**CITY OF DERBY** 



## **BUILDING DEPARTMENT**

1 Elizabeth Street, Derby, CT 06418 - (203) 736-1481

# **SOLAR PERMIT**

To Whom It May Concern:

In an effort to be consistent and accurate when calculating permit fees for the installation of any Solar job, below is a list of requirements needed at the time of application:

- Roof Analysis Report, stamped by an Engineer
- Electrical Permit Application
- Building Permit Application
- Copy of a signed contract showing the total system cost before incentives or rebates
- If the system is being leased, the value of the work being performed (set at \$5.00 per watt)
- UI # MUST BE SUBMITTED WITH SOLAR APPLICATION

Please be advised that these requirements are effective immediately. If you have any questions concerning this matter, please contact this office at the above listed phone number.

Sincerely,

Joseph L. Ballaro

Joseph L. Ballaro Building Official

# **ITEMS REQUIRED TO SUBMIT SOLAR PERMITS**

- 1. Roof Analysis Report, Stamped by an Engineer
- 2. Electrical Permit Application with UI #
- 3. Building Permit Application
- 4. Copy of a Signed Contract Showing the Total System Cost Before Incentives or Rebates
- 5. If System is Leased, the Value of the Work Being Performed (Set at \$4.00 Per Watt)
- 6. Copy of HIC License
- 7. Copy of Electrical E-1 License
- 8. Insurance Certificate
- 9. Electrical Drawing/Design Stamped by an Engineer
- 10. CT Standardized Solar Permit
- 11. Equipment Specifications
- 12. Letter Authorizing Agent to Pull Permits for HIC & E1 Holder (If Applicable)
- 13. Homeowner Letter of Authorization



СТ	Standardized Solar PV Permit Application Supplement	PAGE 1 OF 3
	e fill in the following information and submit ALL applicable attachments.	
Gene	eral Description of Solar PV Array:	
Syste	em Size (kW DC):	
Solar	PV Mounting Information	
Mour	nting Type (roof, pole, ground, other-specify):	
Mour	nting System Manufacturer:	
Prod	uct Name and Model #:	
Build	ing Information (For Roof-Mounted Systems Only)	
Build	ing Type (e.g. house, shed, barn, slab):	01 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/
Build	ing Height (in feet):	
Is the	building permitted? 🗆 Yes 🔲 No 🖾 NA	
lf no,	reason:	
Elect	rical Description	
Size (	amps) and type (phase, voltage) of electrical service:	
	erage of main breaker: Will the value of main breaker change? 🛛 Yes 🗌 No 🏾 To:	
Rated	amperage of the bus bar in the main panel:	
Туре	of interconnection (e.g. breaker-load side, supply-side interconnect):	
Elect	rical panel location:	
lf loa	d side interconnect, will solar intertie into a subpanel? 🛛 Yes 📄 No	
lf yes	, rated amperage of the subpanel bus bar?Value of breaker protecting subpanel bus bar?	
Atta	chments for application (See instructions on the next page. Example Attachments are available for downl	oad
at <u>wv</u>	vw.energizect.com/sunrisene)	
	1. Additional Subcontractors and Information	
	2. One-Line Electrical Drawing	
	3. One-Line Site Plan Drawing	
	4. Attachment Details (Line Drawing)*	
	5. Solar PV Module Specification Sheets From Manufacturer	
	6. Inverter Specification Sheets From Manufacturer	
	7. Pole or Ground Mount Information (if applicable)*	
	8. Structural Evaluation (if required by municipality). See page 3 for documentation requirements.	
	9. Additional Information for Large Solar PV Systems (as Specified by the Municipality)	

\*NOTE: Applicants should submit either Attachment 4 for roof-mounted systems <u>OR</u> Attachment 7 for pole/groundmounted systems, not both.



### PAGE 2 OF 3

## Instructions for ATTACHMENTS to the Connecticut Standardized Solar PV Permit Application

Please Complete the Application Form (page 1) and provide <u>all applicable</u> Attachments based on the below instructions for Attachments 1-8. Attachment 8 is a Structural Evaluation to be completed <u>if required</u> by the municipality. Additional information required by a municipality for large solar PV systems can be submitted as a 9<sup>th</sup> Attachment. Example Attachments (e.g. sample drawings) can be found at <u>www.energizect.com/sunrisene</u>.

### Each Attachment—Subcontractor List and

### Drawings — Must Include:

- Date
- Property Owner
  - Name
  - Address
  - Contact phone number
- Installation Company
  - Name of company and contact person
  - Address
  - Contact phone number
- Drawing number and Revision number or other control method
- Drawing designer

Attachment 1. Additional Subcontractor List (If Needed, as per Permit Application)

### Attachment 2. One-Line Electrical Drawing Must Show:

- Size of electrical service
  - Size of Main Breaker
  - Size of Bus Bar (If Known)
- Type of electrical service
- If interconnection point is a subpanel
  - Size of Subpanel Main Breaker
  - Size of Subpanel Bus Bar (If Known)
- Nominal power of solar system (Watts)
  - DC Capacity: Nameplate "STC" Value of all panels, watts
  - AC Capacity: Total AC capacity of Inverters, watts
- Batteries (If Present): Type, Quantity, Nominal Voltage, Capacity kWh
  - H<sub>2</sub> mitigation methods (If Necessary)

### (Attachment 2 continued)

- Interconnection method
  - Size of overcurrent protection
- Number, type and electrical configuration of solar panels
- Number and type of Inverters
- Values for source stickers: NEC 690.53; NEC 690.54 (Encouraged, Not Required)
- Wiring methods
  - Wire Type(s), Size
  - Conduit Type(s), Size
- Solar metering (If Appropriate)
- Electrical current contribution from all PV sources
- Electrical grounding details: Wire Type, Size, GEC

### Attachment 3. One-Line Site Plan Drawing Must Show:

- Location of solar panels
- Location of Inverters and major equipment
- Location of roof obstructions (Vents, Chimneys, etc.)
- Location of Main Breaker Panel
- Location of Utility Meter
- Location of AC disconnect
- Location of batteries and/or charge controllers (If Appropriate)
- Location of solar metering (If Appropriate)
- Planned conduit path (Encouraged, Not Required)
- Gross dimensions of structure (If Appropriate)
- Approximate layout of building or other structure (If Appropriate)
- Property lines, zoning, and setback considerations (If Appropriate)
- Trenching details: Location, Depth and Length of Trench (If Appropriate)
- A notation indicating scale —or not to scale (Both are Acceptable)



PAGE 3 OF 3

## Instructions for ATTACHMENTS to the Connecticut Standardized Solar PV Permit Application

### Attachment 4. Attachment Details for Roof-Mounted Systems (Line Drawing) Must Show:\*

Racking System

- Manufacturer of racking structure
- Model
- Туре
- Flashing description
- Fastener detail
  - Type of fasteners, e.g. Lag Screws, Seam Clamps, Ballast
    - If Lag Screws include:
      (1) Type (e.g. Zinc, Stainless steel)
      (2) Size of Lag
      - (3) Depth of Thread Penetration
      - (4) Type of Sealant (e.g. caulk)
- Mitigation of Dissimilar Metals
  - Describe how any dissimilar metals will be isolated

Attachment 5. Solar PV Module Specification Sheets (provide PDF from manufacturer)

Attachment 6. Inverter Specification Sheets (provide PDF from manufacturer)

### Attachment 7. Pole Mount or Ground Mount Information (if applicable):\*

- Racking system
- Mounting specification sheets and details from manufacturer (PDFs)
- Manufacturer's Pre-Engineered Document or PE Stamp
- Code Compliance Manual (If Requested by Municipality)
- One-way distance from the Solar PV system to the interconnection point
- Electrical grounding details
- Height of solar PV system at maximum design tilt
- Applicable zoning information if not shown on site plan (e.g. setback from property line)

# Attachment 8. Structural Evaluation (if required by the municipality)

• NOTE: If this Attachment is required by the municipality it must be submitted in a format accepted by the municipality (see two examples, listed below). Installers should contact the municipality's Building Department to determine what documentation will meet the municipality's Structural Evaluation requirements.

#### Two potentially acceptable formats are:

1. Structural Review Worksheet (available at <u>www.</u> <u>energizect.com/sunrisene</u>). This worksheet can be used by an installer to meet the Structural Evaluation requirements of a municipal Building Department if the department specifically authorizes its use for that purpose.

#### OR

2. Proof of a Structural Review performed by a Registered Design Professional (e.g. Professional Engineer).

# Attachment 9. Additional information required for larger solar PV systems

• This Standardized Solar PV Permit Application Supplement can also be used to permit larger systems. If a municipality requires additional information to permit larger systems, they should specify the information needed as a 9<sup>th</sup> attachment to the application.

\*NOTE: Applicants should submit either Attachment 4 for roof-mounted systems OR Attachment 7 for pole/groundmounted systems, not both.

## **CITY OF DERBY**



## **APPLICATION FOR BUILDING PERMIT**

SEPTIC (NAUG.VALLEY HEALTH)
 SEWER (CITY/WPCA)

APPLICATION MUST BE SIGNED IN INK

Date\_\_\_\_\_ 20\_\_\_\_

NOTE: The City of Derby wants to be of service to you, the applicant. We will be better enabled to do so if you complete this application and follow the procedures set out in the INFORMATION SECTIONS on page 4. Please contact the Building Department with any questions at (203) 736-1481. Thank you.

House # Assesse	or's Map-Lot #_	L	ot #	Street			
Owner				Phone		Cell Phone	
Owner's Address							
Street			City		State	1	
Sub-Division Name			Model		Lot	#	
Please check items below that a CONSTRUCTION: TYPE OF OCCUPANC Other	New 🗋 🛛 🗚 Y: One Fan						
		No 🗆 O Stone 🗆	Concrete Block	red Concrete 🗆 : 🗅 Other_ Address_	Block 🗆	Other	
NOTES: 1) Submit Digital 2) Copy of Submi 3) Per CT State St 4) Electrical, Plun	tted/Approv atute - Insta	ved Plans <u>M</u> allation of Sr	noke Alarms/	CO Detector	rs ARE REC	<u>)UIRED</u>	
DESCRIPTION OF WORK: _					<u></u>		
General Contractor's Name				Ado	lress		
*Please be sure to fill in data on a	all pages of app	lication.*		Pho	ne		
I estimate the	e value of this W	/ork Will Be \$			Fee \$		
		Building Offic	ial estimate of val	ue \$			Permit Number Date Issued_
PERMIT FEE \$	COC Fee	Print Applica	nt's Name:				
STATE ED FEE \$	🗅 CA Fee	Applicant's Si	gnature:				
CO FEE \$ <u>50.00</u> _	CO Fee	Address:	-				
	Check						
RECEIPT #	🗆 Cash	City/State/Zip	9				
	🗅 Credit Card	Telephone: Email:					

### ADDITIONAL DATA REQUIRED

FOUNDATION: Kind of Materials	Thickness								
Rebar Required: Size	Height								
Size of Footings	Depth	Depth Below Grade (42" Min.)							
Kind of Columns in Cellar		Size							
MASONRY SIDE WALLS: Size	Thickness		Height						
FRAME: <u>CONTINUITY OF WALL</u>	REINFORCEMENT BETWEEN S	STORIES (SECTIO	<u>DN 611.6)</u>						
Size of Girder	_Spacing on Centers	Corner Posts	Plate						
Size of Floor Joists	Spacing on Centers	,	Longest Span						
Size of Ceiling Joists	Spacing on Centers	······	Longest Span						
Size of Rafters	Spacing on Centers	<u> </u>	Longest Span						
Size of Valley & Hip	Spacing on Centers		Longest Span						
Type of Sheathing on Floor									
Size of Studs in Bearing Wa	allsS	pacing on Centers							
HEATING: Kind of Chimney	Size of Flue		_ Kind of Lining						
Will there be a Fireplace _	Name of Mason								
SIDING: Describe									
ROOFING: Describe									
	SCHEDULE O	E EEES							
Minimum Fee – All Permits			\$ 55.26						
Certificate of Occupancy									
Mobile Homes: Inspection &									
All Permits (including Demo	i): First \$1,000 of estimated co		\$20.00 Per \$1,000 After First \$1,000						
State Education Fee									
Demolition Permit: First \$1,0									
			) Per \$1,000 After First \$1,000						
	INSPECTION SC	CHEDULE							
1	<sup>sr</sup> – Footing Inspection – Bef	ore Concrete is	Poured						
2 <sup>nd</sup> – Foundation Increa	ction After Water Proofing	& Footing Drai	ns are Installed. If Necessary						

<sup>nd</sup> – Foundation Inspection – After Water Proofing & Footing Drains are Installed, If Necessary. Prior to Back Filling

3<sup>rd</sup> – Rough Framing, Wiring, Rough Plumbing, Heating – Before Interior Walls & Ceilings are Insulated & Sheet Rock Applied

4<sup>th</sup> – Insulation

5<sup>th</sup> – Final Inspection – After All Work has been Completed, Sanitary System Completed & the As-Built Drawing on File, Well Installed & Water Tested & Certified Pure

## Please Check One for Each:

Use Classification: R R-1 R-2 R-3 R-4 B M A-1 A-2   A-3 A-4 A-5 Storage Shed Mixed & Other   Live Load Per Square Foot: 30 40 and 100   Fire-Resistance Rating: 20 Minutes 1Hour 2Hour Other Fire Sprinkler   Code Used   Building Type: 1A 1B 2A 2B 3A 3B 4 5A 5B   Number of Stories Total Square Feet Number of Dwelling Units   Drive Under Garage Number of Bathrooms Number of Bedrooms   Number of Kitchen or Bar Sinks
Fire-Resistance Rating: 20 Minutes1Hour2HourOther Fire Sprinkler         Code Used         Building Type: 1A 1B 2A 2B 3A 3B 4 5A 5B         Number of Stories Total Square Feet Number of Dwelling Units         Drive Under Garage Number of Bathrooms Number of Bedrooms         Number of Kitchen or Bar Sinks
Code Used         Building Type: 1A 1B 2A 2B 3A 3B 4 5A 5B         Number of Stories Total Square Feet Number of Dwelling Units         Drive Under Garage Number of Bathrooms Number of Bedrooms         Number of Kitchen or Bar Sinks
Building Type: 1A1B2A2B3A3B45A5B         Number of StoriesTotal Square FeetNumber of Dwelling Units         Drive Under GarageNumber of BathroomsNumber of Bedrooms         Number of Kitchen or Bar Sinks
Number of Stories       Total Square Feet       Number of Dwelling Units         Drive Under Garage       Number of Bathrooms       Number of Bedrooms         Number of Kitchen or Bar Sinks
Drive Under Garage Number of Bathrooms Number of Bedrooms Number of Kitchen or Bar Sinks
Residential
Square Foot of $1^{st}$ Floor X \$80 =
Square Foot of $2^{nd}$ Floor X \$60 =
Square Foot Above Second Floor X \$60 =
Square Foot of Finished Basement $X $25 = $
Square Foot of Attached/Detached
Garage X \$40 =
Square Foot of Room Over Garage X \$30 =
Square Foot of Open Deck         X \$25 =
Square Foot of Deck with Roof $X \$30 = $
Square Foot of 3 Season Room $X $ $=$ $X $
Square Foot of Shed         X \$10 =
Square Foot of Carport X \$30 =
Square Foot of Barn X \$40 =
Miscellaneous       X \$ =
Total \$
<u>Commercial</u>
Square Foot of $1^{st}$ Floor X \$100 =
Square Foot of $2^{nd}$ Floor X \$80 =
Square Foot Above Second Floor X \$80 =
Total \$

THIS BUILDING SHALL COMPLY TO THE NEW ENERGY STANDARDS

1. Permit to Build or Alter. – No building or structure shall be constructed or altered until an application has been filed with the building official and a permit issued.

2. By Whom Application Is Made. – Application for a permit shall be made by the owner or lessee of the building or structure, or agent of either, or by the licensed engineer or architect employed in connection with the proposed work. If the application is made by a person other than the owner in fee, it shall be accompanied by a duly verified affidavit of the owner or the qualified person making the application that the proposed work is authorized by the owner in fee and that the applicant is authorized to make such application. The full names and addresses of the owner, lessee, applicant, and of the responsible officers, if the owner or lessee is a corporate body, shall be stated in the application.

3. Description of Work. – The application form shall be filled in with a general description of the proposed work, its location, the use and occupancy of all parts of the building or structure and of all portions of the site or lot not covered by the building, and such additional information as may be required by the building official.

4. Plans and Specifications. – The completed application form for the permit shall be accompanied by not less than two (2) copies of specifications and of plans drawn to a scale of not less than 1/8 of an inch to the foot, with no detail or working drawing at a lesser scale than 1/2 of an inch to the foot, with sufficient clarity and detail dimensions to show the nature and character of the work to be performed. When quality of materials is essential for conformity to the Building Code, specific information shall be given to establish such quality; and in no case shall the code be cited or the term "legal" or its equivalent be used as a substitute for specific information.

5. If, during the progress of the execution of such work, it is desired to deviate in any manner affecting the construction or other essentials of the building from the terms of the application, drawings, plans or specifications, as filed, notice of such intention to alter or deviate shall be given to the Building Official and his written consent must be obtained before such alteration or deviation may be made. 6. Time Limitation of Application. – An application for a permit for any proposed work shall be deemed to have been abandoned six (6) months after date of filing, unless such application has been diligently prosecuted or a permit shall have been issued; except that for reasonable cause, the Building Official may grant one or more extensions of time for additional periods not exceeding ninety (90) days each.

7. Action on Application. – The Building Official shall examine or cause to be examined all applications for permits and amendments thereto within a reasonable time after filing. If the application or the plans do not conform to the requirements of all pertinent laws, he shall reject such application in writing stating the reasons therefor. If he is satisfied that the proposed work conforms to the requirements of the Building Code and all laws and ordinances applicable hereto, he shall issue a permit therefor assoon as practicable.

8. Payment of Fees.– No permits shall be issued until the fees prescribed have been paid.

9. Suspension of Permit. – Any permit issued shall become invalid if the authorized work is suspended or abandoned for a period of six (6) months after the time of commencing work.

10. Renewal of Permit. – Any permit issued shall become invalid two (2) years after its date; permit renewal may be obtained subject to the review approval of the Building Official and the re-payment of the requisite permit fees.

11. Revocation of Permits. – The Building Official may revoke a permit or approval issued under the provisions of the Building Code in case of any false statement or misrepresentation of fact in the application or on the plans on which the permit or approval was based.

12. Licenses. – Permits shall only be issued to subcontractors who possess the requisite State of Connecticut license.

For questions, please contact the Building Department at: City of Derby, Attn: Building Dept., 1 Elizabeth Street, Derby, CT 06418 – or call (203) 736-1481.

The above stipulations are hereby agreed to by the applicant, and made a part of this application.

The laws and building regulations of the State of Connecticut and the City of Derby, shall at all times have precedence over drawings and specifications. Anything contrary to said laws and regulations that may at any time appear in drawings or specifications, or in the work executed, shall be corrected without delay upon the receipt of due notice from the Building Official. The granting of a permit for the proposed work shall not be assumed or construed to convey any right of permission to do anything contrary to the laws and regulations aforesaid, under any circumstances whatsoever. You must have a deed on file at City Hall before your permit is valid. REMEMBER, PERMITS MUST BE OBTAINED BEFORE STARTING WORK.

THIS BUILDING SHALL COMPLY TO THE NEW ENERGY STANDARDS



## **CITY OF DERBY**

## 1 Elizabeth Street, Derby, CT 06418 - (203) 736-1481 APPLICATION MUST BE SIGNED IN INK

# NOTE: WHEN APPLYING FOR AN ELECTRICAL PERMIT FOR A SERVICE UPGRADE OR SOLAR PV ARRAY, THE UI # MUST BE SUBMITTED OR THE APPLICATION WILL NOT BE ACCEPTED

# **APPLICATION FOR ELECTRICAL WIRING PERMIT**

Job Location								_Lot # _		Da	te	
Name of Owner						Address	6					
Owner Telephone	#					Owner	Email					
DOES PV SYSTEM HAVE RAPID SHUTDOWN?YES							NO	CON	IMENTS:			
IF YES, LOCATIO	N?											
NATURE OF WOR TOTAL COMPUTED LOA # OF BRANCH CIRCUITS										· · · · · · · · · · · · · · · · · · ·		
TYPE OF WIRING SYSTE	M: Armo	or Clod (B										
	OUTLE	<u>ETS</u>						MOTC	<u>DRS</u>			
Location	Light	Heat	Recpt	Switch	No.	H.P.	S.PH.	3 PH.	Start Equip Size	Wire Size	Conduit	
Cellar												
Basement												
1 <sup>st</sup> Floor												
2 <sup>nd</sup> Floor												
Garage												
Yard/Well Pump												
SIZE OF SERVICE: CONDUCTOR SIZE: TYPE SERVICE INSTAL	AWG,	м	M	se, Th	ree Pha R MATE	ise, ERIAL:	Сорр	ad, er,	Aluminum			
	SW	/IMMI	NG POO	LS								
POOL TYPE: Perm	anent,	Storable	• Distan	ce From Po	wer Sou	irce	Ft.	<u>Fees</u> :				
<u>Conductor Size</u> :				_			Permit Fee \$ \$Cash			\Cash		
Lighting Fixtures				GFCI	(Make	& Mode	:I)					
								State Fee \$ &			<b><i><b>Check</b></i></b>	
UI JOB # Do you have a service location from UI Co.?YESNO						on from		Receipt #			♦Credit Car -	ď
ESTIMATED VALUE OF JOB \$ \$ IRC \$ NEC							Permit Date			_		
								Permit #			-	
Master Electrician (E	1) (Print) _						L					
State License #							Email Ad	dress				
Firm Name or Trade	Style						Telephor	ne #				
Firm Address							Signatur	e of Mast	er Electrician			