 rating.	
<p>After Installation:</p> <p>Manufacturer's verification test procedures (Self-Certification Form or on-site verification test)</p>	<p>Describes planned testing of equipment to verify proper settings of equipment (inverters, relays, etc).</p> <p>- For 25 kW and under: installer may perform verification test after install, complete self-certification form, and send in via e-mail or Project Center upload.</p> <p>- For 25 kW and up: inform Con Edison when installation is complete; Con Ed will schedule an on-site verification test with customer and installer.</p>	

NYSERDA

The [NY-Sun Initiative's Incentive Program](#) is administered by NYSERDA under PON 2112. It provides cash incentives for the installation of grid-connected solar PV systems. System incentives are capped at 25kW or less for residential, and 200 kW or

less for commercial sites. All application documents and samples are in PowerClerk (Partner Portal). Electronic customer signatures are accepted. The table below summarizes these requirements. For more details see [Solar PV Program Manual](#).

An energy audit and addendum to the customer agreement no longer need to be uploaded through PowerClerk. However, the applicant must complete a certification statement stating these have been completed and are on file.

NYSERDA PON 2112 Checklist		
Initial Application	Helpful Tips	Signed By
Solar PV Program Project Application Form	The application form includes annual usage history, estimated system production, as well as other project specific information, such as, components, losses, system size, and incentive amount. The application must be uploaded in PowerClerk as a .pdf file	Owner & Contractor
Utility Bill	Only required for commercial projects	
Electrical Diagram	See Con Edison requirements; A one or three line drawing is acceptable	
Site Plan	If it complies with DOB, it should be accepted by NYSERDA.	
Photos of Array Location	Photos of the array location (from the ground and roof level), photos taken looking south showing any obstructions, existing electrical service and the proposed location of the inverter and meter.	
Short Environmental Assessment Form	Required for systems exceeding 4,000 square feet by the Environmental Impact Assessment in NYS. Often applies to projects approximately 50kW or greater.	Project Sponsor/ Lead Agency
Shading Analysis	Use Solmetric Suneye, Solar Pathfinder, or other approved software	
Annual Output Estimate	Create one for each array facing different orientations and/or tilt.	
Incentive Payment Requests	Helpful Tips	Signed By
Incentive Request Form	Submit after application and change orders are approved. Supporting documents are required to be submitted with this form as one pdf. Option to submit 100% request or separate 75%/25% requests to receive a portion of the incentive sooner. The percentage of incentive requested, installer number, application number, and customer name should be listed in the email subject line and naming convention of the pdf. All attachments should be saved as a single pdf along with the incentive request form. Format: %, PV (4 digit installer # + Application #) - Name of Customer Example: 100% – 4000-29000, John Smith	Owner & Contractor
Sign-off/Interconnection Letter from utility	Con Ed will put the response on an official letter, if there is a PON referenced in the request from the installer. If Con Ed replies to an email stating the system is approved, this is considered sufficient for Con Ed purposes, but you should request an official letter to submit to NYSERDA.	
Permits	Copies of all permits, approvals, certificates, etc. must be submitted with application for non-residential systems. Residential customers may submit permits with the invoice. Construction and electrical permits are required, but not the electrical inspection certificate in Con Ed territory.	