



WHITE PVC ROOFING: THE CASE FOR SOLAR

Solar Photovoltaic (PV) systems have become a very well established and reliable source of clean and reliable renewable energy. There are many considerations that are taken into account for any particular system to ensure that it is both safe and efficient. Until recently, Solar PV roofing systems have largely been overlooked, but it is in fact a very important consideration for true system optimization.

By partnering with solar energy experts, True Seal integrates our highly reflective PVC membranes with solar projects to make the solar arrays even more efficient. Since our white membrane is a 'cool roof' product, it dramatically reduces the ambient temperature of the surrounding solar panels. This is achieved through our industry leading 87% reflectivity and 88% emissivity values!

When solar panels heat up, they lose efficiency because heat increases electrical resistance in any electrical circuit. Cooler surroundings allow the panels to produce more kilowatt hours of energy, thus improving on efficiency. In this instance **White = Energy!**

Higher energy yield from solar PV means less energy required from non-renewable energy sources. The membrane is also recyclable at the end of its long life cycle. In this instance **White = Green!**

Whether the installed solar system is part of a Government grant program, an off-grid installation or a net metering system, greater energy production means less hydro payments or offset electricity costs. True Seal's high membrane reflectivity also keeps the building much cooler than traditional heat absorbing roofing systems, meaning less reliance on air-conditioning. In this instance **White = Savings!**

Structural Considerations: All rooftop solar projects undergo strict structural analysis before any project can commence. The average solar array weighs 3-4lbs per square foot. The average traditional hot tar and gravel roof weighs 7-8lbs. The True Seal system weighs as low as 0.47lbs per square foot including insulation, which makes this system an easy decision for any structural engineer.

Project Versatility: No two projects are the same. Site and building conditions can often dictate build out requirements. True Seal offers a variety of roof installation options; mechanically fastened, fully adhered as well as ballasted. For high wind or seismic areas True Seal Roof Anchors can also be utilized to anchor system racking directly to the roof system.

Project Longevity: The average solar panel warranty comes with a 10 year product warranty and 25 year performance warranty. In reality these solid state panels last well beyond 30 years. Since the roof has to host this system it has to be able to match this lengthy service life. True Seal roofing systems offer warranty periods of 20, 25 and 30 years, a perfect marriage for any solar system.

Project Profitability: The True Seal solar ready cool roofing system automatically increases the energy production efficiency of any solar PV system by default of being a white roofing system. In addition, our proprietary ClimaShield Top Finish enhances the our membrane reflectivity and further resists environmental soiling.

Bi-Facial Solar Considerations: The next evolution in solar PV panels is Bi-Facial panels whereby transparent solar cells are utilized on both sides of the panels. With this cutting edge emerging technology the reflectivity of sunlight or the 'Albedo effect' off the roof surface becomes a major consideration for project revenue forecasting. In conjunction with other system design elements our 87% reflectivity rating allows for up to 30% additional energy gains over traditional panels on dark roofing systems.



“When you think Solar PV, think True Seal PVC!”

