PRESCRIPTIVE SOLAR PHOTOVOLTAIC SYSTEM INSTALLATION AFFIDAVIT FOR DETACHED SINGLE FAMILY DWELLINGS

| Project Name: ________________________________ | Job Address: ________________________________ |
| Contractor: ________________________________ | Phone: ________________________________ |

I, ________________________________, Oregon Construction Contractors Board No. __________ certify THE PROPOSED INSTALLATION COMPLIES WITH Sections 304.9 and 305.4 of the Oregon Solar Installation Specialty Code (OSISC) and the following is true and defines the scope of work for this project:

a) All work complies with the current state adopted Oregon Solar Installation Specialty Code and the authority having jurisdiction.
b) All alterations to the roof have been sealed in an appropriate manner.
c) Inspections shall be requested and approvals obtained for all installations. Requests can be made at (503) 682-4159.

Under the provisions of Section 105.2; construction documents shall not be required when an applicant has demonstrated on a form approved by the Building Official that a proposed installation complies with the requirements of Sections 304.9 and 305.4 of the Oregon Solar Installation Specialty Code.

Fire Fighter Access and Escape:

Section 304.9 Fire Fighter Access and Escape. To provide access and escape for Fire Fighters the location of roof-mounted PV modules shall comply with the requirements of this section.

Section 304.9.1 General Pathway Requirements. All PV installations shall include a 36 inch wide (914mm) pathway maintained along three sides of the solar roof. The bottom edge of a roof with a slope that exceeds 2:12 shall not be used as a pathway. All pathways shall be located over a structurally supported area and measured from edge of the roof and horizontal ridge to the solar array or any portion thereof. To be provided.

Exception:

1. On structures with a PV array area of 1,000 square feet (92.9 m²) or less installed on a roof with a slope that exceeds 2:12 and with an intersecting adjacent roof and where no section is larger than 150 feet (45720 mm) measured in length or width:

   Meets exception ☐
   Does not apply ☐

   1.1. Where the PV array does not exceed 25% as measured in plan view of total roof area of the structure, a minimum 12 inch (305 mm) unobstructed pathway, shall be maintained along each side of any horizontal ridge.

Will be provided ☐
Does not apply ☐
1.2. Where the solar array area exceeds 25% as measured in plan view of total roof area of the structure, a minimum of one 36 inch (914 mm) unobstructed pathway from ridge to eave, over a structurally supported area, must be provided in addition to a minimum 12 inch (305 mm) unobstructed pathway along each side of any horizontal ridge.

2. Pathways are not required on non-occupied accessory structures provided they are separated from occupied structures by a 6 feet (3048 mm) minimum separation distance or by a minimum two-hour fire rated assembly.

304.9.2 Intermediate Pathway Locations.
Systems that include a solar array section that is larger than 150 feet (45 720 mm) measured in length or width shall have additional intermediate pathways. An intermediate pathway not less than 36 inches (914 mm) wide separating the array shall be provided for every 150 feet (45 720 mm) of array including offset modules or angled installations. The maximum square footage of an array shall not exceed 22,500 ft² (2090 m²) without the installation of intermediate pathway.

304.9.2.1. Where a system is required to have intermediate pathways, all pathways shall have one or more cutouts located adjacent to the pathway. No point on the pathway shall be more than 25 feet (7620 from a cutout.

304.9.3 Prohibited Locations. Pathways shall not be located within 12 inches of the low point of a valley.

304.9.5 Electrical Component Location.
304.9.5.1 Disconnects, j-boxes, combiner boxes or gutters shall not be located in any required pathway or cutout.

304.9.5.2 Raceways on flat roofs that cross a required pathway shall be bridged to avoid tripping hazards. Raceways shall not be permitted in required pathways on roofs with a slope that exceeds 2:12 (17-percent slope).

305.4 Prescriptive Installations. Roof installations on conventional light-frame construction which complies with this section shall qualify as prescriptive and shall not require an engineered design if all of the following criteria are met:

1. Roof Structure: The supporting roof framing shall be conventional light framed wood construction with pre-engineered trusses or roof framing members at a spacing of 24 inches (610 mm) on center maximum that comply with the applicable allowable span in Table 305.4.1 (See Appendix B) for the specific loads including ground snow loads not exceeding 50 psf and wind loads that do not exceed 95 mph in exposure C or 105 mph in exposures A or B as defined in 1609 of the Building Code. Where the grade cannot be verified it is assumed to be #2 Douglas-Fir Larch.

Exception: Roof framing in compliance with the applicable allowable span in Table 305.4.2 (See Appendix B) for the specific loads including ground snow loads not exceeding 70 psf and wind exposure is limited to exposure A, B or C shall satisfy the requirements of this section when the PV system is install on;

1. Detached one and two family dwelling classified as Group R-3, and Group U Occupancies; and
2. Residences used for family child care home or foster care in accordance with ORS Chapters 418, 443 and 657A; and

2. Roof materials. Roofing material shall be metal, single layer wood shingle or shake, or not more than two layers of composition shingle.

3. Loading: Installation shall comply with Figure 305.4(1). The combined weight of the PV modules and racking shall not exceed 4.5 pounds per square foot (2.0412 kPa). PV modules or racking shall be directly attached to the roof framing or blocking. See Figures 305.4(1). These attachments must be spaced no greater than 48 inches (1219 mm) on center in any direction. Attachments shall be spaced no greater than 24 inches (609.6 mm) on center in any direction where:

3.1. Ground snow loads exceed 25 psf;

3.2. Located within 3 feet (91.44 cm) of a roof edge, hip, eave or ridge; or

3.3. Wind exposure is B or more and wind speed 95 mph or more or wind exposure is exposure C and wind speed is 85 mph or more.

Exception: PV modules or racking may be attached directly to standing seam metal panels using clamps and roofing materials which meet the following:

1. The allowable uplift capacity of clamps shall not be less than 115 pound for clamps spaced at 60 inches (1525 mm) on center or less as measured along the seam or not be less than 75 pounds for clamps spaced at less than 48 inches (1219 mm) on center.

2. Clamp spacing between or along seams shall not be less than 24-inches (610 mm). Spacing of clamps along a seam shall not exceed 60-inches.

3. Roofing panels shall comply with all of the following:
   3.1. Shall be a minimum of 26 gage steel,
   3.2. Shall be a maximum of 18 inches (457 mm) in width,
   3.3. Shall be attached with a minimum of #10 screws at 24 inches (610 mm) on center,
   3.4. Shall be installed over minimum ½-inch (12.7 mm) nominal wood structural panels attached to framing with 8d nails at 6-inches (153 mm) on center at panel edges and 12-inches (305 mm) on center field nailing.

4. Height: Maximum module height above roof shall be 18 inches (457 mm) from top of module to roof surface and in accordance with Figure 305.4(1).
Solar Code Affidavit – Page 4 of 4

to obtain my permit:

- Site plan which contains all of the information shown on the example site plan attached to this document.
- Rafter size: ___ X ___ inches spaced at _____ on center. The maximum allowed span is ___ ft. _____ inches. Plans examiner to validate allowed span. (Not required when engineered trusses).
- Cut sheets for the solar panels that indicate they comply with UL 1703.
- A copy of this document shall be available for the authority having jurisdiction at inspection.
- Photovoltaic system has a _______________kW.

Signature: ________________________________ Date: __________________

Revised 11/10
Choose roof framing detail that applies (must choose one).

Bolt missed rafter.  

Plumbing vents.  

Number indicates detail.
Engineered two point bearing truss

Normally built using 2x4 member’s spaced @ 24” O.C.
All Joints will have either plywood or metal gussets.
Span: Distance between supports (stick frame)
Anchor missed rafter?  
Approved method of repair.

---

**PLUMBING**  
Vent Spanning Detail

- Solar panel attached with module clamps
- Solar module standoff bracket and post
- Roofing Material
- Plywood
- (E) Rafter

2" Max  I.D.

2" Min CLR Span to underside of module

6" Min Vent height from top of roofing material

Plumbing vent pipe

---

Note: Solar module to roof by standoffs sized to create appropriate clearance determined below.

- Vent height will be a minimum of 6 inches above the roof, or the minimum value allowed by local building code.
- Minimum clearance between the top of the vent and the bottom of the solar module glass shall be at least the diameter of the vent.