

Building Official Joseph L. Ballaro

## City Of Shelton

Building Department 54 Hill Street Shelton, Conn. 06484 www.cityofshelton.org

Building Department 203-924-1555, ext. 1358

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

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- 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 Building Official





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### CT Standardized Solar PV Permit Application Supplement

Please fill in the following information and submit ALL applicable attachments.	
Date:	
General Description of Solar PV Array:	
System Size (kW DC):	
Solar PV Mounting Information	
Mounting Type (roof, pole, ground, other-specify):	
Mounting System Manufacturer:	
Product Name and Model #:	
Building Information (For Roof-Mounted Systems Only)	
Building Type (e.g. house, shed, barn, slab):	
Building Height (in feet):	
Is the building permitted? $\square$ Yes $\square$ No $\square$ NA	
If no, reason:	
Electrical Description	
Size (amps) and type (phase, voltage) of electrical service:	
Amperage of main breaker: Will the value of main breaker change?   Yes No To:	
Rated amperage of the bus bar in the main panel:	1.00000.00.11.0
Type of interconnection (e.g. breaker-load side, supply-side interconnect):	
Electrical panel location:	
If load side interconnect, will solar intertie into a subpanel? $\square$ Yes $\square$ No	
If yes, rated amperage of the subpanel bus bar?Value of breaker protecting subpanel bus bar?	
Attachments for application (See instructions on the next page. Example Attachments are available for do	vnload
at www.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/ground-mounted systems, not both.



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# 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, 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)



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# 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
  - Type
- Flashing description
- Fastener detail
  - Type of fasteners, e.g. Lag Screws, Seam Clamps, Ballast
    - o 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 <a href="www.energizect.com/sunrisene">www.energizect.com/sunrisene</a>). 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.

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