

SOLAR-FRIENDLY ZONING TOOLBOX

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Wasatch Solar
Challenge



Solar Panels in HOA Communities – Frequently Asked Questions

Solar panels offer homeowners with an opportunity to improve their property value, shorten resale time, save money on utility bills, and provide important environmental benefits. Despite these desirable impacts, some homeowners encounter challenges and delays when installing solar panels in a HOA community. HOAs that educate themselves about the basics of solar are best equipped to create solar policies that protect the rights of all residents. Four common concerns about solar panels in HOAs are:

1. Reflectivity and Glare

Solar panels are designed to absorb sunlight, not reflect it, so glare is not the issue it's often portrayed to be. Most modern solar panels have a predominantly black surface, and can be encased in a black frame which should not create any glare.

The Federal Aviation Administration (FAA) has determined that solar PV panels are less reflective than many other surfaces, including snow, white concrete, vegetation, and even bare soil or wood shingles.¹

2. Color of Solar Panels

Older versions of panels often had a surface that was a metallic blue, but most modern solar panels now have a black surface. Black solar panels are more inconspicuous on most roof types and have been deemed more visually appealing.

3. Tilt of Solar Panels

Solar panels produce different amounts of energy depending on their tilt and orientation to the sun. In Utah, the optimal tilt for solar panels is approximately 30 to 40 degrees and the optimal orientation is direct south. That being said, most residential solar panels are installed flush to the surface of the south-facing roof to minimize installation costs and system complexity. In cases where only east- or west-facing roof surface is available, homeowners may want to tilt panels to face south to maximize energy production.

4. Roof Penetrations and Warranty Impacts

A limited number of roof penetrations are required for fastening solar racking to the roof of a home. Solar installers take this step seriously and use materials designed specifically to avoid leaks. All roof penetrations are sealed at the source, and installers also use a separate barrier between the solar racking and the roof for enhanced leak prevention.

Most installers work with customers and the original roofing company to ensure that warranties remain intact. Additionally, most solar installers have a workmanship warranty that protects a customer's roof, and most solar panels have their own manufacturer's warranty to ensure long-term power output from the panels.

The Solar Foundation, in partnership with the U.S. Department of Energy, has published a policy guide for HOAs that are investigating solar panels for their communities. The guide is titled "A Beautiful Day in the Neighborhood" and is available by [clicking here](#).

¹ Federal Aviation Administration, "Technical Guidance for Evaluating Selected Solar Technologies on Airports." November 2010, P38
<https://www.faa.gov/airports/environmental/policy_guidance/media/airport_solar_guide_print.pdf>

For more information about solar in Utah, or to access the entire [Solar-Friendly Zoning Toolbox](#), visit www.solarsimplified.org

