

## TITANIUM® FA

## Photocatalytic Silica Façade Paint

**Intended use:** Silicate water - based paint has been designed for painting construction elements both inside and outside rooms. It can be applied on different building materials such as mineral and polymer plasters (for example acrylic plasters), concrete and brickwork. It renders homogeneous, durable, waterproof, mat, snow - white (the white version) or colourful perfect coatings.

This paint protects outside walls of buildings against moisture. It gives durable, hydrophobic layers which having dried, perfectly adhere to typical mineral bases and at the same time allow for permeability of vapour, ensuring its unconstrained

penetration. This feature makes that the surface on which the paint has been applied, easily gets rid off moisture. The paint is water resistant and weatherproof.

The paint contains acrylic binder, potassium water glass, modifying additives, pigments and mineral fillers and also preventive agents against fungus and mould growth. This paint contains a catalyst obtained by means of nanotechnology. It is produced in a basic white colour, but it can be dyed on demand with high quality pigments in a number of pastel colours.

**Photocatalytic properties:** The product is efficient in removing such urban and industrial gas pollutions as: tobacco smoke, sulphur dioxide, carbon monoxide, nitrogen oxides, aldehyde vapours, alcohol vapours (methanol, ethanol, iso-propanol), aromatic and aliphatic hydrocarbons (benzene, toluene, ethyl benzene, xylene, kerosene, patrol). The bigger surface is coated with photocatalytic material the faster elimination of pollutants from the surrounding area. As a result of photocatalytic processes occurring in the presence of light and oxygen (included in the air), airborne pollution particles while coming into contact with the surface painted with the photocatalytic products, oxidize and change into harmless to health and to the natural environment compounds (mainly carbon dioxide and water). In the presence of the nanocatalyst (contained in the paint), stains, for example nicotine stains, are removed from stained walls. This happens due to the influence of direct, reflected, or scattered sun light, as well as artificial

In case of insufficient natural light, in order to maximally utilise the paint's properties it is advised to install additional lighting. Precipitation positively affects self-cleaning effect, and even moisture contained in the air (for example - in rooms - in case of indoor paints) is sufficient for the process to progress.

Preparation of the surface and application of the product: The paint is ready for use. Whiting, lime and dry size (glue) colour must not be added. It is not recommended to paint over the surfaces coated with lime wash paint. Before being painted, the surface has to be carefully cleaned; loose flakes of the old paint should be removed and the surface is to be degreased. Old layers of glue and lime-wash colours must be thoroughly removed. It is recommended that surfaces that have not been pained at all, or the ones that were pained long before, should be treated with a grounding preparation. The fresh cement - lime plaster can be painted no sooner than 4 weeks after plastering.

It is permissible to paint thinned mineral plaster having been used in insulating systems, following three days of their application only when the temperature during these three days is above  $+15^{\circ}$ C. Cracks and other defects should be refilled with cement mortar.

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Before painting, the paint must be mixed very carefully. The paint can be applied once or twice, depending on the structure and the absorbing capacity of the surface on which it is going to be applied. Each subsequent layer can be applied only after the previous one is completely dry (minimum 12 hours). Individual layers should be spread along one direction; every second one should be applied in such a way as to cross the previous one. Technological clearances and connections should be planned earlier, for example in corners or folds of buildings, behind gutters, at colours borders, etc so as to locate them in invisible places. Tools should be washed with running water right after work is finished.

**Notes:** In order to maintain the same colour shade, it is recommended to apply paint with the same date of production over one surface. Surfaces that differ in quality and/or technical parameters can yield different shades of the same paint.

Before commencing work, windows, equipment, objects, especially glass, ceramics, natural stone, metal and clinker should be covered. Beware, it is an alkaline product. One must wear protective clothes, glasses and gloves during work with it.

**Available colours**: white, others on demand, according to NCS or RAL cards,

Paint with roller, brush or after dilution with spraying.

- Temperature of use and storage: +5÷25°C,
- Drying time and spreading of every next layer: ca. 12 h,
- Recommended quantity of layers: 1-2
- Output:  $8-10 \text{ m}^2/l$ ,
- Density according to PN-82/C-81551: 1.5 g / cm<sup>3</sup>,
- pH value: 10÷11
- Washing of equipment and dilution water,
- Hygienic certificate of PZH,
- Guarantee: 12 months from the date of production
- Packaging: 5 litres, 10 litres.

