

Residential Rooftop- Mounted Photovoltaic Systems (Solar Panels)

APRIL 7TH, 2023

City of Prosser Building Dept.
1002 Dudley Ave, Prosser, WA 99350
Phone: (509) 786-2332



Permitting Requirements

Is a Building Permit Required?

The International Residential Code (IRC) Section 105.1 requires that "any owner or owner's authorized agent who intends to construct, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by the IRC, or to cause any such work to be performed shall first make application to the Building Official and obtain the required permit."

International Residential Code Section 324 Solar Energy Systems provides requirements for installation of solar thermal systems, photovoltaic systems, and rooftop-mounted photovoltaic systems. In order to maintain compliance with the International Residential Code a permit is required for these types of systems within the incorporated City limits of Prosser. Unlike other jurisdictions in Washington State, the City of Prosser has not exempted the permitting requirements for photovoltaic systems

*** Also note that an electrical permit and inspection is required to be obtained from Washington State Labor & Industries, more information can be found by visiting their website at [Electrical Basics for Home & Business Owners \(wa.gov\)](http://www.wa.gov)*

Permit Fees

Valuation Based Fee

Currently, the City of Prosser uses the standard valuation based fee calculation provided for by the International Code Council. This may change in the future and a flat fee may be implemented in an effort to make over the counter permitting faster and easier for homeowners and/or contractors.

Submittal Requirements

What the Building Department Needs from you

Homeowners or contractors who wish to install, alter, repair, remove, or convert a residential rooftop-mounted photovoltaic systems on or above the roof covering shall be installed per NFPA 70 National Electrical Code (NEC).

Generally speaking the International Residential Code requires that the rooftop-mounted photovoltaic system be designed by a Washington State Licensed Structural Engineer, however, there is an exception under Section 324.4 which states the following:

***Exception:** The roof structure shall be deemed adequate to support the load of the rooftop solar photovoltaic system if **all** of the following requirements are met:*

- 1. The solar photovoltaic panel system shall be designed for the wind speed of the local area and shall be installed per the manufacturer's installation instructions. (Wind speed of 110mph and Wind Exposure Category "C" (Ultimate Design Wind Speed and Exposure) or 85mph (Nominal Design Wind Speed))*
- 2. The ground snow load does not exceed 70 pounds per square foot. (20 pounds per square foot minimum and drifting snow loads shall be accounted for if applicable to the particular roof pitch and PV panel installation)*
- 3. The total dead load of modules, supports, mountings, raceways, and all other appurtenances weigh no more than 4 pounds per square foot.*
- 4. Photovoltaic modules are not mounted higher than 18 inches (457mm) above the surface of the roofing to which they are affixed.*
- 5. Supports for solar modules are to be installed to spread the dead load across as many roof-framing members as needed, so that no point load exceeds 50 pounds (453 g).*

Once the homeowner and/or contractor has all of the manufacturer's documentation in order a permit can be applied for online by visiting www.cityofprosser.com/bldg and submitting a building permit application along with the manufacturer's documentation.

During the review process the Building Department will verify that the proposed installation is either accompanied by a licensed engineer's design or that the design meets requirements 1-5 listed under the exceptions above.

Before submitting your application and design information we ask that the homeowner and/or contractor please verify that the documentation being submitted addresses items 1-5 listed above or that the documentation includes design information prepared by a licensed engineer in the State of Washington.