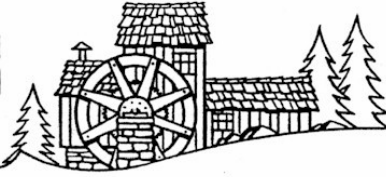


HOMEOWNERS' ASSOCIATION
MILLRIDGE TOWNHOUSES

1610½ N. W. 143rd Avenue • Portland, Oregon 97229



Architectural Control Committee Solar Guidelines

Solar Rooftop Devices

Definitions

Solar rooftop devices are defined as:

1. Photovoltaic (PV) panels/modules and
2. Integrated Photovoltaic Systems (IPS) (i.e., photovoltaic “shingles, tiles or siding” or “thin-film laminates”)

General Considerations

Solar rooftop devices must be visually integrated with the architecture of the building regarding style, location, size and color. The installation of such devices should eliminate or minimize visibility from the street. Devices must be owned by the homeowner; leased products from third parties are not allowed. Solar Panels will transfer to any subsequent owner, and should a new owner wish to have them removed, that owner will make any necessary repairs to the roof. Tracking platforms or mechanisms that allow devices to tilt seasonally, permanently or by time of day are not allowed. Prior to the installation of any devices, the roof surface should be verified to have a minimum roof life of 15 years. Roof life will be determined by proof of roof installation date, professional roofer certification or professional home inspector certification, in each case in form and substance acceptable to the ACC.

Trees on Millridge property will not be trimmed, pruned or removed to accommodate solar panels

No owner at Millridge townhouses may be commissioned for the sale of solar panels to purchasers within Millridge.

Because we have common roofs, all owners of solar panels within a single building will be responsible for roofing leaks unless those leaks can be proven by the panel owner(s) to be not associated with the Solar Panels.

Extra costs associated with gutter cleaning, made necessary by need for ladders rather than from the rooftop, will be shared among Solar Panel owners

Upon approval by the Millridge Board, the owner will agree to sign acceptance of the provisions shown herein and will comply with them for the life of the solar panels.

Should the HOA decide the roof must be replaced, the owners with Solar panels must remove them immediately prior to the new construction. Should the panel owner(s) not agree, the cost of doing so will be borne by the panel owner(s). All requirements shown herein must be accepted and signed for by any subsequent new owner.

Panels must be manufactured by a company that has been making them for at least ten years to insure availability of replacement parts.

Owner will remove debris, rodent/bird nests that accumulate under and around solar panels upon notification by the Millridge Board of Directors.

Technical Guidelines

Installations must comply with applicable building codes; all necessary permits must be obtained. Installations should also comply with both Energy Trust of Oregon and Oregon Department of Energy guidelines and compliance codes.

The minimum system size for a PV system should be 2kW (8 to 10 panels).* The minimum panel efficiency for a PV system should be 10%. The maximum panel tolerance for a PV system shall be +3/-3. Systems should have non-mechanical overheat and freeze protection mechanisms.

All installations should have a minimum manufacturer's power performance warranty of 20 years.

Aesthetic Guidelines

Solar panels must have a non-reflective surface.

The maximum panel clearance (distance from the roof surface to the top surface of the panel) should be 8 inches.

The maximum number of roof planes used for a single type of installation should be 2.

Panels must be installed on the plane of roof material and may not extend above the ridge line of the roof.

Panels must be a continuous unit without gaps.

All conduit or pipe runs should be internal/concealed (non-visible from the outside) or, if external, be painted to match background color.

PV systems require that the inverter should be placed either inside or within 3 feet of the existing utility meter, preferably on the same plane as the existing utility meter.

Invertors and additional utility meters should not be installed in plain sight from the street.

Submission Requirements

A completed application must include a color visualization and/or simulated image of the installation, printed on white 11" x 17" paper. The solar system must be accompanied by a professional construction drawing(s) to scale for the proposed installation. The exact location and number of collectors, means of attachment to the roof structure, and location of all exterior components must be shown. A site map is also required, showing the orientation of the home in relation to other proper-ties. The site map can be created from web-based applications such as Google maps.

Specifications for the installation must include:

- ° Verification of a minimum 15 year roof life
- ° Documentation that the system meets the required technical guidelines
- ° Current roof material and color
- ° Proposed panel manufacturer and panel color, including stock photos of the panel from the manufacturer's website
- ° Proposed panel frame color and material

***Technical Information Regarding Panels/Modules:** Ratio of panels to energy generation is 100 sq ft of panel to every 1kW generated. So a system required to generate 2kW of power would be approximately 200 sq ft in size for the total array of panels.)