



Oregon Solar Installation Specialty Code

Checklist for Prescriptive Photovoltaic Installations in accordance with Section 305.4

Department of Consumer and Business Services
Building Codes Division

1535 Edgewater NW, Salem, Oregon
Mailing address: P.O. Box 14470, Salem, OR 97309-0404
Phone: 503-378-4133 • Fax: 503-378-2322
Web: bcd.oregon.gov

PROPERTY OWNER INFORMATION	
Property owner name:	
Installation address:	
City:	State: OR 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:	

SITE PLAN
<ul style="list-style-type: none"> • 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. • System must be shown in sufficient detail to assess whether the requirements of section 304.9 or one of the exceptions have been met. • The site plan must be on 8.5-inch x 11-inch or larger paper.

STRUCTURAL INFORMATION
<p>All structures:</p> <ul style="list-style-type: none"> • Is this conventional light framed wood construction? Yes <input type="checkbox"/> No <input type="checkbox"/> (check one) • Does the structure have pre-engineered trusses? Yes <input type="checkbox"/> No <input type="checkbox"/> (check one) <p>OR</p> <ul style="list-style-type: none"> • Does structure have roof framing members spaced at 24 inches on center maximum? Yes <input type="checkbox"/> No <input type="checkbox"/> (check one) • 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) • 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)



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: _____

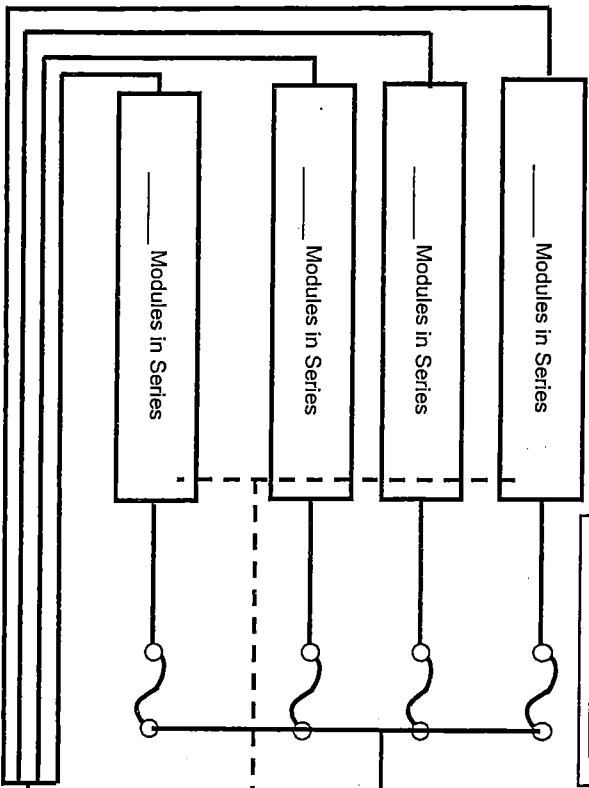
Applicant name (please print)

Applicant signature

Date

**UNUSED SERIES STRINGS
LEAVE BLANK BELOW**

SOURCE COMBINER RATINGS
 MAX OCPD RATING = _____ A
 OCPD AMP RATING = _____ A
 OCPD VOLT RATING = _____ V

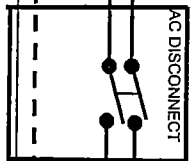
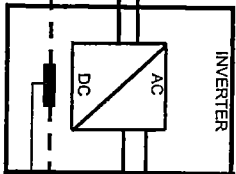
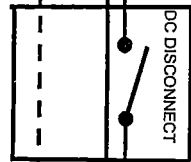


PV MODULE RATINGS @ STC
 MODULE MANUFACTURER _____
 MODULE MODEL # _____
 OPEN-CIRCUIT VOLTAGE = _____ V
 OPERATING VOLTAGE = _____ V
 MAX SYSTEM VOLTAGE = _____ V
 OPERATING CURRENT = _____ V
 SHORT-CIRCUIT CURRENT = _____ V
 MAXIMUM POWER = _____ W
 Voc TEMP COEFF = _____ mV or %/C
 (if supplied)

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

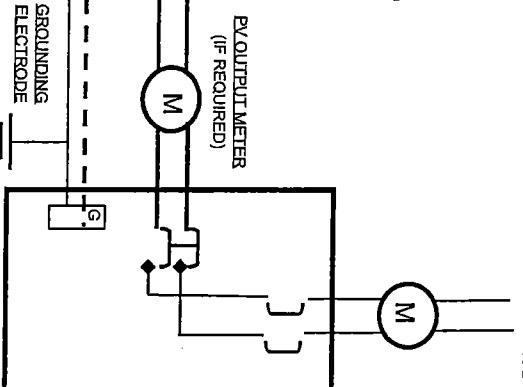
INVERTER RATINGS
 MAX DC VOLT RATING = _____ V
 MAX POWER @ 40°C = _____ W
 NOMINAL AC VOLTAGE = _____ V
 MAX AC CURRENT = _____ A
 MAX OCPD RATING = _____ A

DC DISCONNECT RATINGS
 DISCO AMP RATING = _____ A
 DISCO VOLT RATING = _____ V
 OCPD AMP RATING = _____ A
 OCPD VOLT RATING = _____ V



AC DISCONNECT RATINGS
 DISCO AMP RATING = _____ A
 DISCO VOLT RATING = _____ V
 OCPD AMP RATING = _____ A
 OCPD VOLT RATING = _____ V

SERVICE PANEL RATINGS
 BUS AMP RATING = _____ A
 SERVICE VOLTAGE = _____ V
 MAIN AMP RATING = _____ A
 INVERTER OCPD
 AMP RATING = _____ A



PV ARRAY INFORMATION
 # OF MODULES IN SERIES _____
 # OF PARALLEL CIRCUITS _____
 LOWEST EXPECTED TEMP _____ °C
 HIGHEST EXPECTED TEMP _____ °C

**890.53 PHOTOVOLTAGE POWER
SOURCE SIGNAL ON DC DISCO**
 RATED CURRENT = _____ A
 RATED VOLTAGE = _____ V
 MAX SYS VOLTAGE = _____ V
 MAX CIRC CURRENT = _____ V

SOURCE CIRCUIT WIRE TYPE (OUTSIDE CONDUIT-CIRCLE ONE)
 USE 2-WIRE _____
 SOURCE CIRCUIT WIRE TYPE (INSIDE CONDUIT-CIRCLE ONE)
 THWN-2, XHHW-2, RHW-2, USE 2 _____
 SOURCE CIRCUIT WIRE SIZE (SEE NOTE BELOW) _____

- NOTES:
- 1) ASHRAE FUNDAMENTALS OUTDOOR DESIGN TEMPERATURES DO NOT EXCEED 47°C IN THE UNITED STATES (PHOENIX, AZ; PALM SPRINGS, CA)
 - 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 Isc OF 6.4 AMPS OR LESS WHEN PROTECTED BY A 10-AMP FUSE.
 - b) 10 AWG CONDUCTORS ARE GENERALLY ACCEPTABLE FOR MODULES WITH Isc OF 9.6 AMPS OR LESS WHEN PROTECTED BY A 15-AMP FUSE.

SCALE: NTS

**Generic Photovoltaic System Electrical Diagram
for PV Systems of 25kW or less**