

CLIENT ASSISTANCE MEMO

Residential Solar Systems

This Tip Sheet reflects code requirements of the 2015 International Residential Code (IRC) and the 2015 International Fire Code (IFC) with Washington State Amendments.

Solar electrical systems installed in private homes generate power that helps offset a portion of power supplied by the utility company. Photo-Voltaic (PV) solar panels are a way to generate power in a way that is cleaner for the environment. This tip sheet provides information on the requirements for installing PV systems in single-family homes, two-family homes, and townhomes as defined by the IRC.

Permit and Installation Requirements:

Building Permit: May be required

- Check with your local jurisdiction for information on if a building permit is required for a solar system installation in your area.

Electrical Permit: Required

- Electrical permits and inspection approvals are required for all PV installations that connect to the building's electrical system. Some jurisdictions require an electrical plan review. Check with your local jurisdiction to determine if a plan review is required prior to permit issuance.

Firefighter Accessibility: Roof access points and pathways for firefighters are required. **See figures 1 and 2.**

- Roof access points must be located at strong points of building construction, in areas that do not require ground ladders to be over windows or doors, or under overhead obstructions like trees, wires, or signs.
- Each PV array is limited to 150 feet in either direction.
- Multiple arrays must be separated by a 36 inch wide clear access pathway.
- Panels and modules on hip roofs must be located to provide a 36 inch wide clear access pathway from the eave to the ridge on all roof sections containing solar equipment, except on roof slopes of 2:12 or less.
- Panels and modules on roofs with a single ridge must be located to provide a 36 inch wide clear access pathway from the eave to the ridge on all roof sections containing solar equipment, except on roof slopes of 2:12 or less.
- Panels and modules on roofs with hips and valleys must not be located less than 18 inches from a hip or valley where solar equipment is to be placed on both sides of the hip or valley. Where panels or modules are only on one side of the hip or valley, they may be placed directly adjacent to the hip or valley, except on roof slopes of 2:12 or less.
- Panels and modules must be a minimum of 18 inches from the ridge to allow fire department ventilation operations. Panels may be located up to the ridge when the fire chief determines ventilation operations will not be used, or when the fire chief approves alternate ventilation methods.

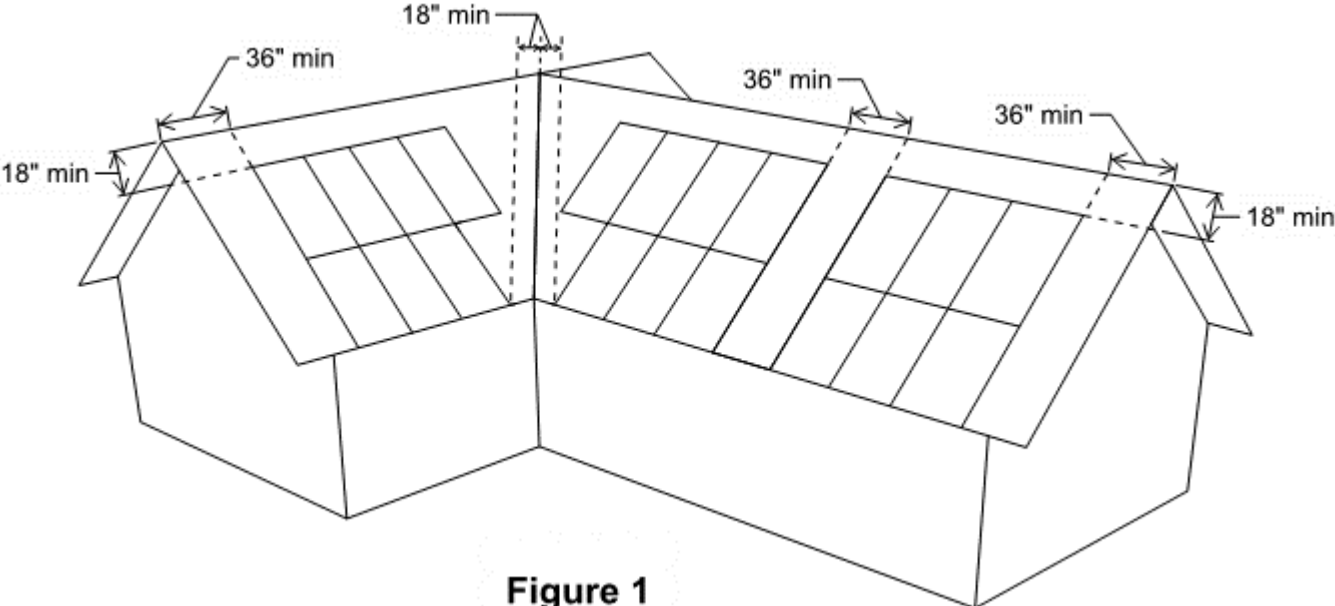


Figure 1

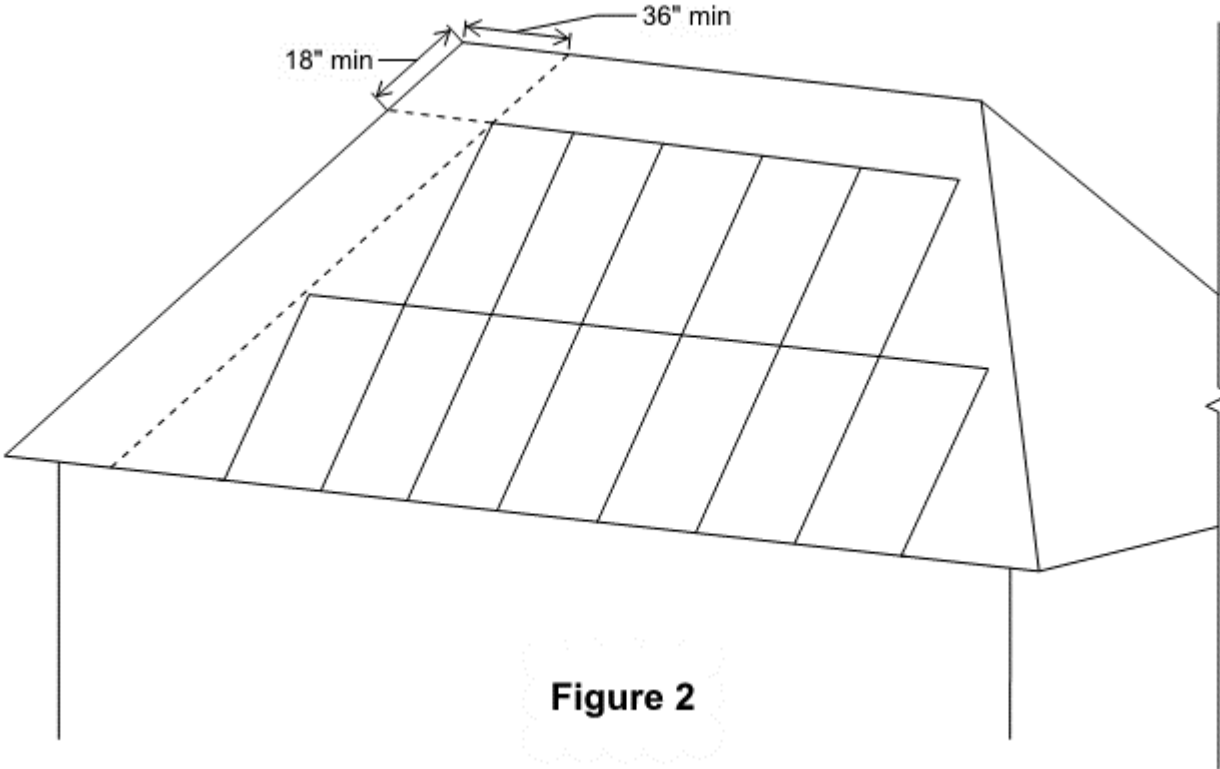


Figure 2

The intent of this Tip Sheet is to provide a general understanding of the code requirements and does not address the subject in great detail. Should you have any questions please call the Building Department at (253) 851-6170.