



Dirty Solar PV Panels Produce Less Electricity than Clean Panels

Solar panel cleaning is an essential component of solar maintenance and this industry best practice offers a simple and cost effective method to increase your Solar PV system by a **return rate of 20% or more.**

A thorough inspection and regular cleaning of system components is the most valuable way to identify existing problems and prevent future problems with your solar PV system.

Our qualified maintenance team will clean the solar panel arrays on your home, business, or large ground mount systems, and perform a visual inspection of the solar array to make sure that everything appears to be in good working order.

PREVENTIVE MAINTENANCE AND CLEANING SERVICES (PROVIDED SEPARATELY OR COMBINED INTO ONE VISIT)

1. General Site Inspection, our technicians will look for:

- Adequate roof drainage
- Vegetation growth or shading issues
- Signs of debris under the array
- Ground erosion near the footings (ground mount system)
- Electrical enclosures that are accessible only to authorized personnel
- Corrosion on the outside of enclosures and racking system
- Loose hanging wires in the array.

2. Detailed Equipment Inspection to inspect for issues that impact the physical integrity or performance of the PV system. Our technicians will:

- Look for warning labels or PPE requirements
- Inspect PV modules for defects like burn marks, discoloration, delamination, or broken glass
- Ensure the module wiring is secure (not resting on the roof)
- Inspect racking system for defects including rust, corrosion, sagging, and missing or broken clips or bolts
- Inspect conduits for proper support and bushings
- Open combiner boxes and check torque on connections
- Look for debris inside the boxes and any evidence of damaging water intrusion
- Open the door to the disconnect(s) and look for signs of corrosion or damage.
- Check to make sure the cabinet penetrations are properly sealed, with no evidence of water ingress.

Each inverter manufacturer has specific requirements for inspection, testing, services, and documentation to meet its warranty obligations. Our technicians will:

- Record and validate all voltages and production values
- Record last logged system error
- Visually inspect fuses, disconnects, and terminations for discoloration
- Inspect equipment grounding
- Check mechanical connection of the inverter to the wall.

3. Solar PV Array Cleaning

The tilt of the array and amount of seasonal rainfall, means the soiling can have a dramatic impact on the overall production of your system. We follow best practices for uses of water pressure and temperature, and harmful chemicals, in order to avoid fracturing or breaking the glass. We record the cleaning in your maintenance log and compare the production of the clean system to the previous production values. Access to water is required for array cleaning.



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Call us for your **FREE** estimate if you feel your solar electric system needs inspection, repair, service, or if you'd like to get a solar health check-up.