

TECHNICAL BULLETIN

CLEANING & MAINTENANCE OF SOLARWORLD PHOTOVOLTAIC MODULES

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This guide is intended for qualified individuals. Damage or injury to persons or property can occur when working with live electrical components. SolarWorld recommends that cleaning and maintenance services be performed by qualified individuals.

Cleaning

With limited maintenance, your solar photovoltaic system will operate at peak performance for many years. Cleaning intervals will vary depending on site-specific factors such as annual rainfall, roof tilt, and proximity of airborne dust and debris (for instance, from trees or a frequently-traveled dirt road). The solar module installation guide notes that arrays with >15 degree tilt will self-clean by rain; however sites may vary and it is best to consult your solar installer for a recommended cleaning schedule.

In the case of heavy soiling, modules may be cleaned with plenty of water (tap water or deionized water) without any cleaning agents. If necessary, a soft cleaning device (e.g. sponge or soft brush with split bristles) may be used. In the case of soiling by dust or sand, modules may be cleaned with a soft brush without using water. Never scrape or rub off dirt, as this may result in micro-scratches and can damage the anti-reflective coating on the module glass.

Do not use a pressure washer or walk on the solar modules. Pressure washing or walking on the solar modules can damage the glass and/or cause micro-cracks in the solar cells. To avoid thermal damage (from cold water contacting hot module glass), clean modules in the early morning or late afternoon, or during mild days.

Snowfall

Sites with substantial snowfall must be designed to support additional loads. While snowfall on a solar array can impact power production, in instances where safety and access are a concern it may be best to leave ice and snow alone until they naturally melt and fall away. Sites will vary and it is best to consult your solar installer for proper service.

Use caution when clearing snow or accessing areas near ice or snow-covered solar arrays. Large masses of ice or snow may move suddenly, causing personal injury or damaging equipment. When removing snow, we suggest a foam-type head on an extension pole. Never use snow removal tools such as a snow rake or shovel, as these tools can damage the modules or compromise the mounting hardware.



Regular maintenance

SolarWorld recommends regular annual inspections of the PV system to ensure that:

- >> All fixtures are securely tightened and corrosion-free;
- >> Wiring is securely connected, properly arranged and free of corrosion;
- >> Cables are free of damage