

Garrett Farms Solar Guidelines

The following guidelines are applicable for Homeowner installation of all types of solar panels. They are to be used by Homeowner's when soliciting bids from contractors and by the Architectural Review Committee (ARC) when reviewing installation applications. The guidelines have been adopted recognizing the desire of Homeowner's to install solar panels and the needs of the Association to maintain consistency in installations and minimize the impact solar panels have on both the use and enjoyment of common areas, privately owned lots and right of ways and of the aesthetic look of the Community.

Definition

A solar energy system is defined as any solar collector or other solar energy device or any structural design feature of a building whose primary purpose is to provide for the collection, storage, and distribution of solar energy for space heating, space cooling, electric generation, or water heating.

Based on this definition, the following common solar energy systems would be considered solar energy systems:

- Photovoltaics (solar electric)
- Solar water heating for use within a building
- Solar water heating for space heating
- Solar pool heating

Other roof mounted fixtures, features and equipment associated with solar energy systems shall also be considered a part of the system including, but not limited to, ducts, piping, conduits, wiring, water tanks, and collectors.

Please note: these guidelines are primarily for the installation of solar energy systems. However, certain provisions are applicable for roof windows, skylights, and other similar roof mounted fixtures, features, and equipment. These Guidelines are a supplement to the Protective Restrictions (CC&R) and will apply to all new construction, additions and remodels affecting roof designs and roofing material.

General Provisions Governing Installation of Solar Energy System

While the ARC is not responsible for verification of such equipment's compliance with any and all applicable governing regulations, requirements and standards, ARC will require that all owners of property submit for ARC review only those systems that meet and satisfy any and all applicable governing regulations, requirements and standards. Whether specifically stated in the ARC's written approval or not, all approvals are based on the condition that the system complies with all such governmental regulations, requirements and standards.

Homeowners are urged to check with their home builder or insurance company prior to installation of devices for how such installation may impact their roof warranty or other aspects of their structure. Neither the Architectural Committee nor the HOA Board of Directors is liable to the property owners from roof damage or for effects to roof warranties. The Association and its Board has no expertise or special knowledge regarding such systems and therefore the Association's approval for installation of any such device(s) or system is not a representation that the system chosen by an Owner is safe to use or is compatible with Owner's roof or other structures on the Lot or the Lot involved, and Owner assumes and bears all risks regarding installation and use of such a system.

There may also be State, County, City, and Electric company requirements (applications, permits, approvals, etc.) that the Owner is responsible for. The HOA will not be responsible for any non-refundable fees or costs associated with these requirements.

ARC shall review the application for approval of the installation or use of a solar energy system in the same manner as an application for approval of an architectural modification to the property.

ARC shall have the right to disapprove an application for a proposed solar energy system based on aesthetics pertaining to profile, size, mass, color, texture, material, and other aesthetic criteria considered by the ARC pursuant to the CC&Rs and the guidelines referenced herein.

ARC shall review an application for a proposed solar energy system based on all CC&R requirements pertaining to the built structures on each property, specifically as it relates to setbacks and heights.

ARC may require alteration or substitution of the solar energy system based on CC&R requirements as well as any other regulations.

Should a homeowner allow a solar energy system unapproved by the ARC to be installed without approval or not as approved, ARC may require removal of such solar energy system at the homeowner's expense, in addition to other remedies available at law, and the homeowner shall reimburse Garrett Farms Homeowners Association for any and all expenses, including legal expenses and/or violation fines, required to enforce this guideline.

Design Guidelines

Reflectivity

- Solar panels may not reflect light or heat into neighboring homes and yards, common areas, or public rights of way.

Mounting

- Solar panels should only be installed in the rear of the home and are not likely to be approved in any other location given aesthetic considerations.
- Wall mounted solar panels are permitted in the rear of the home only.
- Roof-mounted solar panels are permitted so long as their installed location will not be seen from the street fronting the house. The Association realizes that for any houses located on corner lots where the back of the house or roof is visible from a side street, that installation of such devices on the back side roof may still be visible from the street abutting the side of Owner's lot, and installation on the back roof side of the house under these circumstances will not be considered a violation of these Rules.
- Ground-Mounted solar panel equipment must be installed in the rear yard and no portion of the unit should exceed six feet in height from the ground below it. It cannot be visible from the street. Ground-mounted solar collectors shall be within the setback lines in accordance with Durham County Codes/HOA CC&R's and concealed from neighbor's view to the extent reasonably possible. No ground mounted devices or their components should be affixed to a fence.
- Panel material for solar energy systems should be dark in color and/or be consistent with the existing character of the structure.
- Roof mounted panels should be laid out in a symmetrical rectangle or square pattern and should have the perimeter squared off with filler material to eliminate asymmetrical edges.
- Plumbing vents should be painted black when in between panels and should have gaps filled.
- All plumbing, electrical, and utility lines for the solar energy system shall be concealed from view.
- Conduit/piping abutting panels should be painted black and conduit/piping not against panels should be painted to match roof color. Conduit/piping going up a wall should be installed tight together and painted to match adjacent surface. Conduit/piping should be tight against drain spouts when a drain spout is on the wall being used. Conduit/piping must go through eaves not around. Conduit/piping should penetrate the roof, to the extent possible, and be contained within the

structure. Conduit/piping that cannot be concealed should be painted to blend with the color of the adjacent surface. Conduit/piping will have single routing from panels and run tight against the panels to the point where it penetrates the roof. Conduit/piping must not run across the roof faces or over ridges, valleys or hips but should go through the roof and be concealed below the roof.

- Filler strips should be used between panels to fill any gaps and hide the roof.
- Solar panels should have end caps where an end is visible.
- Mounting brackets should be painted to match panel color or roof as appropriate.
- Piping and electrical connections will be located directly under and/or within the perimeter of the panel and invisible from all street angles. Panels are to be mounted on the same plane as the roof slope. The installation profile should be as level as practical.
- Panels should not project above the roof more than 7 inches.
- Screening with trees will be required where appropriate.

Mounting Angle

- Raised or tilted solar panels will only be installed on the rear roof.

Above-Ridgeline Panel Placement

- For aesthetic purposes, the highest point of a solar panel should be lower than the ridge of the roof where it is attached.

On-Going Maintenance

- All painted surfaces will be kept in good repair.
- All non-functioning solar installations will be repaired within 60 days or removed.
- The homeowner of the approved and installed solar energy system shall properly maintain such solar energy system to ensure that it does not dilapidate or create visual and/or aesthetic nuisance as determined by the ARC. Should the installed solar energy system not be properly maintained resulting in visual and/or aesthetic nuisance, ARC reserves the right to enforce any of its rights under the CC&Rs to insure homeowner compliance that may include, but not be limited to, fines and/or litigation.
- Should the installed solar energy system be no longer functioning, in use or in violation of any governmental regulation or requirement, the ARC may require owner to maintain the solar energy system in a good and aesthetically pleasing condition pursuant to the CC&Rs as well as these Guidelines, that may include the removal of said solar energy system if warranted and said removal shall include

remedying the area of the removed system to its original state of compliance with the CC&R as determined by the ARC.

Applications

- Submit two sets of scaled dimensioned roof plans showing the entire roof including hips, valleys and ridges.
- Show proposed panel locations on the roof including the dimensions of panels and setbacks from edge of roof.
- Show routing of piping/conduit/piping on roof.
- Show where piping/conduit/piping penetrates eaves and roof.
- Show all vents/obstacles on roof that will be in between the panels.
- Submit photos of roof, where practical.
- Provide drawing of wall where pipes/conduit/piping will go up wall to roof.
- Submit photos of wall.
- Include the manufacturer's brochure.
- Sample of the proposed solar energy system and manufacturer's literature shall be submitted with the application to the satisfaction of ARC.
- Calculations shall be provided with the initial application verifying the number and/or area of panels required for the proposed solar energy system.
- Photographs shall be submitted showing the location of the proposed solar energy systems and their visibility from neighboring structures and street(s).
- During the 30 day application process, the plans and submittals for the solar energy system will be made available for nearby homeowner's review.