

SILICATE TROWELED RENDER 2,0/2,5

Silikatni zariban omet

SILICATE SMOOTH RENDER 1,0 /1,5/2,0/2,5

Silikatni glajen omet

General Description and Fields of Application

Silicate decorative renders are pasty, ready-to-use renders, intended for decorative protection of façade surfaces, especially of thermal-insulation systems (JUBIZOL façade). They can be also used for decorative protection of interior wall surfaces.

The thickness of the plaster is usually slightly larger than the diameter of the largest grain in the mortar compound.

SILICATE TROWELED

RENDER (2 granulations: 2 and 2,5 mm) has – depending on the toweling technique (horizontal, circular or vertical) – distinctive grooved structure, similar to the oak bark.

SILICATE SMOOTH RENDER

(4 granulations: 1,0; 1,5; 2,0 and 2,5 mm) has – depending on the granulation – equally smooth structure that somewhat reminds of fine-grain structure of the scraped plasters. **Silicate Smooth Render 1,0** can be successfully applied only to high-quality prepared substrates; therefore it is recommended only for treatment of smaller surfaces, i.e. reveals, decorative borders, cornices, etc.

The plasters are distinguished for their high hardness, good adhesion to the substrate, high water-vapor permeability (Class 1 – EN ISO 7783-2), high water-repellence (Class 3 – EN 1062-3)

and resistance to effects of smoke and ultraviolet radiation.

Composition

Potash water glass (potassium silicate) and water-based acrylic binders, aggregates, inorganic pigments, special additives.

All renders are protected against algae and mould growth and contain special water-repellent (siloxane) additives.

Colour Shades.

128 colour shades on the colour chart PAINTS AND PLASTERS (JUMIX System). **Silicate Smooth Plaster 1,0** is manufactured in natural white, only.

Substrates

Silicate renders chemically bond to mineral surface (lime, cement). The substrate should be leveled, fine coarse grained (fine plaster), solid, dry and clean, without weakly bound particles, dust, easy water-soluble salts, oil stains or other filth. On previously painted surfaces, all loose, peeling and chalking paint must be removed. Newly applied renders must be dried for 3-4 weeks (for each cm, at least 7 – 10 days, for insulant light weight renders 5 –7 days) (T = +20 °C, R.H. = 65 %). Surfaces infected with wall mildew and algae must be disinfected prior to plastering.

Washing with a jet of hot water or steam is especially

recommended for all concrete substrates.

Suitable surfaces: fine mineral key renders of all kinds, base coat (cement-based) thermal-insulation systems (JUBIZOL façade), concrete surfaces, fiber-cement façade boards and gypsum-cardboards.

Application to old tightly adhered silicate coatings is possible.

Unsuitable surfaces: all surfaces painted with façade and interior washable coatings, chalk-based (water dissolving coats), surfaces painted with oil paints, lacquers or enamels, plastic compounds and wooden surfaces.

Preparation of Mortar Compound

Mix the mortar compound in the container well, by using a manual electric mixer. If necessary, thin it with JUBOSIL GX up to 1%.

CAUTION!

When more than one container of mortar compound is needed to cover the individual wall surface, avoid the irregular colouration due to eventual differences in colour shades by equalizing the paint in large container of appropriate size. Perform the equalization especially carefully when using the tinting renders and when the renders of **different production batches or different dates of manufacture**, are applied on the same wall surface.

SUBSTRATE	PRIMER	CONSUMPTION	DRY TO RECOAT
fine mineral key render, base coat of thermal-insulation systems	UNIGRUND (in colour shade of the render) RECOMMENDED !	150 - 200 g/m ²	min. 12 hours (T = +20 °C, R.H. = 65 %)
	JUBOSIL FX (in colour shade of the render) : JUBOSIL GX : water = 1 : 1 : 1	JUBOSIL FX app. 60 ml/m ² JUBOSIL GX app. 60 ml/m ²	
	JUBOSIL GX (thinned with water 1 : 1)	JUBOSIL GX app. 120 ml/m ²	
Smooth, low-absorbing surfaces: concrete, gypsum-cardboard boards, fiber-cement boards,	UNIGRUND (in colour shade of the render) RECOMMENDED !	150 - 200 g/m ²	min. 12 hours (T = +20 °C, R.H. = 65 %)
	VEZAKRIL	app. 300 ml/m ²	

TECHNICAL DATA

render	density (kg/dm ³)	drying time T: 20 °C, R.H.: 65 %		water vapour transmission EN ISO 7783-2		liquid water permeability w (kg/m ² h ^{0.5}) EN 1062-3	adhesion to l-c plaster EN 24624 (N/mm ²) (MPa)
		dry to touch	protect against rainfall	μ value(-)	Sd value(m)		
STR 2,0	app. 1,80	app.6 hrs	app.24 hrs	< 50	< 0,06	< 0,10	> 0,30
STR 2,5	app. 1,80	app.6 hrs	app.24 hrs	< 50	< 0,08	< 0,10	> 0,30
SSR 1,0	app. 1,97	app.6 hrs	app.24 hrs	< 30	< 0,04	< 0,08	> 0,30
SSR 1,5	app. 1,97	app.6 hrs	app.24 hrs	< 30	< 0,06	< 0,08	> 0,30
SSR 2,0	app. 1,97	app.6 hrs	app.24 hrs	< 30	< 0,08	< 0,08	> 0,30
SSR 2,5	app. 1,97	app.6 hrs	app.24 hrs	< 30	< 0,09	< 0,08	> 0,30

Notes:

STR: **Silicate Troweled Render**

SSR: **Silicate Smooth Render**

Application of Renders

Prepared mortar compound can be applied manually - using a stainless steel smoothing trowel – or using a machine (e.g. WAGNER PC 30, PC 25 in PC 5) – in the thickness, as close as possible to the diameter of the largest grain in the mortar compound. Remove the excessive compound using a stainless steel smoothing trowel,

regardless to the method of application.

SILICATE SMOOTH RENDER
Immediately or a few minutes after the application (depending on the absorption of the surface and microclimate conditions!) smooth the plaster surface with circular strokes using a solid and smooth plastic smoothing trowel,

to achieve as equal and filled look as possible.

SILICATE TROWELED RENDER
A few minutes after the application (usually 10, it may also be more or less, depending on the absorption of the surface and microclimate conditions) trowel the plaster surface using a solid plastic smoothing trowel.

Trowel the surface horizontal, vertical or circular strokes until the desired structure is achieved. A few minutes after the troweling, smooth the plaster surface lightly using a clean stainless steel smoothing trowel.

RECOMENTADION

Application of the renders should be performed as fast as possible – without interruption, from one corner of the wall to the other. When applying the renders to the wall surfaces higher than one floor, the plasters must be applied simultaneously to all floors: in such cases always begin the application of the render at the top floor, while in

Application Temperature

Air and surface temperature for application should not be lower than +8 °C and not higher than +30 °C, R.H. < 80%. Protect the façade surfaces against the sun, wind and rainfall

lower floors work with a “step shift”. Divide larger wall surfaces to smaller sections, with stripes, channels, mortar borders, frames, or some methods and avoid the problems of continuous application of the plaster and also unaesthetic look because of eventually uneven surface. The contacts between surfaces in corners and corner edges are made easier if a few cm wide fine-smoothed stripes are

with curtains; however do not apply the paint in rain, fog or strong wind (≥ 30 km/h), even with such protection.

applied. They also give a pleasant decorative effect to treated surfaces. Decorative stripes, channels, mortar borders, frames, etc. are usually applied prior to application of decorative plaster. Protect them with appropriate façade paints and pay attention not to apply the paint in uncontrolled manner over the edges; on the surfaces prepared for application of decorative plaster.

Coverage, Storage, Packaging

RENDER	Consumption (kg/ m ²)	Packaging	Durability when stored in originally sealed and undamaged packaging, protected from freezing and direct sunlight
Silicate Troweled Render 2,0	app. 2,5	Plastic container 25 kg	Max. 12 months
Silicate Troweled Render 2,5	app. 3,2	Plastic container 25 kg	Max. 12 months
Silicate Smooth Render 1,0	app. 2,4	Plastic container 25 kg	Max. 12 months
Silicate Smooth Render 1,5	app. 3,3	Plastic container 25 kg	Max. 12 months
Silicate Smooth Render 2,0	app. 3,5	Plastic container 25 kg	Max. 12 months
Silicate Smooth Render 2,5	app. 5,5	Plastic container 25 kg	Max. 12 months

Tool Cleaning

Thoroughly clean all the tools with water immediately after use.

ATTENTION! Before applying the silicate paints and coatings, protect window glasses, door and window frames and window shelves thoroughly. Eventual stains **cannot be removed**.

Safety at Work

Besides general instructions and regulations for construction and painting works consider that silicate plasters contain potash water glass (potassium silicate) which is irritating to eyes and skin, therefore use appropriate personal protection means while working; In case of contact with eyes, rinse immediately with plenty of water and seek medical advice; Keep the product out of the reach of children!

Waste Handling

Liquid waste must not be disposed together with domestic wastes, poured into water or in sewage system. After hardening deposit as a construction waste: **EWC: 17 09 04** Packaging may be recycled after appropriate cleaning.

Colour Shades - Caution

Because of incorrect preparation of the surface, non-consideration of equalizing rules when preparing the mortar compound and/or application of the plaster in unsuitable weather and microclimate conditions (high relative humidity, fog, low temperature, where due to slower drying process, more or less intensive rising of adhesives and pigments occurs), unequal colour shade or occurrence of spots and stripes can appear on the surface of applied plaster, for which we cannot take any

responsibility. Spotted surfaces can be equalized by using micro-reinforced façade paint REVITALCOLOR SI or REVITALCOLOR AG. Colour equalization is not possible prior to one week after the application of the render.

Health Integrity

Based on researches at the Institute of public health in Maribor, the dried coats of silicate plasters are not hazardous to health.

Quality Control

ISO 9001 and ISO 14001. Factory production control and occasional testing at various independent professional institutions, home and abroad.

Link to Other JUB Products

See also Technical sheets:

- 01** Primers,
- 15** Revitalcolor AG,
- 16** Revitalcolor SI

Technical instructions in this brochure are 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 choice of the product, incorrect use or unprofessional work. Minor differences in colour shades are possible among the equivalent plasters from different production batches, however the shades do not vary from those in the colour charts for more than $\Delta E = 1,0$ and $\Delta a = 0,4$. The test for colour shade tolerances must be performed on standard test cardboard after the coat dries. Colour shade variations, caused by application of the plaster on surfaces with different coarseness and absorbing properties, cannot be subject to any claim. We reserve the right to change the technical data of our products without notice as a result of our own development work or as a result of other technical progress. This technical sheet supplements and replaces all preceding editions.
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