MINERAL DECORATIVE RENDERS

Technical Sheet 20



MINERAL TROWELED RENDER 2,0/2,5 Mineralni zariban omet

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MINERAL SMOOTH RENDER 1,5/2,5

Mineralni glajen omet

General Description and Fields of Application

Mineral decorative renders are thin-coat renders intended for decorative protection of façade and interior wall surfaces. They can be also used for decorative protection of thermal-insulation systems (JUBIZOL façade). The thickness of the render is usually slightly larger than the diameter of the largest grain in the mortar compound.

TROWELED RENDERS (2

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

SMOOTH RENDERS (2

granulations: 1,5 and 2,5 mm) have – depending on the granulation – equally smooth structure that somewhat reminds of fine-grain structure of the scraped plasters.

The renders are distinguished by high hardness, good adhesion to the substrate, high water-vapor permeability, water-repellence and resistance to smoke and ultraviolet radiation.

Application of the renders to the façade surfaces of the buildings higher than 2 floors (G + 1) with small projecting roofs or even without them is not recommended.

Composition

White cement, hydrated lime, organic additives, mineral aggregates. All plasters are protected against algae and mould growth and contain special water-repellent additives.

Colour Shades.

Natural white, can be painted with acrylic façade paint REVITALCOLOR AG or silicate façade paint REVITALCOLOR SI.

Substrate

The substrate should be leveled, fine-coarse-grained (fine render), 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 mould or algae must be disinfected and cleaned 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) thermalinsulation systems (JUBIZOL façade), concrete surfaces, fibercement façade boards and gypsum-cardboards.

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

SUBSTRATE	PRIMER	CONSUMPTION	DRY TO RECOAT
fine mineral key render, base coat of thermal-insulation systems	AKRIL EMULSION (thinned with water 1 : 1)	AKRIL EMULSION app. 100 g/m²	4 - 6 hours (T = +20 °C, R.H. = 65 %)
Smooth, low- absorbing surfaces: concrete, gypsum-cardboard boards, fiber- cement boards	VEZAKRIL	app. 300 ml/m²	min. 12 hours (T = +20 °C, R.H. = 65 %)



fresh mortar		compressive strength EN 1015-11	capillary water absorption		water vapour permeability EN 1015-19		adhesion EN 1015-12	adhesion after weathering EN 1015-21	
	density (kg/l)	(N/mm ²)		EN 1015-18 categorie	EN 1062-3 (kg/m ² h ^{0,5})	μ(-)	Sd (m)	(N/mm²)	(N/mm²)
MTR 2,0	арр. 1,80	5,5 CS	S III	W 2	< 0,20	< 15	< 0,03	0,5 100% B	0,4 100% B
MTR 2,5	app.1,84	5,5 CS	S III	W 2	< 0,20	< 15	< 0,04	0,5 100% B	0,4 100% B
MSR 1,5	app. 1,66	5,5 CS	S III	W 2	< 0,10	< 15	< 0,03	0,5 100% B	0,4 100% B
MSR 2,5	app. 1,75	5,5 CS	S III	W 2	< 0,10	< 15	< 0,04	0,5 100% B	0,4 100% B
All the	Reaction to fire: A 1				B: fracture in the render itself				
renders	Thermal conductivity: λ (tab. value): 0,93 W/mK								
	Drying time	Orying time touch dry: app.6 hours (T: 20 °C, r. h.: 65 %)							
		protect against rainfall: at least 24 hours (T: 20 °C, r. h.: 65 %)							

Notes:

MTR: Mineral Troweled Render MSR: Mineral Smooth Render

Preparation of Mortar Compound

Mortar compound (MTR and MSR) is prepared in the concrete mixer or in appropriately large plastic container, if mixed manually. Mix the contents of the bag in the appropriate quantity of water, so the compound becomes homogenous and without any lumps. Wait for 10 minutes for compound to swell up and mix it again well. Adjust the consistency of the mortar compound by adding some water if necessary.

Mortar pot life: app. 2 hours.

RENDER:20 kg	Water added
MTR2,0	app. 4,7 l
MTR 2,5	app. 4,7 l
MSR 1,5	app. 4,5 l
MSR 2,5	app. 4,0 l

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 mlortar in large container of appropriate size. Perform the equalization especially carefully when using the renders of different production batches or different dates of manufacture.

Application of Renders

The prepared mortar compound is 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.

Mineral 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. Smoothing trowel of appropriate size made of steel or wood may be also used for smoothing the surface.

Mineral 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 styropor, stainless steel or wooden smoothing trowel. Trowel the surface horizontal, by vertical or circular stokes until the desired structure is achieved. Few minutes after the troweling, smooth the render surface lightly using a clean stainless steel smoothing trowel.

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Application Temperature

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

Air and surface temperature for

with such protection. **RECOMENDATION**

The application of plasters should be preformed as fast as possible - without interruption, from one corner of the wall to the other. When applying the plasters 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 plaster at the top floor, while in 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 at corners and corner edges are made easier if a few cm wide fine-smoothed stripes are 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 CAUTION not to apply the paint in uncontrolled manner over the edges; on the surfaces prepared for application of decorative render.

Tool Cleaning

Thoroughly clean all the tools with water immediately after use.

Safety at Work

Besides general instructions and regulations for construction and painting works consider that the mineral renders contain lime and cement and are classified as hazardous labeled with **Xi**, IRRITATING

R 36/38 Irritating to eyes and skin.

R 41 Risk of serious damage to eyes.

S 2 Keep out of reach of children.

S 24/25 Avoid contactwith skin and eyes.

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S 28 After contact with skin.

S 28 After contact with skin, wash immediately with plenty of water.

S 37/39 Wear suitable gloves and eye/face protection.

See also MSDS.

Consumption, Storage, Packaging

RENDER	Consumption(kg/m²)	Packaging	Durability when stored in originally sealed and undamaged packaging
Min. troweled render 2,0	app. 2,6	Paper bags 20 kg	at least 6 months
Min. troweled render 2,5	app. 3,1	Paper bags 20 kg	at least 6 months
Min. smooth render 1,5	app. 2,6	Paper bags 20 kg	at least 6 months
Min. smooth render 2,5	арр. 3,6	Paper bags 20 kg	at least 6 months



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Waste Handling

Treat hardened mortar compound as a construction waste: **EWC**: **17 09 04**

Health Integrity

The dried coats of mineral plasters/renders 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

Labelling



EC Declaration of conformity

Technical instructions in this brochure are based on our experiences and are given as a guideline for achieving optimal results. Because of the changes in colour shades of natural aggregates, minor differences in colour shades are possible among the products from different production batches, which cannot be the subject to any claim. Colour shade variations, caused by application of the plaster on surfaces with different coarseness and absorbing properties, cannot be subject to any claim.

We cannot take any responsibility for the damage, caused by incorrect choice of the product, incorrect use or unprofessional work. 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. November 2006

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