

Special information on the handling of modules with AR glass

Dear Sir/Madam,

We are delighted that you have decided on a high-performance module from Heckert Solar.

Reflection losses are reduced through the special nanoporous coating of the glass surface. In particular, with a deviation of the radiation angle from the vertical, up to 2% more performance can be achieved through the angle-dependent transmission, compared with non-coated glass.

In order to maintain this effect and to avoid adverse effects, the following information should be observed scrupulously.

- The surface of the module has a resistance to mechanical or chemical influences comparable with non-coated modules. Therefore they should be treated with the same degree of carefulness.
- Due to the special reflective properties slight contamination is, however, better visible. In particular, greases and oils in small amounts are already visible and can influence transmission. In order to avoid these marks, the modules should be handled with care already with unpacking and assembly and the surface of the modules should be touched exclusively using clean gloves.
- Adhesive labels and stickers are to be avoided at all costs as, depending on the materials used, very fine residues, which are extremely difficult to remove, cannot be ruled out.
- The glass surface is to be protected against contact with silicones. The removal of silicones without leaving residues is not possible.
- Under certain circumstances, visible white residues from coating fluid as well as variations in colour can occur, dependent on process, in the area of the edges ($\leq 5\text{mm}$). These represent no reduction in quality.
- Should, due to heavy contamination, a cleaning of the module be necessary, we recommend that this is carried out with cooled modules (e.g. during the morning hours) using plenty of lukewarm, demineralised water and clean, lint-free cotton, microfibre or paper towels. Greasy or oily residues can be removed using alcohol or a mixture of alcohol and water. Alternatively, a simple cleaner containing tenside can also be used if one is concerned with particularly tenacious residues. The following should also be avoided: strong acids, caustic solutions, petrol-based cleaners, steam and heat-based cleaners, cleaning agents containing silicone oils, fluorides or waxes, polishes, alkaline cleaners, cleaners containing scouring agents and high pressure cleaners.

We wish you many years of good production using our modules.

