

COMMUNITY DEVELOPMENT CENTER - Building Department

Ph. 503-543-7184 Fx. 503-543-5679 scappoosebuildingdept@scappoose.gov

Prescriptive Rooftop-Mounted Solar Photovoltaic Installation Checklist

Residential and Commercial Compliance

Submit this checklist to demonstrate compliance with the prescriptive photovoltaic (PV) installation requirements of the Oregon Residential Specialty Code (ORSC) and the Oregon Structural Specialty Code (OSSC). Separate electrical permits are required for installations. See OAR 918-050-0180. Use Oregon ePermitting for permit application and upload this checklist once completed.

Property owner name: Phone n	number:
Installation address:	
City: State: Oregon ZIP:	
Structure type: ORSC governed dwelling or accessory structure OSSC governed commercial or apartment building Other:	
Installer: Contractor Owner (If owner, skip to Part III)	
PART II – CONTRACTOR INFORMATION	
Contractor's name: Phone n	number:
Email address:	
BCD license #: CCB license #:	cense #:
PART III – STRUCTURAL CRITERIA	
Roof structure requirements	
If "No" is selected for any item in Part III, or if the supporting structure is a manufactured dwelling submitted using the prescriptive path.	ng, the project may not be
Check the appropriate boxes for each item as it applies to the project.	
• The Risk Category is I or II for OSSC governed structures (OSSC Section 1604.5):	
The structure is of conventional light-frame construction:	
 The supporting roof framing is one of the following: (check one) □ Preengineered trusses spaced ≤ 24 inches o.c.; or 	Yes No
 Rafters spaced ≤ 24 inches o.c. and for ORSC governed structures spans comply with OSSC Section 3111. for OSSC governed structures spans comply with OSSC Section 3111. 	
The ground snow load does not exceed the following:	Yes No
(<i>check one</i>) \Box 70 psf for ORSC governed structures, or \Box 50 psf for OSSC governed st	tructures
 The basic design wind speed does not exceed the following:	
• The roofing materials are metal, single-layer wood shingle or shake, or not more than two layers of composition shingle:	Yes 🗌 No
• The module height will be no more than 18 inches from the top of the module to the roof surface comply with Figures 3111.3.5.3(2) and 3111.3.5.3(3):	



PART III – STRUCTURAL C	CRITERIA (continued)
-------------------------	----------------------

Loading requirements Check the appropriate boxes for each item associated with the selected attachment method. ☐ Attachment Method 1: PV modules or racking will be attached directly to the roof framing or blocking: • The combined weight of PV modules or racking is not more than 4.5 psf: • The spacing of PV modules or racking attachments complies with the following: • The spacing 5 24 inches in any direction; or Attachment spacing > 24 inches and ≤ 48 inches in any direction where all of the following exist: I. Ground snow load ≤ 36 psf. 2. Attachments not located within 3 feet of a roof edge, hip, eave, or ridge. 3. Basic design wind speed ≤ 120 mph in Wind Exposure Category B or ≤ 110 mph in Wind Exposure Category C. □ Attachment Method 2: PV modules or racking will be attached directly to standing seam metal panels: • The combined weight of PV modules and racking is not more than 4.5 psf: Yes • The clamps comply with all the following requirements: Yes • The allowable uplift capacity complies with the following: Yes Not less than 175 pounds where clamp spacing is < 48 inches o.c. and Not less than 175 pounds where clamp spacing is < 48 inches o.c. 2. The spacing along a panel seam will be ≥ 24 and ≤ 60 inches o.c. 3. The parallel to seam clamp spacing multiplied by the perpendicular clamp spacing will be ≤ 10 sq. ft. •
 Attachment Method 1: PV modules or racking will be attached directly to the roof framing or blocking: The combined weight of PV modules and racking is not more than 4.5 psf:
 The combined weight of PV modules and racking is not more than 4.5 psf: Yes Yes No The spacing of PV modules or racking attachments complies with the following: Yes No Attachment spacing ≤ 24 inches in any direction; or Attachment spacing > 24 inches and ≤ 48 inches in any direction where all of the following exist: Ground snow load ≤ 36 psf. Attachments not located within 3 feet of a roof edge, hip, eave, or ridge. Basic design wind speed ≤ 120 mph in Wind Exposure Category B or ≤ 110 mph in Wind Exposure Category B or ≤ 110 mph in Wind Exposure Category C. Attachment Method 2: PV modules and racking is not more than 4.5 psf: Yes No The combined weight of PV modules and racking is not more than 4.5 psf: Yes No The clamps comply with all the following requirements: Yes No The allowable uplift capacity complies with the following: Not less than 15 pounds where clamp spacing is ≥48 inches o.c. and Not less than 15 pounds where clamp spacing is ≥48 inches o.c. The metal roofing panels comply with the following requirements:
 The spacing of PV modules or racking attachments complies with the following: Yes No Attachment spacing ≤ 24 inches in any direction; or Attachment spacing > 24 inches and ≤ 48 inches in any direction where all of the following exist: Ground snow load ≤ 36 psf. Attachments not located within 3 feet of a roof edge, hip, eave, or ridge. Basic design wind speed ≤ 120 mph in Wind Exposure Category B or ≤ 110 mph in Wind Exposure Category C. Attachment Method 2: PV modules or racking will be attached directly to standing seam metal panels: The combined weight of PV modules and racking is not more than 4.5 psf: Yes No The clamps comply with all the following requirements: Yes No The allowable uplift capacity complies with the following: Not less than 115 pounds where clamp spacing is ≥ 48 inches o.c. and Not less than 15 pounds where clamp spacing is ≤ 48 inches o.c. The metal roofing panels comply with the following requirements: Yes No Panel thickness is a minimum 26 gauge steel. Panel width is ≤ 18 inches. Attached with at least #10 screws at 24 inches o.c. Will be installed over minimum ½-inch nominal wood structural panel sheathing that is fastened with 8d nails at 6 inches o.c. at panel edges and 12 inches o.c. field nailing.
 Attachment spacing ≤ 24 inches in any direction; or Attachment spacing > 24 inches and ≤ 48 inches in any direction where all of the following exist: Ground snow load ≤ 36 psf. Attachments not located within 3 feet of a roof edge, hip, eave, or ridge. Basic design wind speed ≤ 120 mph in Wind Exposure Category B or ≤ 110 mph in Wind Exposure Category C. Attachment Method 2: PV modules or racking will be attached directly to standing seam metal panels: The combined weight of PV modules and racking is not more than 4.5 psf: The clamps comply with all the following requirements: Not less than 115 pounds where clamp spacing is ≥ 48 inches o.c. and Not less than 15 pounds where clamp spacing is ≥ 48 inches o.c. The allowable uplift capacity complies with the following: Not less than 15 pounds where clamp spacing is < 48 inches o.c. The spacing along a panel seam will be ≥ 24 and ≤ 60 inches o.c. The parallel to seam clamp spacing multiplied by the perpendicular clamp spacing will be ≤ 10 sq. ft. The metal roofing panels comply with the following requirements: Panel thickness is a minimum 26 gauge steel. Panel width is ≤ 18 inches. Attached with at least #10 screws at 24 inches o.c. Will be installed over minimum ½-inch nominal wood structural panel sheathing that is fastened with 8d nails at 6 inches o.c. at panel edges and 12 inches o.c. field nailing.
 Attachment spacing > 24 inches and ≤ 48 inches in any direction where all of the following exist: Ground snow load ≤ 36 psf. Attachments not located within 3 feet of a roof edge, hip, eave, or ridge. Basic design wind speed ≤ 120 mph in Wind Exposure Category B or ≤ 110 mph in Wind Exposure Category C. Attachment Method 2: PV modules or racking will be attached directly to standing seam metal panels: The combined weight of PV modules and racking is not more than 4.5 psf: Yes No The clamps comply with all the following requirements: No tess than 115 pounds where clamp spacing is ≥ 48 inches o.c. and Not less than 115 pounds where clamp spacing is < 48 inches o.c. The spacing along a panel seam will be ≥24 and ≤ 60 inches o.c. The metal roofing panels comply with the following requirements: Panel thickness is a minimum 26 gauge steel. Panel thickness is a minimum 26 gauge steel. Will be installed over minimum ½-inch nominal wood structural panel sheathing that is fastened with 8d nails at 6 inches o.c. at panel edges and 12 inches o.c. field nailing.
 Ground snow load ≤ 36 psf. Attachments not located within 3 feet of a roof edge, hip, eave, or ridge. Basic design wind speed ≤ 120 mph in Wind Exposure Category B or ≤ 110 mph in Wind Exposure Category C. Attachment Method 2: PV modules or racking will be attached directly to standing seam metal panels: The combined weight of PV modules and racking is not more than 4.5 psf: The clamps comply with all the following requirements: No The allowable uplift capacity complies with the following:
 2. Attachments not located within 3 feet of a roof edge, hip, eave, or ridge. 3. Basic design wind speed ≤ 120 mph in Wind Exposure Category B or ≤ 110 mph in Wind Exposure Category C. Attachment Method 2: PV modules or racking will be attached directly to standing seam metal panels: The combined weight of PV modules and racking is not more than 4.5 psf: Yes □ No The clamps comply with all the following requirements: Yes □ No I. The allowable uplift capacity complies with the following: Not less than 115 pounds where clamp spacing is ≥ 48 inches o.c. and Not less than 115 pounds where clamp spacing is < 48 inches o.c. 2. The spacing along a panel seam will be ≥ 24 and ≤ 60 inches o.c. 3. The parallel to seam clamp spacing multiplied by the perpendicular clamp spacing will be ≤ 10 sq. ft. The metal roofing panels comply with the following requirements: Yes □ No 1. Panel thickness is a minimum 26 gauge steel. 2. Panel width is ≤ 18 inches. 3. Attached with at least #10 screws at 24 inches o.c. 4. Will be installed over minimum ½-inch nominal wood structural panel sheathing that is fastened with 8d nails at 6 inches o.c. at panel edges and 12 inches o.c. field nailing.
 3. Basic design wind speed ≤ 120 mph in Wind Exposure Category B or ≤ 110 mph in Wind Exposure Category C. Attachment Method 2: PV modules or racking will be attached directly to standing seam metal panels: The combined weight of PV modules and racking is not more than 4.5 psf: Yes □ No The clamps comply with all the following requirements: Yes □ No I. The allowable uplift capacity complies with the following: Not less than 115 pounds where clamp spacing is ≥ 48 inches o.c. and Not less than 15 pounds where clamp spacing is < 48 inches o.c. 2. The spacing along a panel seam will be ≥24 and ≤ 60 inches o.c. 3. The parallel to seam clamp spacing multiplied by the perpendicular clamp spacing will be ≤ 10 sq. ft. The metal roofing panels comply with the following requirements: Yes □ No I. Panel thickness is a minimum 26 gauge steel. 2. Panel width is ≤ 18 inches. 3. Attached with at least #10 screws at 24 inches o.c. 4. Will be installed over minimum ½-inch nominal wood structural panel sheathing that is fastened with 8d nails at 6 inches o.c. at panel edges and 12 inches o.c. field nailing.
 ≤ 110 mph in Wind Exposure Category C. Attachment Method 2: PV modules or racking will be attached directly to standing seam metal panels: The combined weight of PV modules and racking is not more than 4.5 psf: Yes No The clamps comply with all the following requirements: Yes No The allowable uplift capacity complies with the following: Not less than 115 pounds where clamp spacing is ≥ 48 inches o.c. and Not less than 115 pounds where clamp spacing is < 48 inches o.c. The spacing along a panel seam will be ≥ 24 and ≤ 60 inches o.c. The metal roofing panels comply with the following requirements: Yes No Panel thickness is a minimum 26 gauge steel. Panel width is ≤ 18 inches. Attached with at least #10 screws at 24 inches o.c. Will be installed over minimum ½-inch nominal wood structural panel sheathing that is fastened with 8d nails at 6 inches o.c. at panel edges and 12 inches o.c. field nailing.
 The combined weight of PV modules and racking is not more than 4.5 psf: Yes No The clamps comply with all the following requirements: Yes No The allowable uplift capacity complies with the following: Not less than 115 pounds where clamp spacing is ≥ 48 inches o.c. and Not less than 75 pounds where clamp spacing is < 48 inches o.c. The spacing along a panel seam will be ≥ 24 and ≤ 60 inches o.c. The parallel to seam clamp spacing multiplied by the perpendicular clamp spacing will be ≤ 10 sq. ft. The metal roofing panels comply with the following requirements: Yes No Panel thickness is a minimum 26 gauge steel. Panel width is ≤ 18 inches. Attached with at least #10 screws at 24 inches o.c. Will be installed over minimum ½-inch nominal wood structural panel sheathing that is fastened with 8d nails at 6 inches o.c. at panel edges and 12 inches o.c. field nailing.
 The clamps comply with all the following requirements: Yes □ No 1. The allowable uplift capacity complies with the following: Not less than 115 pounds where clamp spacing is ≥ 48 inches o.c. and Not less than 75 pounds where clamp spacing is < 48 inches o.c. 2. The spacing along a panel seam will be ≥ 24 and ≤ 60 inches o.c. 3. The parallel to seam clamp spacing multiplied by the perpendicular clamp spacing will be ≤ 10 sq. ft. The metal roofing panels comply with the following requirements: Yes □ No 1. Panel thickness is a minimum 26 gauge steel. 2. Panel width is ≤ 18 inches. 3. Attached with at least #10 screws at 24 inches o.c. 4. Will be installed over minimum ½-inch nominal wood structural panel sheathing that is fastened with 8d nails at 6 inches o.c. at panel edges and 12 inches o.c. field nailing.
 The allowable uplift capacity complies with the following: Not less than 115 pounds where clamp spacing is ≥ 48 inches o.c. and Not less than 75 pounds where clamp spacing is < 48 inches o.c. The spacing along a panel seam will be ≥ 24 and ≤ 60 inches o.c. The parallel to seam clamp spacing multiplied by the perpendicular clamp spacing will be ≤ 10 sq. ft. The metal roofing panels comply with the following requirements: Yes No Panel thickness is a minimum 26 gauge steel. Panel width is ≤ 18 inches. Attached with at least #10 screws at 24 inches o.c. Will be installed over minimum ½-inch nominal wood structural panel sheathing that is fastened with 8d nails at 6 inches o.c. at panel edges and 12 inches o.c. field nailing.
 Not less than 115 pounds where clamp spacing is ≥ 48 inches o.c. and Not less than 75 pounds where clamp spacing is < 48 inches o.c. 2. The spacing along a panel seam will be ≥ 24 and ≤ 60 inches o.c. 3. The parallel to seam clamp spacing multiplied by the perpendicular clamp spacing will be ≤ 10 sq. ft. • The metal roofing panels comply with the following requirements: Yes No 1. Panel thickness is a minimum 26 gauge steel. 2. Panel width is ≤ 18 inches. 3. Attached with at least #10 screws at 24 inches o.c. 4. Will be installed over minimum ½-inch nominal wood structural panel sheathing that is fastened with 8d nails at 6 inches o.c. at panel edges and 12 inches o.c. field nailing.
Not less than 75 pounds where clamp spacing is < 48 inches o.c.
 3. The parallel to seam clamp spacing multiplied by the perpendicular clamp spacing will be ≤ 10 sq. ft. • The metal roofing panels comply with the following requirements: Yes No 1. Panel thickness is a minimum 26 gauge steel. 2. Panel width is ≤ 18 inches. 3. Attached with at least #10 screws at 24 inches o.c. 4. Will be installed over minimum ½-inch nominal wood structural panel sheathing that is fastened with 8d nails at 6 inches o.c. at panel edges and 12 inches o.c. field nailing.
 The metal roofing panels comply with the following requirements: Yes □ No 1. Panel thickness is a minimum 26 gauge steel. 2. Panel width is ≤ 18 inches. 3. Attached with at least #10 screws at 24 inches o.c. 4. Will be installed over minimum ½-inch nominal wood structural panel sheathing that is fastened with 8d nails at 6 inches o.c. at panel edges and 12 inches o.c. field nailing.
 Panel thickness is a minimum 26 gauge steel. Panel width is ≤ 18 inches. Attached with at least #10 screws at 24 inches o.c. Will be installed over minimum ½-inch nominal wood structural panel sheathing that is fastened with 8d nails at 6 inches o.c. at panel edges and 12 inches o.c. field nailing. PART IV - ROOF FRAMING PLAN
 Panel width is ≤ 18 inches. Attached with at least #10 screws at 24 inches o.c. Will be installed over minimum ½-inch nominal wood structural panel sheathing that is fastened with 8d nails at 6 inches o.c. at panel edges and 12 inches o.c. field nailing. PART IV – ROOF FRAMING PLAN
 3. Attached with at least #10 screws at 24 inches o.c. 4. Will be installed over minimum ½-inch nominal wood structural panel sheathing that is fastened with 8d nails at 6 inches o.c. at panel edges and 12 inches o.c. field nailing. PART IV – ROOF FRAMING PLAN
 4. Will be installed over minimum ¹/₂-inch nominal wood structural panel sheathing that is fastened with 8d nails at 6 inches o.c. at panel edges and 12 inches o.c. field nailing. PART IV – ROOF FRAMING PLAN
6 inches o.c. at panel edges and 12 inches o.c. field nailing. PART IV – ROOF FRAMING PLAN
Roof design requirements
Roof design requirements
Provide a simple plan showing the roof framing members (type, size and spacing) and PV system racking attachment points
in accordance with the local municipality's requirements. The proposed system must be shown in sufficient detail to assess
whether the prescriptive installation requirements of Section 3111.3.5.3 will be met.
PART V – PV MODULES
Manufacturer:

Model number:

Listing agency:

PART VI – LOCATIONS AND PATHWAYS

Locations and pathway requirements

Provide a simple plan in accordance with the municipality's requirements showing the location of the proposed PV array(s) on the building(s) and fire fighter access and escape pathways. The proposed system must be shown in sufficient detail to assess whether the location and pathway requirements of Sections 3111.3.4.1 through 3111.3.4.8 will be met.