



Planning & Community
Development

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Solar Photovoltaic Roof-Top Mounted Panels

Did you know, that every hour, enough sunshine strikes Earth's surface to satisfy global energy consumption for an entire year? Our area receives as much sun as Germany, the world leader in solar power. Photovoltaic panels use the power of the sun to generate electricity.



Can it work for you?

If your house has a south facing roof or wall and not much shade from trees or neighboring buildings, you may be able to use the power of the sun for electricity. This can make a big impact on your energy bill, especially if you add up the savings over the life of the system. If you do not have shading issues, you can even make solar work on an east or west facing roof.

Photovoltaic (PV) panels are used to convert solar power to electricity.



Hours of Operation:

Monday 8:00 am-5:00 pm
Tuesday 8:00 am-5:00 pm
Wednesday 1:00 pm-5:00 pm
Thursday 1:00 pm-5:00 pm
Friday 8:00 am-5:00 pm

Permit Processing Ends at 4:00 pm Daily

Permits

In some cases, the only permit you will need will be an electrical permit from the Washington State Department of Labor & Industries (L&I). For single-family, two-family and townhome buildings which fall under the scope of the International Residential Code (IRC) and meeting the following criteria, no building permit for roof-mounted PV solar panels is required:

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 specifications.
2. The ground snow load does not exceed 70 pounds per square foot.
3. The total dead load of modules, supports, mountings, raceways, and all other appurtenances weigh no more than four pounds per square foot.
4. Photovoltaic modules are not mounted higher than 18 inches 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 to ensure that no point load exceeds fifty pounds.

Roof-mounted photovoltaic panels and modules that serve as roof covering shall conform to the requirements for roof coverings in Chapter 9 of the IRC. Where mounted on or above the roof coverings, the photovoltaic panels and modules and supporting structure shall be constructed of noncombustible materials or fire-retardant treated wood equivalent to that required for the roof construction.

If your project design does not meet the above criteria, a building permit will be required. Contact Planning & Community Development at (206) 801-2500, or pcd@shorelinewa.gov for more information.

Solar Water Heating

Solar thermal power is using the sun to generate heat; systems that include solar water heating. For more information, see our Solar Water Heating Development Handout.

Resources and citations

2015 International Residential Code (as amended by Washington State): Section R324.

Washington State Department of Labor & Industries (L&I):

- Bellevue (425) 990-1496
- Everett (425) 290-1309
- Online <http://www.lni.wa.gov/TradesLicensing/Electrical/FeePermlnsp/default.asp>

Local Providers: (note: the following are businesses that are in or have done work in Shoreline; being on this list does not imply that the City is providing a recommendation)

- Northwest Mechanical.....(206) 267-4328
- Galaxy Electric & Solar LLC.....(206) 414-1211
- Northwest Electric & Solar.....(206) 356-0601