



Building Safety Division  
51 Winburn Way, Ashland OR 97520  
541-488-5305 Fax 541-488-6006

# Photovoltaic Permit Application Information

Most Photovoltaic (PV) systems are small, under 3000 watts, roof mounted systems which can be applied for as a Prescriptive Path system. For other systems, or Non-Prescriptive Path systems, a detailed plan must be submitted for plan review after which the permits will be issued; this may take up to two weeks. An example of a Non-Prescriptive system is a roof mounted PV array that extends higher than 18" above the roof. *\*See the 2010 Oregon Solar Specialty Code and article 690 of the 2011 National Electrical Code for more details.*

Each type of system will require two permits: 1) a structural permit for the mounting or racking method of the array, and 2) an electrical permit for the electrical work associated with the PV system. A zoning permit may also be required for certain pole mounted systems.

## Prescriptive Path

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1. Complete the Electrical Renewable Energy Permit Application form.
2. Complete the Photovoltaic System Information Diagram.
3. Complete the Checklist for Prescriptive Photovoltaic Installations.
  - a. Provide a simple site plan showing roof framing and PV racking attachment. Please be aware that a zoning permit may be required if a pole mounted system is proposed.
4. Submit all items for review via:
  - a. In person at the Community Development Building, 51 Winburn Way, Ashland. Office hours are 8 am – 4:30 pm, Monday through Friday.
  - b. Email - [building@ashland.or.us](mailto:building@ashland.or.us)
  - c. Fax - #541-488-6006

## Non-Prescriptive Path

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1. Complete the Electrical Renewable Energy Permit Application form.
2. Complete the Photovoltaic System Information Diagram.
3. If a roof mounted system is proposed, provide an engineered plan showing roof framing and PV racking attachment
  - a. Include structural load and wind calculations.
4. If a pole mounted system is proposed, provide foundation details and site plan.
5. Submit all items for plan review at the Community Development Building, 51 Winburn Way, Ashland. Office hours are 8 am – 4:30 pm, Monday through Friday.



# Electrical Renewable Energy Permit Application

City of Ashland Building Division  
 51 Winburn Way, Ashland OR 97520  
 (541) 488-5305 [www.ashland.or.us](http://www.ashland.or.us)

Type of work	
<input type="checkbox"/> New Construction	<input type="checkbox"/> Addition/Alteration/Replacement
<input type="checkbox"/> Demolition	<input type="checkbox"/> Other:
Category of construction	
<input type="checkbox"/> 1 & 2 family dwelling	<input type="checkbox"/> Commercial/Industrial
<input type="checkbox"/> Multi-family	<input type="checkbox"/> Master Builder
<input type="checkbox"/> Accessory Buidling	<input type="checkbox"/> Other:
Job site information and location	
Job address:	
City/State/Zip:	
Suite/Bldg/Apt no.:	Project Name:
Subdivision:	Tax Map/Parcel no.:
Description of work	
Provide RS permit no.	
<input type="checkbox"/> Property owner <input type="checkbox"/> Tenant	
Name:	Email:
Address:	
City/State/Zip:	
Phone:	Fax:
<b>If owner installation:</b> This installation is being made on property that I own, which is not intended for sale, lease, rent, or exchange.	
Owner signature: _____	Date: _____
<input type="checkbox"/> Contractor <input type="checkbox"/> Subcontractor	
Business name:	Email:
Address:	
City/State/Zip:	
Phone:	Fax:
Elec.lic.no.	CCB lic.no.
Supervising Electrician	
Signature required: _____	
Print name: _____	License no. _____
Authorized signature: _____	
Print name: _____	Date: _____
<input type="checkbox"/> Applicant <input type="checkbox"/> Contact Person	
Business name:	
Contact name:	
Address:	
City/State/Zip:	
Phone:	Fax:
E-mail:	

RS Combo Permit/No Fees Due:

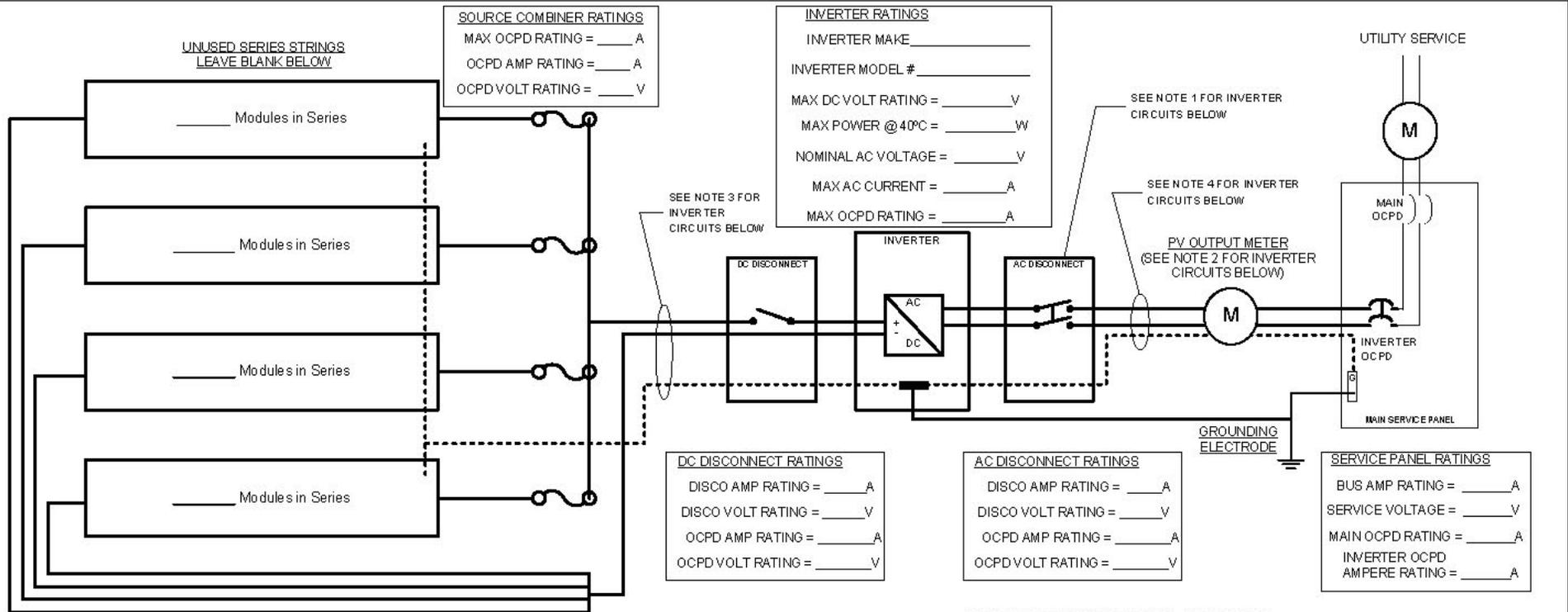
This permit application expires if a permit is not obtained within 180 days after it has been accepted as complete.

Fee Schedule				
Description	Qty.	Fee	Total	**
Renewable energy installation per system total				
5 kva or less		\$79		2
5.01 to 15 KVA		\$94		2
15.01 to 25 KVA		\$156		2
>25 KVA @ \$6.25ea				2
Wind generation systems in excess of 25 KVA:				
25.01 to 50 KVA		\$204		
50.01 to 100 KVA		\$469		
100.01 and up		See OAR 918.309.0040		
Miscellaneous				
Describe:				
Hourly rate:		\$65		
Each additional inspection				
Per inspection		\$65		
Investigation fee				
Other				
Permit fees				
Electrical Permit Subtotal			\$	

Structural Valuation for Racking System:	\$
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<b>Subtotal of Permit Fees</b>	\$
Plan review (25% of permit fee)	\$
State surcharge (12% of permit fee)	\$
<b>TOTAL PERMIT FEE</b>	\$

# CITY OF ASHLAND



**PV MODULE RATINGS @ STC**

MODULE MANUFACTURER \_\_\_\_\_

MODULE MODEL # \_\_\_\_\_

OPEN-CIRCUIT VOLTAGE = \_\_\_\_ V

OPERATING VOLTAGE = \_\_\_\_ V

MAX SYSTEM VOLTAGE = \_\_\_\_ V

OPERATING CURRENT = \_\_\_\_ A

SHORT-CIRCUIT CURRENT = \_\_\_\_ A

MAX SERIES FUSE (OCPD) = \_\_\_\_ A

MAXIMUM POWER = \_\_\_\_ W

V<sub>oc</sub> TEMP COEFF = \_\_\_\_ mV or %/°C  
 (IF SUPPLIED, CIRCLE TYPE OF COEFF)

**PV ARRAY INFORMATION**

# OF MODULES IN SERIES \_\_\_\_\_

# OF PARALLEL CIRCUITS \_\_\_\_\_

LOWEST EXPECTED TEMP \_\_\_\_ °C

HIGHEST EXPECTED TEMP \_\_\_\_ °C

**690.53 PHOTOVOLTAIC POWER SOURCE SIGN ON DC DISCO**

RATED CURRENT = \_\_\_\_ A

RATED VOLTAGE = \_\_\_\_ V

MAX SYS VOLTAGE = \_\_\_\_ V

MAX CURRENT = \_\_\_\_ A

**SOURCE CIRCUIT CONDUCTOR TYPE**  
 (OUTSIDE CONDUIT—CIRCLE ONE) USE-2; PV WIRE

**SOURCE CIRCUIT CONDUCTOR TYPE**  
 (INSIDE CONDUIT—CIRCLE ONE) THWN-2; XHHW-2; RHW-2; USE-2

**SOURCE CIRCUIT CONDUCTOR SIZE**  
 (SEE NOTES FOR ARRAY WIRING BELOW) \_\_\_\_ AWG

**NOTES FOR ARRAY WIRING:**

1.) 2005 ASHRAE FUNDAMENTALS 2% DESIGN TEMPERATURES DO NOT EXCEED 47°C IN THE UNITED STATES (PALM SPRINGS, CA IS 43°C).

2.) FOR LESS THAN 9 CURRENT-CARRYING CONDUCTORS IN ROOF-MOUNTED SUNLIT CONDUIT AND USING THE OUTDOOR DESIGN TEMPERATURE OF 47°C,

a) 12 AWG CONDUCTORS ARE GENERALLY ACCEPTABLE FOR MODULES WITH I<sub>sc</sub> OF 6.4 AMPS OR LESS WHEN PROTECTED BY A 10-AMP FUSE.

b) 10 AWG CONDUCTORS ARE GENERALLY ACCEPTABLE FOR MODULES WITH I<sub>sc</sub> OF 9.6 AMPS OR LESS WHEN PROTECTED BY A 15-AMP FUSE.

**NOTES FOR INVERTER INPUT AND OUT CIRCUITS:**

1) IF UTILITY REQUIRES VISIBLE-BREAK SWITCH, DOES THE AC DISCONNECT SATISFY THE UTILITY REQUIREMENTS OR IS AN ADDITIONAL SWITCH NECESSARY?

2) IF INCENTIVE PROGRAM REQUIRES PV OUTPUT METER, ADD METER BASE THAT MEETS REQUIREMENTS.

3) SIZE PHOTOVOLTAIC POWER SOURCE (DC) CONDUCTORS BASED ON MAX CURRENT ON 690.53 SIGN OR OCPD RATING AT DISCONNECT (IF SUPPLIED).

4) SIZE INVERTER OUTPUT CIRCUIT (AC) CONDUCTORS ACCORDING TO INVERTER OCPD AMPERE RATING.

OCPD = OVERCURRENT PROTECTION DEVICE (IF NO OCPD—LEAVE ITEM BLANK)

Generic Photovoltaic System Electrical Diagram for PV Systems of 10 kW or less				
Drawn By:	SIZE A	PSCH NO	DWG NO E1.1	REV 3
Checked By:	SCALE	NTS	Date:	SHEET



# Checklist for Prescriptive Photovoltaic Installations

PROPERTY OWNER INFORMATION	
Property owner name:	
Installation address:	
City:	State: ZIP:
Structure on which modules are to be installed:	
Day phone: (      )	Evening phone: (      )
E-mail address:	
Contractor:	CCB#:
Day phone: (      )	Evening phone: (      )
E-mail address:	
Electrical Sub-Contractor:	

SITE PLAN
<ul style="list-style-type: none"> <li>• Attach a simple site plan showing the location of the PV system in relation to buildings, structures, property lines, and, as applicable, flood hazard areas.</li> <li>• System must be shown in sufficient detail to assess whether the requirements of the Oregon Solar Installation Specialty Code section 304.9 or one of the exceptions have been met. (Fire Fighter Access)</li> <li>• The site plan must be on 8.5-inch x 11-inch or larger paper.</li> </ul>

STRUCTURAL INFORMATION
<p><b>All structures:</b> Structural Valuation of Project: \$_____ (racking or pole system only)</p> <ul style="list-style-type: none"> <li>• Is this conventional light framed wood construction? Yes <input type="checkbox"/> No <input type="checkbox"/> (check one)</li> <li>• Does the structure have pre-engineered trusses? Yes <input type="checkbox"/> No <input type="checkbox"/> (check one)</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>• Does structure have roof framing members spaced at 24 inches on center maximum? Yes <input type="checkbox"/> No <input type="checkbox"/> (check one)</li> <li>• Is the weight of the PV modules and racking less than 4.5 pounds per square foot? Yes <input type="checkbox"/> No <input type="checkbox"/> (check one)</li> <li>• Is the roofing material metal, single layer wood shingle, or not more than two layers of composition shingle? Yes <input type="checkbox"/> No <input type="checkbox"/> (check one)</li> </ul> <p style="text-align: right;">Over ⇨</p>

## STRUCTURAL INFORMATION (continued)

### Standing seam metal roofs:

- Is the metal gauge 26 or heavier?  
Yes  No  (check one)
- Clamp design: Are clamps designed to withstand uplift of at least 115 pounds for clamps spaced at 60 inches on center or less or at least 75 pounds for clamps spaced at 48 inches on center or less?  
Yes  No  (check one)
- Is the spacing of the clamps as measured along the seam less than or equal to 24 inches on center?  
Yes  No  (check one)
- Is the roofing panel width 18 inches or less?  
Yes  No  (check one)
- Will the roofing panel attachments be at least #10 screws at 24 inches on center?  
Yes  No  (check one)
- Will the roofing panels be installed over minimum ½-inch nominal wood structural panels attached to framing with 8d nails at six inches on center at panel edges and 12 inches on center field nailing?  
Yes  No  (check one)

*If no, on any of these requirements, the project may not be submitted using the prescriptive path.*

## ROOF DESIGN AND ATTACHMENT

- Attach a simple structural plan showing the roof framing (rafter size, type, and spacing) and PV system racking attachment.
- System must be shown in sufficient detail to assess whether the requirements of section 305.4 have been met.
- The structural plan must be on 8.5-inch x 11-inch or larger paper.

## WIND DESIGN

- Does the project site exceed 95 mph in exposure C or 105 mph in exposures A or B?  
Yes  No  (check one) *If yes, the project may not be submitted using the prescriptive path.*
- Is the module height less than 18 inches above the roof in accordance with section 305.4?  
Yes  No  (check one)

## PV MODULES

Manufacturer: \_\_\_\_\_  
Model number: \_\_\_\_\_  
Listing agency: \_\_\_\_\_

Applicant name (please print)

Applicant signature

Date