



SOLAR PANEL SYSTEM PERMITS

REQUIRED APPLICATION MATERIALS:

- Complete unrestricted PDF File permit submittal of all documents to permits@southbarrington.org
 - Hard copy permit submittal of all documents to include:
 - Permit Application Form (southbarrington.org, Government, Building & Engineering)
 - Roof Mounting Information Form (attached)
 - Compliance with Village Zoning Ordinance Title 10, Chapter 6-4: Alternative Energy Systems
 - Total estimated cost of installation of roof-mounted solar energy system
 - 2017 NEC Compliance for plans
 - Two (2) hard copies showing location, size of panels, electrical diagram, specification sheets and electrical equations for the following:
 - a) OCPD
 - b) Ampacity
 - c) Conduit Sizing
 - d) Voltage Drop
 - One copy of Installation Manual
 - Homeowners Association Approval (HOA)
 - \$ 150.00 Application Fee (No credit cards)
 - \$ 500.00 Deposit toward Plan Review Fee (No credit cards)
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6-4: ALTERNATIVE ENERGY SYSTEMS:

B. Solar Energy Collection Panels and Solar Water Heating Systems (Solar Panels):

1. Solar systems shall be allowed on side or rear roof surfaces as set forth herein in any zoning district as permitted accessory uses. Freestanding and/or ground mounted solar panels and panel arrays are prohibited in all zoning districts.

2. Solar systems must be parallel to the roof, not extend beyond the roofline, and be integrated with the structure's architecture. Solar panels may not be located on a street-facing roof surface.

3. Solar surfaces may cover any amount of a side or rear roof surface, provided that they are incorporated into and made to appear as part of the roof, and do not cause glare to reflect onto neighboring properties.

4. All frame and visible structural parts of a solar panel shall coordinate with the roof color.

5. Solar systems may not be artificially illuminated.

6. A building permit shall be required prior to erecting any solar collector system. Mounting for such solar systems shall be in conformance with all electrical codes and building codes to ensure wind and weight loading requirements are met. Plans shall be prepared and stamped by a licensed architect, professional engineer or structural engineer (SE), and inspected by the building officer or his designee.

7. An emergency direct current (DC) disconnect switch shall be provided in a location accessible outside near the electric meter to shut off such system in the event of an emergency.

8. Solar systems should be used primarily to generate energy for the property where it is located. This provision is not intended to restrict connection to or provide excess electricity to the utility provider.

SEPTIC AREA PROTECTION:

Absolutely no construction traffic, stockpiling of materials, etc. shall occur over any portion of the septic field areas.

INSPECTIONS:

- Final includes electric and building. Technician must be on-site and have attic access.

PERFORMANCE BOND DEPOSIT:

Performance bond deposits (cash or check) are required from both the general contractor and the property owner at the time the permit is issued. In the event that damage occurs to village streets, easements, etc. from any construction or landscaping work, the deposits will be retained until the problem is resolved to the satisfaction of the Village Building Department. The deposit return will be initiated after the final inspection is complete and approved. “Request for Release of Performance Bond Deposit” forms are available at southbarrington.org.

ROOF MOUNTING INFORMATION FORM

1. Is the roofing type lightweight (Yes = composition, lightweight masonry, metal, etc.)

If No, submit completed worksheet for roof structure WKS1 (No = heavy masonry, slate, etc.)

2. Does the roof have a single roof covering? Yes or No

If No, submit completed worksheet for roof structure WKS1

3. Provide method and type of weatherproofing roof penetrations (e.g. flashing, caulk, etc.)
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MOUNTING SYSTEM INFORMATION

1. Is the mounting structure an engineered product designed to mount PV modules with no more than an 18" gap beneath the module frames? Yes or No

If No, provide details of structural attachment certified by a design professional.

2. For manufactured mounting systems, fill out information on the mounting system below:

a. Mounting System manufacturer _____ Product Name/Model # _____

b. Total Weight of PV Modules and Rails _____ lbs

c. Total Number of Attachment Points _____

d. Weight per Attachment Point (b ÷ c) _____ lbs (if greater than 45 lbs, see WKS1)

e. Maximum Spacing Between Attachment Points on a Rail _____ inches (see product manual for maximum spacing allowed based on maximum design wind speed)

f. Total Surface Area of PV Modules (square feet) _____ ft²

g. Distributed Weight of PV Module on Roof (b ÷ f) _____ lbs/ft²

If distributed weight of the PV system is greater than 5 lbs/ft², see WKS1

STRUCTURE WORKSHEET – WKS1

1. Roof construction: Rafters Trusses Other: _____

2. Describe site-built rafter or site-built truss systems:

a. Rafter Size: _____ x _____ inches

b. Rafter Spacing: _____ inches

c. Maximum unsupported span: _____ feet, _____ inches

d. Are the rafters over-spanned? (see the IRC span tables in B.2.) Yes or No

e. If Yes, complete the rest of this section.

3. If the roof system has:

a. Over-spanned rafters or trusses,

b. The array of 5 lbs/ft² on any roof construction, or

c. The attachments with a dead load exceeding 45 lbs per attachment

It is recommended that you provide one of the following:

i. A framing plan that shows details for how you will strengthen the rafters using the supplied span tables in B.2.

ii. Confirmation certified by a design professional that the roof structure will support the array.