



# **West Windsor Township**

# Residential Roof-Mounted Photovoltaic (PV) Solar System Permit Application Guidance

**West Windsor's Division of Code Enforcement** has compiled this guidance document to assist an applicant with the preparation of a residential roof-mounted PV solar system Construction Permit Application. By following the guidance provided in this document it should help to facilitate a faster permit and plan review process by reducing delays due to rejected applications.

This document contains a detailed listing of requirements that consistently represent deficiencies found in PV permit submissions. These deficiencies have created delays in the approval of Construction Permit Applications.

Please utilize the herein provided information and checklist(s) to review your application documentation to ensure the submission's completeness. This will help facilitate an efficient application processing. It is each applicant's responsibility to ensure their application is complete and accurate. It is the Code Enforcement Division's responsibility to ensure compliance with NJ Uniform Construction Code (UCC) Regulations and review the design for Code compliance.

After reviewing the included information, if you have further questions, you may contact the West Windsor Township Code Enforcement Division directly for further assistance.

Phone inquiries - 609-799-8490

Email inquiries - CodeEnforcement@WestWindsorTWP.com

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**PLEASE NOTE:** Construction **SHALL NOT** begin until an approved Construction Permit has been released from the Code Enforcement Division.

### **Prior Approvals**

#### **Explanation**

Prior Approvals represent an affirmative answer or an acknowledgment, which is granted by outside agencies and/or organizations, for the approval of a proposed construction project.

Certain outside agencies and/or organizations, outside the Code Enforcement Division, must provide their approvals *prior* to the application for, and processing, of a Construction Permit Application.

The Code Enforcement Division functions as the "flood gate" for proposed construction projects. Without perfected Prior Approvals, the Code Enforcement Division may not release, and in most cases accept for processing, a Construction Permit.

#### What is required for a PV application?

Residential roof-mounted PV solar systems require the following Prior Approval(s) in West Windsor Township. Evidence of these approvals, in paper form, must be included with the Construction Permit Application for the proposed work.

**ZONING APPROVAL** - Contact the West Windsor Township Land Use Division for questions on the Zoning permit application process.

- Phone inquiries 609-799-9448
- Email inquiries <u>LandUse@WestWindsorTWP.com</u>

#### **Required Zoning Permit Application Documents**

- Zoning Permit Application
- \$35 Application fee [check (made out to the "Township of West Windsor") or cash]
- (3) Copies of a Survey showing location of the rooftop panels
- (2) Sets of the Design Plans
- HOA APPROVAL If the residence is under the purview of an HOA, the HOA's
  written approval of the proposed project must be submitted along with the
  Zoning Permit Application.

#### **Zoning Permit Application forms may be found on the Township Website:**

Website – www.WestWindsorNJ.org

- Select Departments
- Select Land Use Planning / Zoning
- Select Zoning Forms

### **Construction Permit Application**

#### **Explanation**

The NJ Uniform Construction Code Regulations require a Construction Permit Application to be submitted using specific forms and documentation.

The **Construction Permit Application** is the "umbrella" that encompasses all the Code Enforcement Division's required submittal documentation. Residential roof-mounted PV solar systems require the following UCC forms and documentation to file for the proposed construction.

#### What is required for a PV application?

- UCC Form F100 1-2 "Construction Permit Application" and "Certification In Lieu Of Oath" Forms (1 copy of each is required)
  - UCC Form F100 1-2, this form must be filled out, in its entirety (all applicant required sections), to ensure efficient processing of the application.

Along with **UCC Form F100**, a residential roof-mounted PV solar system Construction Permit Application requires **UCC Technical Section Forms** for each of the discipline's preforming the proposed work.

The following are the **Technical Section Forms** required to be submitted with this type of application.

- UCC Form F110 Building Subcode Technical Section Form (2 copies are required)
  - The Building Technical Section Form must be completed, in its entirety (all applicant required sections), by the NJ HIC registered Contractor responsible for the proposed work.

**PLEASE NOTE:** A copy of the HIC Contractor's registration documentation must be submitted.

- UCC Form F120 Electrical Subcode Technical Section Form (2 copies are required)
  - The Electrical Technical Section Form must be completed, in its entirety (all applicant required sections), by the Electrical Contractor responsible for the proposed work.

**PLEASE NOTE:** The Electrical Technical Section Form must be signed and "raised" sealed by the responsible Electrical Contractor. The "seal" must match the applicant listed on the document and it must be a "raised" seal.

You may also access downloadable / fillable versions of the previous listed documents at the following website address:

https://www.nj.gov/dca/divisions/codes/resources/constructionpermitforms.html

• Renewable Energy Form - CRES (9-2018) – Completed and signed by the Homeowner and the Contractor.

You may also access downloadable / fillable versions of the previous listed document at the following website address:

https://www.state.nj.us/treasury/taxation/pdf/other\_forms/lpt/cres.pdf

• **Design plans** – The Construction Permit Application must also be accompanied by (2) copies of design plans and calculations. Please find further details of the design plan requirements under the "Designs" heading of this document.

**PLEASE NOTE:** Common deficiencies of these forms include the following.

- Missing cost of work information
- Conflicting cost of work information
- Incorrect or missing "counts" under "quantity" section of the forms
- Missing information regarding sizing of equipment
- Missing or not detailed enough "description of work"
- Pennsylvania or other State Design Professional seals used other than NJ licensed professionals
- UCC Form F100-2 (Certification in lieu of oath) not completed, completed incorrectly or not signed
- Electrical Technical Section form (F120) not signed and "raised" sealed by the Electrical Contractor

Copies of the above mentioned forms may be found towards the end of this guide.

### **Designs**

#### **Explanation**

The NJ Uniform Construction Code Regulations require designs for PV solar systems, prepared by a NJ Licensed Design Professional, to be submitted with the Construction Permit Application. These designs must clearly represent the proposed construction and represent compliance with all currently adopted applicable Codes and Standards.

For the purposes of this section, "designs" shall include both plans and calculations, except where specifically noted.

#### What is required for a PV application?

- All submitted designs must be signed and "raised" sealed by a NJ Registered Design Professional.
- The Electrical designs may be signed and "raised" sealed by a NJ Registered Architect
  OR, by a NJ Registered Electrical Engineer OR, for Class 3 structures [as per N.J.A.C.
  5:23-4.3A (d) 1. vi.], the designs may be signed and "raised" sealed by a Licensed NJ
  Electrical Contractor.
- West Windsor Township Code Enforcement Department requires (2) sets of the design plans and calculations to be provided.
- Design plans submitted shall be drawn to a scale and the scale shall be clearly identified on each page of the documents.
- Submitted design plans shall be of sufficient size to allow clear interpretation of the details included. Example: 8.5" x 11" paper size would not typically allow clear interpretation of details of a design for a common residential PV solar system. Commonly submitted paper sizing, acceptable for most designs, is 11 x 17 or larger.
- Design plans shall provide the Licensed Design Professional's information in the title block of the documents. (For details regarding this required information please reference UCC Bulletin 96-2 included towards the end of this guide)
- The design plans title page must include the currently adopted NJ Codes and Standards utilized for the design of the project. You may access NJ's currently adopted Codes and Standards at the following website address:

#### https://www.nj.gov/dca/divisions/codes/codreg/

PLEASE NOTE: This is not an all-inclusive list but does represent a listing of common deficiencies of submitted designs.

See the next (2) pages for discipline specific information commonly missing from the submitted design plans and details...

### **Building Subcode** (Minimum required details for plan review)

The following is a list of required design details commonly missing from the Building Subcode regulated portion of a permit submission...

#### Designs: Signed and "raised" sealed

- Indicate the design codes. (Must be currently adopted NJ Codes and Standards)
- Show the different arrays on the roof and identify each one.
- Number of panels on each array.
- Designed snow load
- Designed wind load
- Section view of the roof showing: Panel, Racking System, Flashing, Pitch of roof, Roof material, Sheathing size, Rafter or Truss size, Anchor size, spacing and embedment, etc.

#### Engineer Report / Structural Calculations: Signed and "raised" sealed

- A description of the existing roof structure including <u>all materials</u>. (This description must indicate clearly that the existing roof assembly construction is capable of withstanding the new loading of the solar panels)
- The actual calculations (Including formulas) for the following items:
  - Wind load = Code Section: (NJ Edition of 2018 IRC) R301 / ASCE 7-16 27.1.5
  - Snow load = Code Section: (NJ Edition of 2018 IRC) R301 / ASCE 7-16 7.2
  - o Anchor fastening size, spacing and embedment dimension
  - o Rafter length
  - Type of Racking System
  - o Panel type, size and amount of panels

#### **Manufacturer Specifications:**

#### **Solar Panels**

- Fire type and classification
- UL Compliance
- Installation instructions

#### Racking System

- Fire type and classification, when being used with a certain type of solar panel
- Installation instructions
- UL Compliance

#### Flashing:

Manufacturer's specifications

Please note, this list is not an all-inclusive list but does represent common deficiencies found in application submissions.

### Electrical Subcode (Minimum required details for plan review)

The following is a list of required design details commonly missing from the Electrical Subcode regulated portion of a permit submission...

#### Designs: Signed and "raised" sealed

- Indicate the design codes. (Must be currently adopted NJ Codes and Standards)
- Indicate if the system is "railed" or "rail-less"
- Clearly represent locations of all equipment
- Clearly represent conduit runs and existing service location on the building
- Type of inverter (string, micro, or A/C panels).

#### Other required documentation

• (2) Copies of the cut sheets

#### More commonly missing details... (2017 Edition of NFPA 70)

- Rapid shutdown per 690.12
- The type and size of the conduit per 690.31(G)
- The type and size of the wiring methods 690.31(A through F)
- Calculation for 690.7 maximum voltage based on lowest temperature
- Calculation for rated current, voltage, and wattage output per 690.54
- Wiring methods calculation for current per 690.8
- Temperature corrections for wiring at under or above a roof per table 310.15 (B) (3) C
- Grounding electrode conductor sizing per 690.47
- All labeling and marking 690.31(G) 3 and 4
- Interconnected power production sources bus and conductor rating per 705.12(2)
- If batteries are to be installed they shall represent compliance with section 706, in particular battery systems Article 706.10. Battery installations shall also represent compliance with UL 9540A test (test for thermal runaway fire propagation). The design plans shall represent compliance with the specified installation requirements of UL 9540A.
- If a battery system installation may be subjected to vehicular impact, the design plans shall represent compliance with Article 110.27 (B).

Please note, this list is not an all-inclusive list but does represent common deficiencies found in application submissions.

### **Required Inspections**

#### **Explanation**

The NJ Uniform Construction Code Regulations require physical inspections be performed by licensed NJ Code Officials as the work progresses and after the work is completed.

#### What is required for a PV installation?

PLEASE NOTE: No inspections will occur if the Division "released field" designs are not ON SITE at the time of inspection.

The "released" field designs that are received by the Applicant, after the permit is paid for and released from the Code Enforcement Division, are to remain ON SITE at all times during the construction of the project and until a Certificate of Approval is issued. These must be the original documents released from this Division and must include the original "released" stamps of this Division's staff.

### Required inspections are as follows...

#### ELECTRICAL INSPECTION

Trench inspection (if applicable)

**PLEASE NOTE:** The trench inspection must take place **AFTER** the excavation has been completed and **AFTER** the conduit has been installed and **BEFORE** the conduit is backfilled over. The entire run of conduit and the trench base must remain uncovered. (NO "partial" backfills)

- Rough / panel verification inspection
- Final

#### BUILDING INSPECTION

o Final

**PLEASE NOTE:** All installations will require a signed and "raised" seal report, produced by the responsible Registered Design Professional, to be provided at the final inspection. This document shall include language clearly stating the installation of the system has been "completed in strict conformance with the design and with all applicable Codes and Standards".

# **Application checklist**

☐ Zoning Permit approval
☐ HOA approval (if applicable)
☐ UCC Form F100 1-2
☐ UCC Form F110 (2 copies are required)
☐ UCC Form F120 (2 copies are required)
$\square$ (2) Copies of the signed and "raised" sealed design plans and
specifications
☐ (2) Copies of the signed and "raised" sealed Engineering
calculations

### UCC Form F100-1 and F100-2

Please see the following pages for the full size documents.

**PLEASE NOTE:** The applicant is responsible for completing sections "I", "II", "IV", "VI", and "VII" of Form F100-1 and the "Certification In Lieu Of Oath" on Form F100-2.

BLOCK LOT	QUAI	IFICATIO	QUALIFICATION CODE		4	ADDRESS (SITE)	(E)			PERMIT NO.		
<u>U</u>	CONSTRUCTION PERMIT	<b>STR</b>	UCT	NO	PER	<b>TIM</b>	V. FEE 8	V. FEE SUMMARY (for office use only)	r office us	e only)	Update	Update
NOTICE WEN ASSET WEN	APPL	SA	-ICATION	_			9 등 등 4	Electrical Plumbing Fire Protection				
Applicant Completes: Sections I, II, III (optional), IV, VI, and VII	II (optional), IV,	VI, and V						Elevator Devices				
I. IDENTIFICATION 1. Proposed Work Site at:								Subtotal Less 20% for State Plan Review	ite Plan Re	view \$		
2 Name of Owner in Fee:							80 G	Subtotal State Permit Surchame Fee	chame Fee	*		
Tel.		mail						Subtotal		s		
Address							11. Ce	Cert. of Occupancy Other	ıcy			
3. Ownership in Fee: Public	Pri	municipality Private	liy		м	apo odz		TOTAL		\$ (((((()())()))		
4. Principal Contractor:			Tel				VI. BUILI	VI. BUILDING/SITE CHARACTERISTICS	ARACTER	RISTICS		(office use only)
Address			e-mail	lie.			1. Nu	Number of Stories	82		1	
								reignt of structure Area I arnest Floor	Floor		5	
License No. OR, if new home, Builder Reg. No.	ler Reg. No.			EXP.	Exp. Date			New Building Area	8 8		Sq. ff.	
Home Improvement Contractor Registration No. or		Exemption Reason	Reason				5. Vol	Volume of New Structure	Structure		. E	
Federal Emp. ID No.			FAX				6. Ma	Max. Live Load				
5 Architect or Engineer							7. Ma	Max. Occupancy Load	Load			
Address			Confact	j =			8. If I	If Industrialized Building:	ö	State Approved	HUD —	
[a]		FAX					9. Tot	Total Land Area Disturbed	Disturbed		sq. ft.	
							10. Flo	Flood Hazard Zone	l e			
6. Kesponsible Person in Charge once Work has Begun	e work nas Begu	2					11. Ba	Base Flood Elevation	ation		<u>=</u>	
lei.		Ä					12. We	Wetlands yes		no		
IIa.PROPOSED WORK			New Building			Addition		Demolition		VII. DESCRIPTION OF BUILDING USE	OF BUILDING	USE
Reposir			Alteration	D		Renovation		Reconstruction	ioi	1. State Specific Use:	mary user	
					]						],	
☐ Asbestos AbatSubch. 8	Subch. 8		Lead Hazard Abatement	Abatement	100	batement Radon Remediation	Jiation 🗆	Annual Permit	it	2. Use Group, Proposed: 3. Channe in Use Group Indicate Present:	sed: oun Indicate	Present:
IIIb. SUBCODES	$^{+}$	-	-	John John	Appropriate	ONLT (Opnor	_	Does having Dates	ď	A No of Autolling unite: Take Income pechinted	ile: Teter trees	Income-restricted
	Est. Cost Rec'dby	by	Rec'd	Date	Date	^	Approval	Rejection	viewer	Gained, Sale	INS. TOTAL OUTS	
□ Building										Gained, Rental		
☐ Electrical										Lost, Sale Lost, Rental		
Plumbing										B. NON-RESIDENTIAL (primary use)	AL (primary us	(e)
										1. State Specific Use:	.ee.	
☐ Fire Protection										2. Use Group, Proposed:	:peso	
□ Elevator										Change in Use Group, Indicate Present:     MIXED USE _List secondary use(s)	Sroup, Indicate	Present:
TOTAL COST			111111111	11111111	111111	W. W	111111111111111111111111111111111111111	111111111111111111111111111111111111111		D Construct Classification: Present	cation. Prese	-(2):
III. PLAN REVIEW (optional)	<u>×</u>	ES OR W	ILL YOUR E	SUILDING	CONTAIN	IV. DOES OR WILL YOUR BUILDING CONTAIN ANY OF THE FOLLOWING?	FOLLOWIN	62			Proposed	sed
DO YOU WANT	-	Flevatore	Flevatore/Fecalatore/Lifte/	l		Refrineration Systems	90	α		Smoke Control Systems in Open Wells	1	12   Fire Alarm
1. □ Partial Releases 2. □ Prototype Processing		Dumbwaiters/Mov High Pressure Bo Pressure Vessels	Dumbwaiters/Moving Walks High Pressure Boilers Pressure Vessels	S 10.05 t		reingeration Systems Cross-Connections/Backflow Preventers Azardous Uses/Places of Assembly Sorinkland/Standninge	sackflow Predices of Assert	venters 9.		Underground Storage Tanks Swimming Pools, Spas and Hot Tubs I DGas Tanks	2	
U.C.C. F100-1 (rev. 8/08)		0000	0000			did in the second	2			2		

#### CERTIFICATION IN LIEU OF OATH

I. OWNER SECTION (to be completed if the applicant is the owner in fee)

I hereby certify that I am the owner in fee of the property listed on Page 1.

Mark the f	ollowing applicable boxes:
	I further certify that a new home (private residence) will be constructed on this property for my own use and occu- pancy. This dwelling is to be occupied by myself and is not to be used for any purpose other than single family residential use. I attest that all construction, plumbing, or electrical work will be done, in whole or in part, by me or by subcontractors under my supervision, in accordance with all applicable laws; and, I further acknowledge that said new home is not covered under the New Home Warranty and Builders Registration Act (N.J.S.A. 46:3B-1 et seq.) and that such fact shall be disclosed to any person purchasing this property within ten years of the date of issuance of a certificate of occupancy.
	I UNDERSTAND THAT IN MARKING BOX A, I ACKNOWLEDGE THAT I AM ASSUMING RESPONSIBILITY FOR THE WORK DONE ON SAID PROPERTY, THE CONDITION OF THE PROPERTY PRIOR TO, DURING, AND AFTER ANY WORK PERFORMED, AND FOR THE PERFORMANCE OF THE SUBCONTRACTORS I HIRE, EMPLOY, OR OTHERWISE CONTRACT OR WITH WHOM I MAKE AGREEMENTS TO PERFORM WORK. I AM VOLUNTARILY AND KNOWINGLY ASSUMING THIS RESPONSIBILITY.
B. ( )	I further certify the following as required by the New Jersey Uniform Construction Code, N.J.A.C. 5:23-2.15(f)1.ix:
	I personally prepared the plans submitted for: 1) the new home referred to in A.; or, 2) an addition, alteration, renova- tion, or repair to an existing single family residence owned and occupied by myself and located on the property listed on Page 1; or, 3) a new structure that will be physically separate from, but that will be deemed part of, an existing single family residence that is owned and occupied by myself and located on the property listed on Page 1.
	I further certify that I will perform or supervise the following work:  ( ) Building C.2. ( ) Fire Protection
	er certify that I will perform the following work: ( ) Electrical C.4. ( ) Plumbing
	I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.
and local p	ertify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, prior approvals, including such certification as the construction official may require, have been given or will be given mit issuance.
I understa	nd that if any of the above statements are willfully false, I am subject to punishment.
Signature	Date
II. AGEN	NT SECTION (to be completed if the applicant is not the owner in fee)
	ertify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(d): the proposed work is autho- tic owner in fee; and I have been authorized by the owner in fee to make this application as his agent.
and local p	ertify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, prior approvals, including such certification as the construction official may require, have been given or will be given rmit issuance.
	advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation nply with all New Jersey tax laws.
I understa	nd that if any of the above statements are willfully false, I am subject to punishment.
( ) Che	ck if contractor.
Agent Nan	ne

III. ( ) LEAD HAZARD ABATEMENT: Include Homeowner or Building Owner Affidavit as per N.J.A.C. 5:23-2.15(b)4.

IV. ( ) HOME ELEVATION: Include Home Elevation Contractor Certification as per N.J.S.A. 52:27D-123.16.

U.C.C. F100-2 (rev. 11/2014)

Telephone \_\_\_ Signature\_\_\_\_

### **UCC Form F110**

Please see the following page for the full size document.

PLEASE NOTE: The applicant is responsible for completing sections "A", "B", "C", and "D".

	盈	Ţ
U		A CONSTRUCTION CODE
Ш		UNITORN

	C. CERTIFICA	I hereby certif application.
BUILDING SUBCODE TECHNICAL SECTION	ICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION. WHEN CHANGING TORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.	Lot Qualification Code
Y JERSEY TRUCTION CODE	ICAT TOR	

<u>U</u>	Į	Date Received Control #
BUILDING SUBCODE TECHNICAL SECTION		Date Issued Permit #
N—APPLICANT: COMPL NOTIFY THIS OFFICE. CA	ETE ALL APPLICABLE INFORMATION. WHEN CHANGING ALL UTILITY DIG NO: 1-800-272-1000.  Qualification Code	C. CERTIFICATION IN LIEU OF OATH     I hereby certify that I am the (agent of) owner of record and am authorized to m application.
Vork Site Location		Sign here:
er in Fee:		D. TECHNICAL SITE DATA
let. ( ) e-mail		DESCRIPTION OF WORK
vouress street contractor:	municipality zp code Tel. ()	
ontractor License No. or Builder Registration No	n NoExp. DateNo. or Exemption Reason (if applicable):	
ederal Emp. ID No.	FAX: ()	
JOB SUMMARY (Office Use Only) PLAN REVIEW Date Initial INSPECT [ ] No Plans Required Type: [ ] All Footing	INSPECTIONS Dates (Month/Day)  ype: Failure Failure Approval Initial Footing	
	Footing Bonding Foundation	TYPE OF WORK:
] Structural/Framework Slab ] Exterior Frame		
1	Truss Sys./Bracing	[ ] Rehabilitation
Joint Plan Review Required:  JElec. [ ] Plumb. [ ] Fire [ ] Elevator Insulation expension for DEDMIT	Darrier-Free Insulation Elistes - Base Laver	[ ] Roofing [ ] Siding
	Finishes -Final	9
Approved by:	997	L Jogn Sq. Ft.
: APPROVAL for CERTIFICATE	Mechanical —— —— TCO	[ ] Retaining Wall Sq. Ft.
[ ] CO [ ] CO [ ] CA Other		[ ] Asbestos Abatement Subchapter 8
ved by:	inal Barrier-Free	[ ] Lead Haz. Abatement NJAC 5:17
BUILDING CHARACTERISTICS		Other
Jse Group Present Proposed	Constr. Class Present Proposed	[ ] Demolition
	<ul> <li>If Industrialized Building:</li> </ul>	
Height of Structure	-ft. State Approved HUD	Administrative Surcharge \$

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G SUBCODE L SECTION	COMPLETE ALL APPLICABLE INFORMATION. ICE. CALL UTILITY DIG NO: 1-800-272-1000.				iomo	municipality			No.	tration No. or Exemption Reason (if applicable):  FAX: (	INSPECTIONS	Type:	Footing Panding	Footing Bonding	Slab	Frame	Truss Sys./Bracing	Barrier-Free		Finishes -Base Layer,	Finishes -Final	Energy	Mechanical	100	Other	Final	Barriar Eraa
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U.C.C. F110 (rev. 11/09)

Est. Cost of Bidg. Work:
1. New Bidg. \$\_\_\_\_\_
2. Rehabilitation \$\_\_\_\_
3. Total (1+2) \$\_\_\_\_\_

sq. ft. sq. ft. cu. ft.

New Bldg. Area/All Floors Volume of New Structure Max. Live Load \_\_\_\_\_\_ Max. Occupancy Load \_

Area — Largest Floor -

Canary = Office Copy Gold = Applicant Copy

### **UCC Form F120**

Please see the following page for the full size document.

**PLEASE NOTE:** The applicant is responsible for completing sections "A", "B", "C", and "D" and signing and "raised" sealing this document.

Administrative Surcharge \$ Minimum Fee \$ State Permit Surcharge Fee \$

KW Elec. Sign/Outline Light AMP Motor Control Center

TOTAL FEE

ELECTRICAL SUBCO	
NEW JERSEY	

Date Received Control #	Date Issued Permit #	HANGING I hereby certify that I am the (agent of) owner of record and am authorized to make this application and perform the work listed on this application.	Applicant sign contractor sign and seal here:	Print name here:   Print name here:     I Licensed Electrical Contractor     Exempt Applicant
	ELECTRICAL SUBCODE TECHNICAL SECTION	A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION. WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.  Lot	Nork Site Location	Owner in Fee:

FEE (Office Use Only)

Tel. ( )	e-mail	D TECHNICAL SITE DATA	ITEDATA
Address		DESCRIPTION OF WORK	WORK
street	municipality zip code		
Contractor:		QTY. SIZE	ITEMS
Address	e-mail		Lighting Fixtures
			Receptacles
Contractor License No.	Exp. Date		Switches
Home Improvement Contractor Registration No. or Exemption Reason (if applicable):	No. or Exemption Reason (if applicable):		Detectors
Federal Fmo ID No	FAX: ( )		Light Poles
R ELECTRICAL CHARACTERISTICS			Motors—Fract, HP Emergency & Exit Lights
Ilse Group Present	Proposed		Communications Points
# pe	] Temporary [ ] Other		Alarm Devices/F.A.C. Panel
Building Occupied as	Utility Co.		
Est. Cost of Elec. Work \$			TOTAL NUMBERS
			Pool Permit/with UW Lights
JOB SUMMARY (Office Use Only) PLAN REVIEW	INSPECTIONS Dates (Month/Day)		Storable Pool/Spa/Hot Tub
[ ] No Plans Required	Type: Failure Failure Approval Initial		KW Oven/Surface Unit
[ ] Partial -Underslab Utilities Approved	Rough		KW Elec. Water Heater
Date: Approved by:	Barrier-Free Treath		KW Elec. Dryer/Receptacle
I 1 Flactric Plans Approved	Temp Serv		KW Dishwasher
Doto: Americal har	Constr Serv		HP Garbage Disposal
Date. Approved by.	100		KW Central A/C Unit
Joint Plan Review Required:	1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		HP/KW Space Heater/Air Handler
[ ] Bldg. [ ] Plumb. [ ] Fire. [ ] Elev.	Country		KW Baseboard Heat
SUBCODE APPROVAL for PERMIT	Final		HP Motors 1/+ HP
Date:	Barrier-Free		KW Transformer/Generator
Approved by:			AMP Service
SUBCODE ADDROVAL 62 CEDITIONAL	Temp. Cut-in-Card Date Issued		AMP Subpanels

U.C.C. F120 (rev. 01/21) 1 White = Inspector Copy 2 Canary = Office Copy 3 Pink = Office Copy 4 Gold = Applicant Copy

Date of Grounding and Bonding Certification

Approved by: [ ] CO Date:

Final Cut-in-Card Date Issued Annual Pool Inspection

SUBCODE APPROVAL for CERTIFICATE

e-mail

## Renewable Energy Form - CRES (9-2018)

CRES (9-2018)
APPLICATION FOR CERTIFICATION OF RENEWABLE ENERGY SYSTEM(S)
Pursuant to P.L. 2008, c.90

on Ow			Municipality
Ow	1		
		Name:	Email Address
		Address:	Phone # Fax #
BIO	CK	Lot	-
on		Name	Frank Address
		Name: Address:	Email Address Phone # Fax #
	,,		
on		auman and installer recording	why of a consumble announcement installed on to be installed
We the	s, the	owner and installer, respective property, hereby certify as fo	rely, of a renewable energy system installed, or to be installed
1.	A rer all ap all m subc	newable energy system meeting plicable subcodes of the Station anufacturers' instructions, has odes, standards and instruction	ng the requirements set forth in P.L. 2008, c.90 and complying one Uniform Construction Code, all applicable testing standards, one shall be installed, in accordance with all sons, at a structure located at the above property.
2.	onsit		m produces, or when installed shall produce, renewable ene portion of the electrical, heating, cooling, or general energy ne
3.		source of the renewable energ	gy is designed to be as follows (at least one line must be checke
	(a)	from the following source:	nergy system at the above location is designed to produce ene
		Photo-voltaic technologies (or	ther than photo-voltaic)
		Wind energy	-5
		Fuel cells Geothermal technology	nine.
		Wave or tidal action	gles
		Methane gas from lar	ndfills
			cility (DEP determination attached)
			DEP determination attached)
			ving biomass cultivated and harvested in a (DEP determination attached)
	(b)		ble energy system at the above location is designed to prod
		energy from the following sou	
		Solar thermal technol	
4	If the	Geothermal technolog	gies roduces energy from a resource recovery, hydropower or biom
۹.			,,,,,,
	facili	ly, we have attached to this	application proof of a determination by the Commissioner
_	Envir	conmental Protection that the impacts to the environment an	facility meets the highest environmental standards and minimi d local communities.
5.	Envir any i We	onmental Protection that the mpacts to the environment an have attached to this appl	facility meets the highest environmental standards and minimi d local communities. lication a list identifying all applicable testing standards
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CRES (6-1-09)

#### Definitions - N.J.S.A. 54:4-3.113a

As used in this act:

"Renewable energy" means: (1) electric energy produced from solar technologies, photovoltaic technologies, wind energy, fuel cells, geothermal technologies, wave or tidal action, methane gas from landfills, a resource recovery facility, a hydropower facility or a biomass facility, provided that the biomass is cultivated and harvested in a sustainable manner, and provided further that the Commissioner of Environmental Protection has determined that the resource recovery facility, hydropower facility or biomass facility, as appropriate, meets the highest environmental standards and minimizes any impacts to the environment and local communities; and (2) energy produced from solar thermal or geothermal technologies.

"Renewable energy system" means any equipment that is part of, or added to, a residential, commercial, industrial, or mixed use building as an accessory use, and that produces renewable energy onsite to provide all or a portion of the electrical, heating, cooling, or general energy needs of that building.

"Local enforcing agency" means the enforcing agency in any municipality provided for under the "State Uniform Construction Code Act," P.L.1975, c.217 (C.52:27D-119 et seq.) and rules and regulations adopted pursuant thereto.

#### Calculation - N.J.S.A. 54:4-3.113b

2. Property that has been certified by a local enforcing agency as a renewable energy system shall be exempt from taxation under chapter 4 of Title 54 of the Revised Statutes. The owner of real property which is equipped with a certified renewable energy system may have exempted annually from the assessed valuation of the real property with the renewable energy system included, minus the assessed valuation of the real property without the renewable energy system included.

#### Right to Inspect - N.J.S.A 54:4-3.113c

3. The local enforcing agency may at any time inquire into the right of a claimant to the exemption, and for that purpose the local enforcing agency may require the filing of a new application or the submission of such proof as the local enforcing agency shall deem necessary to determine the right of the claimant to the continuance of the exemption.

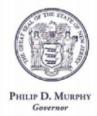
#### Effective Date of Exemption - N.J.S.A 54:4-3.113d

 The exemption from taxation for the renewable energy system shall become effective for the tax year following the year in which certification has been granted and thereafter during its use primarily for such purposes.

#### Appeal Information - N.J.S.A 54:4-3.113f

- 5a. Any person aggrieved by any action of the local enforcing agency may seek review before the board of appeals.
- b. Any person aggrieved by any action of the assessor may seek a review of such action at the county board of taxation or directly to the State Tax Court where the value in dispute is \$750,000 or more annually on or before April 1. The judgment of the county board of taxation may be further appealed to the Tax Court of New Jersey by filing a complaint with the Tax Court Management Office within 45 days from the date of the service of the judgment (date of mailing). Contact information for the county tax boards can be found at <a href="http://www.state.nj.us/treasury/taxation/lpt/cboards.shtml">http://www.state.nj.us/treasury/taxation/lpt/cboards.shtml</a>. The Tax Court of New Jersey is located at the Richard J. Hughes Justice Complex, 25 Market Street, Trenton, New Jersey. Mailing address: PO Box 972, Trenton, NJ 08625-0972. Telephone number: (609) 815-2922, Press Option 1.

### **UCC Bulletin 96-2**



#### State of New Jersey

DEPARTMENT OF COMMUNITY AFFAIRS 101 SOUTH BROAD STREET PO BOX 802 TRENTON, NJ 08625-0802



Lt. Governor Sheila Y. Oliver

#### **BULLETIN 96-2**

(Supersedes Bulletin 79-9

Issued: October 1997 Revised: October 2017

Code Ref. Update: September 2019

Subject: Signing and Sealing of Construction Documents

Reference: N.J.A.C. 5:23-2.15(f)1.ix through x

The requirements of the Uniform Construction Code (UCC), the New Jersey State Board of Architects, and the New Jersey Board of Professional Engineers and Land Surveyors regarding signing and sealing of construction documents are as follows:

N.J.A.C. 5:23-2.15(f)1.ix states that the licensed/registered professional of record must sign and seal each sheet of each copy of plans, the title page of the specifications, and any additional supporting information submitted. The acceptable manner of signing and sealing is established by each professional licensing board. Where the document includes the work of more than one professional, each professional shall sign and seal the work that he prepared.

There are some instances when the signature and seal of a licensed/registered design professional is not required on construction documents:

- a) On applications for construction, alteration, repair of or addition to single-family dwellings, including accessory structures, for the exclusive occupancy of the owner, who also has prepared the construction documents and will construct the dwelling by himself or herself [N.J.A.C. 5:23-2.15(f)1.ix].
- b) When the construction official waives the requirement for plans because the work is of a minor nature [N.J.A.C. 5:23-2.15(f)1.x].
- c) Plumbing, electrical, and mechanical plans for Class 3 structures may be prepared by plumbing, electrical, and heating, ventilation, air conditioning and refrigeration (HVACR) contractors, respectively [N.J.A.C. 5:23-2.15(f)1.vii(1) and (3)].

#### HOW ARCHITECTS MUST SIGN AND SEAL:

Site plans of projects or construction documents required to be submitted for review and/or approval by any State, county, or municipal agency shall bear the title block of the architect, including the essential elements required by the New Jersey State Board of Architects regulations (N.J.A.C. 13:27-6), including:

- 1. The full name of the architect, architectural firm, or company;
- 2. The address of the architect or architectural firm;
- 3. The name of the client and the location of the project;

- 4. The name and license number of the architect in responsible charge; and
- 5. The signature and raised professional seal of the architect in responsible charge (a rubber stamp of a seal is not acceptable). As of May 1, 2017, digitally-transmitted plans with electronic seals affixed in accordance with N.J.A.C. 13:27-6.5 should be accepted. (\* See page 4 for more information regarding digital signatures and seals.)

At the time of registration, a professional seal press for the newly licensed architect is ordered by the Board of Architects. This process may take four to six weeks. In the event that it becomes necessary to submit construction documents for review or approval prior to receipt of the seal press, the Board will verify the architect's registration to the reviewing agency and request that the construction documents be accepted for consideration without the required impression of the seal.

#### **HOW ENGINEERS MUST SIGN AND SEAL:**

Site plans and construction documents required to be submitted for review and/or approval by any State, county, or municipal agency shall bear the title block of the professional engineer and/or land surveyor containing the following essential elements required by the New Jersey Board of Professional Engineers and Land Surveyors regulations (N.J.A.C. 13:40-8):

- 1. The name and location of the project;
- The name of the engineering or land surveying individual, firm, partnership, corporation, professional association, or professional service corporation;
- 3. The full name and certificate number of the person(s) in responsible charge;
- 4. The title, "professional engineer" and/or "land surveyor," spelled out; and
- 5. The handwritten signature and impression-type seal of the person(s) in responsible charge, and the date when signed (a rubber stamp of a seal is not acceptable). As of November 16, 2015, digitally-transmitted plans with electronic seals affixed in accordance with N.J.A.C. 13:40-8.1 and 8.1A should be accepted. (\* See page 4 for more information regarding digital signatures and seals.)

In some cases, all or parts of construction documents may bear more than one separate completed title block. This would signify that the submitting design professionals are either associated in the project design, or that one architect or engineer is "in responsible charge" over others in the project. As long as construction documents are signed and sealed by the architect or engineer responsible for that portion of the design, according to the Building Design Services Act, and that individual is licensed to practice in New Jersey, the signing and sealing requirement of the UCC has been met.

#### WHO MAY SIGN AND SEAL? ARCHITECT OR ENGINEER:

The following chart with explanatory notes designates projects by Group and sets forth those which may be designed, prepared, signed, and sealed by licensed architects and professional engineers, or both, as indicated. For complete details, it is necessary to refer to the Building Design Services Act, effective as of May 7, 1990.

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#### BUILDING SUBCODE GROUP CLASSIFICATION DESIGN PROFESSIONAL

A-1 Theaters Architect
A-2 Assembly Structures Architect
A-3 Assembly Structures Architect
A-4 Indoor Assembly Architect

A-5 Outdoor Assembly Architect or Engineer

B – Business Architect

**EXCEPTIONS** 

(a) Car-Wash Facilities Architect or Engineer
(b) Materials Testing Laboratories Architect or Engineer
(c) Data Processing Relay, or Equipment
Facilities and Telephone Exchanges

E - Educational Architect

F - Factory and Industrial

H - High Hazard

I - Institutional

M - Mercantile

R - Residential

Architect or Engineer

Architect

Architect

Architect

Architect

S - Storage Architect or Engineer
U - Utility Architect or Engineer

#### SPECIAL SITUATIONS:

- Only professional engineers may sign and seal plans for "engineering works" in the Utility Group such as a sewage, water treatment, power plant, or transportation system.
- 2. Either an architect or an engineer may sign and seal plans for "engineering systems," by law defined as those systems necessary for the proper functioning of a building and surrounding site, which systems include but are not limited to structural (soil tests, footing and foundation, framing, roofing, etc.), electrical, heating, lighting, acoustical, ventilation, air conditioning, grading, plumbing, drainage, fire protection, elevators, and energy conservation.
- 3. For a mixed use, which the law terms "an ancillary part of an engineering project," professional engineers may sign and seal plans for buildings and portions of buildings in a non-permitted Group only where the building or portion is an ancillary part of an engineering project, and the area of incidental use does not constitute more than ten percent of the building's total floor area or 2,000 square feet, whichever is greater.
- 4. Only engineers may sign and seal plans for drainage systems for sites greater than ten acres involving a stormwater detention basin, or traversed by a water course.
- 5. The types of buildings under this law are based on the building subcode group categories. The boards that regulate the professions of architecture and engineering or the Joint Committee will use these categories in determining whether an architect or an engineer may design a particular building. The group for the application of the code (not for deciding who may make submissions) should be determined on the basis of the latest adopted edition of the code.

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In cases where identifying an architect or engineer as the design professional is still difficult, you may direct your questions to the Department of Community Affairs' Code Assistance Unit at (609) 984-7609, or ask for resolution by the Joint Committee of Architects and Engineers by contacting either the Board of Architects at (973) 504-6385 or the Board of Professional Engineers and Land Surveyors at (973) 504-6460.

- \* Pursuant to the rules adopted for digital sealing by the Board of Architects and the Board of Professional Engineers and Land Surveyors, the digital signature and seal must be:
  - i. Unique to the licensee;
  - ii. Verifiable by a trusted third party or some other approved process as belonging to the licensee:
  - iii. Under the licensee's direct and exclusive control; and
  - iv. Linked to a document in such a manner that the digital signature and seal is invalidated if any data in the document is [sic] changed. Once the digital signature and seal are applied to the document, the document shall be available in read-only format if the document is to be digitally transmitted.

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Notes: