

Planning & Development Services

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Website: www.cityofboise.org/pds

Residential Photovoltaic Panels & Modules Guide

What are photovoltaic panels & modules?

Photovoltaic Panels & Modules are commonly referred to as "solar panels". These panels convert solar energy into direct current electricity.

Although most of us recognize the larger panels; modules can come in all shapes and sizes. For instance: modules are being used that take the place of regular shingles.

These modules comply as a roof covering as well as harnessing the energy from our largest renewable resource – the sun.

Why is a Building Permit required to install photovoltaic panels & modules?

The requirement for a Building Permit boils down to one reason...Safety! These panels and the wires connected route "live" power from one point to another. If done correctly the risk to residents and fire fighters are minimal. If done incorrectly fire fighters trying to vent a roof during a fire and homeowners conducting routine maintenance are in danger of electrocution or worse.

What are the requirements for photovoltaic panels & modules?

Panels & modules are required to be listed and labeled in accordance with UL 1703. 2/2015

Panels are required to be securely attached to the roof with approved mounting devices.

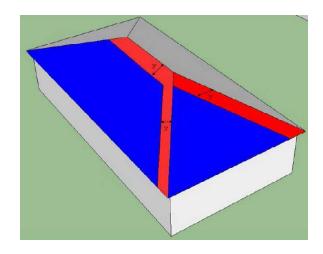
Panels and modules must be located in approved locations based on type of roof and the International Fire Code (IFC).

Panels and modules must be installed by the homeowner or a certified contractor (North American Board of Certified Energy Practitioners or equivalent).

Idaho code requires a licensed Electrical Journeyman to complete the installation beyond the converter box / AC combiner box, unless exempt by section 54-1016 of Idaho Code.

What is the approved roof locations based on the Fire Code?

■ Hip Roofs - 3-foot-wide (914 mm) clear access pathway from the eave to the ridge on each roof slope where panels/modules are located.





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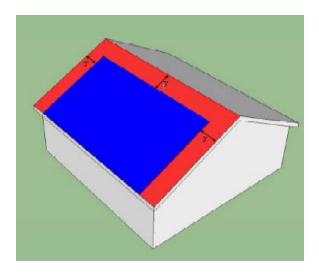
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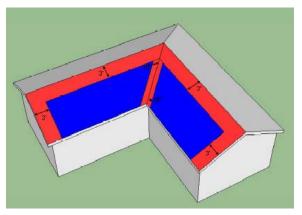
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Single Ridge - Provide two, 3-footwide (914 mm) access pathways from the eave to the ridge on each roof slope where panels/modules are located.



■ Hip and Valley - No closer than 18 inches (457 mm) to a hip or a valley where panels/modules are to be placed on both sides of a hip or valley. Where panels are to be located on only one side of a hip or valley that is of equal length, the panels shall be permitted to be placed directly adjacent to the hip or valley.



If the prescriptive clearances noted are not conducive to your particular roof, specific approvals can be given on a case by case basis to reduce those clearances if access is provided elsewhere.

How do I get a Building Permit to install photovoltaic panels & modules?

Print a copy of the "#406 Residential Photovoltaic Systems Submittal Checklist". The checklist will advise you on what plans and documents are required to submit.

What inspections are needed for the installation of photovoltaic panels & modules?

A two stage electrical inspection process is required. A rough-in and a final inspection shall be completed.

At rough-in, inspector will be verifying:

- Grounding
- Listing of all components

At final, inspector will be verifying:

 Wiring methods of your unique system



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- Labeling (specifically at your shutoff)
- Verify working clearances
- Verify venting (for battery storage)

A final Building inspection is required to verify panel installation and locations.

A final Planning and Zoning inspection is required only if in a Historic District.