



Application of Ceracoat Ceramic self-cleaning coating for PV panels

What is the Ceracoat ceramic self-cleaning coating for solar panels?

CERACOAT ceramic glass SC (self-cleaning) coating for PV systems (self-cleaning)

CERACOAT ceramic glass SC coating is a water-based system that protects PV panels from dirt and improves the light output. The applied material creates a hydrophilic film just a few nanometers thick on the surface. The self-cleaning process of the surface is generated by a photocatalytic process in the presence of natural sunlight. The surface tension in relation to condensed water is reduced above the air/water value, which results in the condensate running off completely (spreading). Sun + rain clean the panels coated with **Ceracoat Ceramic SC coating** for years. Expensive cleaning and major loss of electricity production (due to dirty panels) are eliminated.

How much liquid do you need per m2 and when to spray on the panels?

You need just about 20 ml per m2, means with 1 Liter you can coat around 50 m2 of surface. The best temperature range to coat the solar panels is from +5°C to +25°C. **(1 push with our trigger = 2 ml)**

What happens if you spray when it is colder or hotter temperature?

If you coat beyond +5°C, this is not a problem, but the drying time will be longer. If you coat above +25°C, this is not a problem either, but the drying time will be shorter and you will perhaps use a bit more than 20 ml per m2 to be sure, the whole solar panel is covered with Ceracoat ceramic self-cleaning coating when you spray the liquid on the panels.

What happens if you coat in the direct sunlight?

It is best not to coat (= spray on the panels) in direct sunlight, but if you do that, that's not a problem but again, you may then use more than 20 ml per m2.

How do you apply Ceracoat ceramic self-cleaning coating for solar panels?

Apply on already installed / used / dirt solar panels



To apply the coating, the panels have to be clean. So, for already installed / used / dirt panels, you have to clean them first. Do a normal cleaning of the panels, by using a universal organic cleaner or Ceracoat cleaner for solar panels. You can also use alkaline or acidic surfactant cleaners. After the cleaning, you have to rinse the clean panels with water to be sure not to have any surfactant rest on the clean panels. Then wait until the panels are dry. The panels have to be clean and dry before you can apply Ceracoat Ceramic self-cleaning coating for solar panels.

Now you just spray the coating-liquid by homogenous application on the panel. Remember, just about 20 ml are enough per m². Make sure there is liquid on the whole panel, that the whole panel is humid. You can spray the liquid with any trigger spray, spraying machine or whatever you like.

If too much coating has been sprayed (20 ml per m² is enough) you can often see a film or stains. But it's not a big deal, the effect still occurs. You can also actively wash off the film with water and a microfiber cloth, but this is unnecessary because the first rain will wash off the excess material.

Spraying is easy and quick: Easy application

<https://www.youtube.com/shorts/eylwbGXtPpM>

Apply on new panels before installation of the panels



New panels do not need to be cleaned. When you take the panel out of his carton, out of his

packaging, just spray the coating-liquid by homogenous application on the panel. Remember, just about 20 ml are enough per m². Make sure there is liquid on the whole panel, that the whole panel is humid. You can spray the liquid with any trigger spray, spraying machine or whatever you like to spray the liquid on the panels.

What do you have to do after coating / spraying the liquid on the panel?

Nothing. After spraying, your job is done, nothing else to do. No polishing, nothing else. Depending on the climate conditions, the coating will dry quickly and be hard after 24-48 hours when exposed under sunlight. If you coat panels and put them back into their packaging, the coating will dry and become hard in the packaging.

Depending on the sun rays, the self-cleaning effect is activated by the sunlight within approximatively 2 to 4 weeks. Dirt or rain will not affect the coating. The coating will become dry, hard, active.

Cleaning of the coated solar panel

No cleaning is necessary any more. The sun and the rain will clean the panels that are coated with Ceracoat ceramic self-cleaning coating. There is a decomposition of the dirt by the sun and then, the rain will wash away the dirt. If there is no rain, you can replace the rain by rinsing the panels with water.

Since dirt, bacteria and limescale are washed away by the coating in combination with moisture and UV light, cleaning is no more necessary for a long time (several years).



Easy and quick application of Ceracoat ceramic self-cleaning coating for Solar Panels

Application on Dirt panels

- 1) Cleaning
- 2) Rinsing with water
- 3) Drying
- 4) Spraying coating-liquid on panels - about 20 ml per m2 **(1 push with our trigger = 2 ml)**
- 5) Finish, nothing else to do, no polishing, nothing else to do
- 6) Coating will be dry quickly, hard after 24-48 hours, self-cleaning effect activated by the sun within 2 -4 weeks
- 7) Sun & Rain will clean the panels

Application on New panels

- 1) Spraying coating-liquid on panels - about 20 ml per m2 **(1 push with our trigger = 2 ml)**
- 2) Finish, nothing else to do, no polishing, nothing else to do
- 3) Coating will be dry quickly, hard after 24-48 hours, self-cleaning effect activated by the sun within 2-4 weeks
- 4) Sun & Rain will clean the panels

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How can the panels look like after coating?

After coating the panels, it's possible that you see a mat film. It can even look this like (see below) if you use too much product (remember, just about 20 ml per m²). This is not a problem because after rainfalls, the rain will wash away the excess material over time.

We created the water based self-cleaning coating to be ***extremely easy to apply***: Only spraying on the surface, nothing else (the sun will dry it within 24-48 h, the sun will activate it within 2-4 weeks, the rain will wash the excess material away).

If for a demonstration you want to show panels without this „mat film“, you can polish the coating after spraying with a cloth, to avoid this look, but we do not recommend this. Let the nature do the job and be patient!

This is only a question of optic, nothing else. The result (self-cleaning by sun + rain, more output) is there!

