

TECHNICAL SHEET 08.05.02-EN



JUBIZOL Nano finish S 2,0 mm

Self-cleaning silicone smooth render finish

1. Description, Application

Self-cleansing silicone smooth render JUBIZOL Nano finish S 2,0 mm is used to manufacture the final coat for JUBIZOL External Thermal Insulation Composite (ETIC) systems. The product is based on combination of silicone and other polymeric binders and has a characteristic equally grained textured surface. It is intended for decorative protection of façade wall surfaces of modern buildings without or with minimum projecting roofs. Adhere well to all fine-coarse construction surfaces including: classical fine lime-cement and cement plasters, smoothed concrete surfaces, and also to fibre-cement and gypsum-cardboards, chipboards, and similar. Key components made in accordance with the latest discoveries in nanotechnologies ensure these render finishes high resistance to the effects of smoke, ultraviolet rays and other atmospheric factors and, consequently, solid resistance in any climate conditions even on façade surfaces exposed to heavy rainfall. It is more difficult for dust, soot, and other filth to adhere to surfaces processed with JUBIZOL Nano finish S 2,0 mm due to high content of silicone binders and siloxane additives. Thus, dust, soot, and other filth are largely washed away by drainage water. Surfaces rendered with these finishes have an assured long-term resistance to contamination with wall algae and mould. Therefore, it is not necessary to add any biocidal substances prior to application.

2. Colour Shades

- White (shade 1001)
- Colour shades marked with * from the JUB FAVORITE FEELINGS color chart – colour shades ending in C, D, E and F (on JUMIX tinting stations at points of sale!)

Delivery of render finishes in shades designed on special request of the customer is possible under certain conditions.

3. Technical data

Packaging	25 kg
Density	~1.88 kg/dm ³
Water dilution	1 dL/bucket

Layer thickness		~2,0 mm
Drying time T = +20 °C, relative air humidity = 65 %	Touch dry	~6 h
Average consumption		~3 kg/m ²
Vapor permeability EN ISO 7783-2	coefficient μ	<60
	value Sd (d = 2,0 mm)	<0.12 m class 1
Water absorption w ₂₄ (EN 1062-3)		<0.02 kg/m ² *h _{0,5}
Water absorption class		class W3
Adhesion according to EAD 040083-00-0404, point 2.2.20.2		>0.3 MPa

4. Installation Conditions

Temperature of air and wall surface should not be lower than +5 °C or higher than +30 °C, and relative air humidity should be <80 %. Façade surfaces should be protected from the sun, wind and precipitation by using curtains, and despite this protection, the rendering should not be done during rain, fog or strong wind (≥ 30 km/h).

5. Surface Preparation

The surface should be slightly coarse (ideal is the coarseness of a classically smoothed fine render of 1.0 mm granulation), solid (compressive strength of at least 1.5 MPa – CS II according to EN 998-1), dry and clean, without weakly bound particles, dust, easy water-soluble salts, oil stains and other filth. Any smaller uneven parts – bulges and niches – hinder the smoothing of the applied render; therefore it is necessary to focus special attention on the preparation of the surface.

Prior to the application of a decorative render dry the newly applied base-coats for at least 7 to 10 days for each cm of its thickness. Decorative renders are applied to new concrete surfaces a month after concreting (stated times of drying of the surface are valid in normal conditions: T = +20 °C, relative air humidity = 65 %). Coatings, slurries and other decorative coats have to be removed from old solid plasters/renders. After the surface had been cleaned, it should be thoroughly freed from dust by washing and, if necessary, mended and levelled. Washing the surface with a jet of hot water or steam is especially recommended in case of fibre-cement boards and all concrete surfaces because by washing them, new surfaces are free from the remains of panel oils and the old ones from soot, moss, lichen, remains of old paints, and similar.

The base is coated with JUBIZOL Unigrund primer, chosen in a shade as close as possible to the color of the render.

The application of a render finish should start only when a primer is dried through. In normal conditions (T = +20 °C, relative air humidity = 65 %), at least 12 hours after application of base coat.

For technical information on these primers, please read the technical data sheet.

6. Preparation of Render Finish for Application

Prior to application, stir the render finish with an electric mixer, and, if necessary (only exceptionally), dilute it with water (maximum 1 dl per container). The colour shade must be checked; then, equalize the render finish in order to remove even the slightest or imperceptible differences in colour shade between individual buckets. Stir the content of four buckets well in a large container of appropriate size. When a quarter of the so prepared compound is used, the content of the next bucket is poured into the container and mixed properly with the rest of the render finish, etc. Equalisation of white renders, which belong to the same production batch or to the same production date and which have not been diluted, is not necessary.

Reworking the render finish during application (adding tinting agents, diluting, and similar) is not allowed.

7. Application of Render Finish

The render finish is applied manually – using a stainless steel smoothing trowel – or by spraying – in the thickness

equal to the diameter of the thickest sand grain. When the render finish is applied by spraying, follow the instructions of the producer of the mechanical equipment. Immediately after the application, smooth the surface with a solid plastic finishing trowel. Perform the smoothing by circular strokes until we reach equally grained structure. Grains in the applied mortar coat should move as little as possible during smoothing, pushing of the mortar compound in the form of a wave in front of the trowel is not allowed. In most cases the creation of such a wave can be attributed to over-thickness of the application or to the surface not being prepared well or it being uneven. At the end – a few minutes after smoothing – push protruding lumps into the surface by smoothing the surface slightly using a clean stainless steel smoothing trowel.

Perform the application as fast as possible, without any interruptions from one corner of the wall to the other. When applying the render finish onto wall surfaces higher than one floor, it must be applied simultaneously to all floors: in such cases, always begin the application at the top floor, while performing a phase-delayed “step shift” in lower floors. Larger wall surfaces should be divided into smaller sections by using adequately wide decorative grooves, mortar trims, and other decorations, frames or in any other way. In this manner we avoid potential problems caused by continuous application of the render finish as well as non-aesthetic appearance due to a potentially uneven surface. Joints between planes in inner or outer corners can be made easier by preparing a few cm wide, finely smoothed stripes, which also give a pleasant decorative appearance to processed surfaces. Decorative smoothed stripes, grooves, mortar trims, frames, and similar are usually made prior to the application of the decorative render finish. They are protected by suitable wall paints, while paying attention not to apply coatings encroaching onto surfaces prepared for the application of the render finish.

In normal conditions ($T = +20^{\circ}\text{C}$, relative air humidity = 65 %), resistance of freshly processed surfaces to damage caused by precipitation (washing away of the application) is achieved in 24 hours at the latest. Thoroughly clean the tools with water immediately after use. Dried stains cannot be removed.

8. Maintenance and Restoration of Treated Surfaces

Façade surfaces processed with JUBIZOL Nano finish S 2,0 mm do not require any special maintenance. The non-adhering dust and other non-adhering filth can be swept, hoovered or washed away with a water blaster. Adhering dust and more obstinate stains can be removed by light rubbing with a soft brush soaked into a solution of usual universal household preparations and washed away by clean water.

However, where filth and stains cannot be removed applying the methods described above, renovation painting is recommended. In such cases, apply two coats of the micro-reinforced façade paint SILICONECOLOR or micro-reinforced façade paint REVITALCOLOR onto a prior coat of an appropriate primer.

9. Storage, Transportation Conditions and Durability

Storage and transportation at temperatures between $+5^{\circ}\text{C}$ and $+25^{\circ}\text{C}$, protected from direct sunlight, out of the reach of children, **MUST NOT FREEZE!**

Shelf life when stored in originally sealed and undamaged packaging: at least 12 months.

10. Other Information

The technical instructions in this brochure are given based on our experiences and are given as a guideline for achieving optimal results. We cannot take any responsibility for the damage, caused by incorrect selection of a product, incorrect use or unprofessional work.

Safety measures: Follow the instructions on the safety data sheet of the product.

The colour shade may differ from the print in the colour chart or from the approved sample. However, the total colour difference ΔE_{2000} for shades from the JUB's FAVOURITE FEELINGS – it is determined in accordance with the ISO 7724/1-3 and with a mathematical model CIE DE2000 – does not exceed 2.5. In order to check the colour shade, a dry application of render finish on a test surface is compared to a standard of the concerned shade, which is stored in the TRC JUB d.o.o. A colour shade of a render finish made on the basis of other samplers and colour charts is the best possible approach for JUB's product bases and tinting agents. Therefore, in such cases the total colour difference from the desired shade may be even higher than the value guaranteed above. A difference in colour shade, which is the result of unsuitable working conditions, of a product preparation technique, which differs from the one in this technical sheet, of failure to follow the equalisation rules, of the application of the product onto an unsuitably prepared, overly or not enough absorbing surface, more or less coarse surface, on a

wet or not dried enough surface, cannot be subject of complaint. In more demanding exploitation conditions, JUBIZOL Nano finish S 1.5 and 2.0 render finishes of darker colour shades are more inclined to chalking and less resistant to washing out with precipitation, while their photocatalytic characteristics are also worse. We shall not accept complaints for changes, which might occur for this reason on exposed façade surfaces in particular in a form of faster paling for render finishes in colour shades with brightness (Y) below 50. 5 This technical sheet supplements and replaces all preceding editions. We reserve the right to change and supplement data in the future.

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