



City of SeaTac
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Community and Economic Development

Electrical Permit Checklist for Residential Solar Photovoltaic Systems

Building Services

Complete all sections of this form and submit this checklist, a roof layout of solar panels, and a one-line diagram to the City of SeaTac Permit Center permit portal.

PROPERTY INFORMATION

Site Address: _____ Parcel #: _____ Phone: _____

Property Owner: _____ Owner Phone/Email: _____

Owner Address (if not the same as site address): _____

ELECTRICAL CONTRACTOR INFORMATION

Company Name: _____ Phone: _____

Site Contact Name: _____ Email: _____

Mailing Address: _____

Contractor's L&I License #: _____ and SeaTac Business License #: _____

Description of PV system, including manufacturer and model number of major equipment:

PERMIT INFORMATION AND SUBMITTAL CHECKLIST

	Yes	No	N/A
PV modules, inverters, and combiner boxes are identified for use in PV systems.			
The inverters are listed and labeled in accordance with UL 1741 and are listed for utility interaction. [WAC 51-51 IRC R324.3]			
The AC interconnection point is on the load side of service disconnect. [NEC 705.12(B)]			
The system meets all current NEC, City and Washington Cities Electrical Code requirements.			
For Split-Bus modules, the AC interconnection is one of the six service disconnects.			

Maximum load added to the panelboard is based on the rating of the panelboard's bus/main Over Current Protection Device (OCPD) combination.

Maximum inverter OCPD may be no greater than 120% of the panelboard bus rating minus the panelboard main OCPD rating in accordance with NEC 705.12(D)(2)(3)(b). Check combination that applies ^{Notes 1,2,3:}

- ☐ 100 amp bus/100 amp main OCPD - 3,840 watts, maximum 20 amp inverter OCPD.
- ☐ 125 amp bus/125 amp main OCPD - 4,800 watts, maximum 25 amp inverter OCPD.
- ☐ 150 amp bus/150 amp main OCPD - 5,760 watts, maximum 30 amp inverter OCPD.
- ☐ 200 amp bus/200 amp main OCPD - 7,860 watts, maximum 40 amp inverter OCPD.
- ☐ 225 amp bus/225 amp main OCPD - 8,640 watts, maximum 45 amp inverter OCPD.
- ☐ 225 amp bus/200 amp main OCPD - 13,440 watts, maximum 70 amp inverter OCPD.
- ☐ None of the above - *****Electrical Permit with Plan Review Required*****

Note 1: Listed un-altered factory main/bus combination. Alteration of the panelboard main OCPD will require plan review.

Note 2: The circuit conductors and overcurrent devices shall be sized to carry not less than 125 percent of the maximum currents as calculated in 690.8(A). The rating or setting of overcurrent devices shall be permitted in accordance with 240.4(B) and (C). NEC 690.8(B).

Note 3: If a panelboard employs a snap switch rated 30 amperes or less in any branch circuit, it cannot be rated more than 200 amperes unless there is a supply side overcurrent protection at 200 amperes or less within the panelboard. This requirement does not apply to panelboards equipped with circuit breakers. Section 408.36(A) of the NEC.



I have attached the following one-line diagram (use template or provide your own):

Standard Electrical Diagram - ☐ 6 strings or less ☐ 4 strings or less ☐ Micro Inverter
☐ None of the above- ***Electrical Permit with Plan Review Required***

Comments:

BUILDING PERMIT EXEMPTION CHECKLIST

	Yes	No
PV system is designed and proposed for a detached one- or two-family dwelling or townhouse not more than three stories above grade or detached accessory structure that is code compliant to setbacks and height, or code allows expansion of nonconformity for solar modules. (IRC 101.2)		
Modules installed do not exceed the highest point of the roof.		
Specify roof pitch (rise/run):		
Rooftop is made from lightweight material such as a single layer of composition shingles, metal roofing, lightweight masonry, or cedar shingles.		
The installation will comply with the manufacturer's instructions.		
The installation will meet the requirements of NFPA 70 National Electric Code, and all required electrical permit(s) will be obtained from the City of SeaTac to administer the electrical code.		
The installation will meet the requirements of the International Fire Code as amended by WA State. The selected compliance option is (check one below): <input type="checkbox"/> The dwelling will be sprinklered, so no access pathways are required <input type="checkbox"/> The total array does not exceed 33% of the total roof area and does not exceed 1,000 sq ft in total area and 18" minimum unobstructed pathways will be provided along each side of all horizontal ridges <input type="checkbox"/> Pathways meeting IRC Sections 324.7.1 through 324.7.2.5 will be provided		
The PV system is designed for the wind speed of the local area, and will be installed per the manufacturer's specifications.		
The ground snow load does not exceed 70 pounds per square foot.		
Total dead load of modules, supports, mountings, raceways, and all other appurtenances weigh no more than four pounds per square foot.		
Enter total dead load of system (psf):		
To address uplift, modules are mounted no higher than 18" above the surface of the roofing to which they are affixed.		
Supports for solar modules will be installed to spread the dead load across as many roof-framing members as needed to ensure that no point load exceeds fifty (50) pounds.		
The photovoltaic modules and supporting structure will be constructed of noncombustible materials or fire-retardant treated wood equivalent to that required for the roof construction.		
Roof and wall penetrations will be flashed and sealed to prevent entry of water, rodents, and insects.		
PV modules are listed and labeled with a fire classification in accordance with UL 1703. [IRC R324.3.1]		

If you answered **yes** to all the questions in Building Permit Exemption Checklist, your project **does not** require a building permit. **Separate Fire and Electrical permits are still required.**

As the property owner or authorized representative of the above listed property, I attest that all information in this checklist is accurate to the best of my knowledge. Inaccurate information may result in having to modify or remove the installation.

Applicant Signature: _____ Date: _____

Printed Name: _____

