Plaster and Facade Systems

P2301_DSP.uk

Product Data Sheet 2025-02

Conni S

Silicone resin render with floated render structure

Product description

Ready-to-use, paste-like silicone resin render for non-directional textures with a floated render structure. With the appropriate tools, structured effects such as rustic render or trowel finish render can be implemented.

Composition

Silicone resin emulsion, synthetic resin emulsion, graded marble graining and silica sand, special admixtures, water additives, preservatives and light fast colour pigments.

Storage

Protect against frost, high temperatures and exposure to direct sunlight. The material can be stored for approx. 24 months in the original container in a cool and frost-free environment. Close opened buckets airtight.

Quality

In compliance with EN 15824, the product is subject to initial type testing and continuous factory production control and bears the CE marking. External monitoring compliant with certification is implemented.

Properties and added value

- Paste-like ready-to-use finishing coat acc. to EN 15824
- Ready-mixed
- High resistance to weather influences
- Resistant to soiling
- Highly vapour permeable
- Highly water-repellent
- Retards and prevents the formation of mould and algae
- For exterior applications
- Colour shade white (approximately RAL 9010)
- Can be pigmented with Knauf Knauf ColorConcept colour shade selector card

Field of application

- On Knauf WARM WALL systems
- On lime-based renders, lime-cement renders for outdoors
- On organic reinforcement mortars, such as Pastol and Pastol Dry

Application

Substrate and pretreatment

Substrate	Pretreatment
Lime renders and lime/cementitious renders	Apply a primer coating with Quarzgrund Pro after a corresponding drying time. In case of intensive colour shades, Casiol Grund is recommended instead of Quarzgrund Pro
Basecoat, e.g. SM700 Pro, SM300	Apply Quarzgrund Pro when fully dry, at the very earliest after 10 days drying time. In case of intensive colour shades, Casiol Grund is recommended instead of Quarzgrund Pro
Reinforcement mortar, e.g. Pastol	With pigmented Conni S, a primer coat of Quarzgrund Pro in an approximately similar colour shade of the finishing render is recommended.
Non-stable paint coats	Remove completely
Render hollows and cavities	Remove completely and fill with a suitable render, observe the drying times, apply a Quarzgrund Pro primer.
Concrete, bonded coats and stable old render layers	Clean with a high-pressure water cleaner until dust-free and allow to dry completely, apply Quarzgrund Pro.

When pigmented Conni S is used, it is recommended that a primer coat of an approximately similar colour shade is used to prevent the substrate shimmering through.

Preparation

Check substrate for compliance with VOB part C, DIN 18350, DIN 18345 chapter 3.1 and/or according to VOB part B, DIN 1961 paragraph 4 no. 3. Clean the substrate of dust and loose parts and ensure that the surface is smooth. Cover easily-soiled building components before commencement in accordance with Code of Practice “Abklebe- und Abdeckarbeiten für Maler- und Stuckateurarbeiten” issued by the Bundesverband Ausbau und Fassade. Protect fresh coats from the effects of moisture, e.g. from precipitation and from the effects of rapid water loss, e.g. by exposure to direct sunshine or strong wind, by protecting with suitable measures such as protective nets.

Preparation of the substrate in accordance with the table "Substrate and pretreatment". Allow to dry for at least 12 hours before further applications. All substrates must be stable, dry, even and free of grease and dust as well as free of any residual substances that may reduce the adhesion. Basecoats and adhesive must be fully dry and set before the application of Conni S. Use of a reinforcing mesh is recommended on the basecoat in case of Conni S with graining of 1.5 mm.

Machines / equipment

- Knauf PFT SWING L
- Knauf PFT K 2 N air compressor
- Supply hose Ø 25 mm

Application

The colour shade should be verified before application. When using pigmented Conni S on optically connected rendered surfaces, only apply materials with the same batch number (when reordering please supply the order number of the previous delivery) or mix together materials from different batches. Conni S must be stirred with an agitator. The application consistence can be set by adding a small quantity of water when necessary.

To avoid fins/protrusions, a sufficient number of workers must be present on every scaffolding level as well as to ensure speedy “fresh-in-fresh” application.

Manual application

Conni S is applied over the entire surface in grain thickness with a stainless steel trowel, and directly after application it is worked uniformly and without interruption to the desired texture using a hard plastic trowel. The type of tool used influences the surface roughness and it is therefore essential to use the same tool for a consistent finish. If necessary, Coni S can have a top coat of Autol or Fassadol applied.

Machine application

Conni S can be machine applied with a conventional fine plastering machine.

Reinforcement

Partial surface reinforcement / reinforcement in exteriors, change of material, building openings etc.

On thin-layer final coats with a grain size up to 3 mm, the partial surface reinforcement is undertaken by the application of a reinforcement render with reinforcement mesh directly on the masonry with a joint overlap of 200 mm on the undisturbed masonry area. Now roughen the reinforcement render without exposing the mesh. The minimum thickness is 5 mm.

More information can be found in the “Leitlinie für das Verputzen von Mauerwerk und Beton - Guidelines for plastering masonry and concrete”, issued by the German Verband für Dämmsysteme, Putz und Mörtel e.V. (VDPM), (German only).
An additional full surface mesh reinforcement should always be preferred instead of partial surface reinforcement.

Full surface reinforcement in exteriors

With freely textured, brushed surfaces or textured renders where the grain size is less than 2 mm (in acc. with DIN 18350, VOB part C, < 3 mm), mixed brickwork, on sides exposed to weather, critical building geometries, large areas applied with multi-layer wood wool slabs (after a drying time of at least 3 weeks) and insulating layers on XPS-R etc. or with render thicknesses of > 30 to 50 mm, an additional full surface mesh reinforcement (reinforcing mesh 4x4 or 5x5 mm) with SM700 Pro, SM300 or Lustro is strongly recommended on the hardened basecoat.

Plinth application

Seal all rendered surfaces with contact to the soil up to approx. 50 mm above the ground line against moisture acc. to DIN 18533. For this purpose, a double layer of Sockel-Dicht plinth sealing can be applied with a dry layer thickness of at least 1 mm and a wet layer thickness of at least 1.2 mm. When sufficiently dry, a protective layer with slip membrane (e.g. fleece laminated dimpled sheet) should be placed before the construction.

Drying time

Conni S physically dries by the evaporation of water. In suitable weather conditions, Conni S can be worked on again after 24 hours at the earliest. Conni S is fully dry after approx. 14 days. The drying time will be extended with unfavourable temperatures / air humidity.

Application temperature/climate

Do not apply at material, air and/or substrate temperatures below +5 °C. Do not apply Conni S onto substrates that have heated up.

Note	When using the film forming accelerator TS Mix, application is possible at temperatures from +1 °C to maximum +15 °C. The ambient relative humidity may not exceed 90 %. Add 1 bottle of TS Mix (200 ml) to a 25 kg bucket of Conni S and carefully mix with an agitator and subsequently apply.

Cleaning

Clean the equipment and tools with water immediately after use.

Notes	Render must be applied according to EN 13914-1, DIN 18550-1 and DIN 18350, VOB part C as well as the generally recognized building engineering rules and valid guidelines. Slight changes in the colour shade or minor colour shade differences can result due to the contained natural aggregates as well as due to the physical drying process in diverse weather and ambient conditions. An additional coat is recommended for intensive colour shades. Should dark coloured surfaces be exposed to high mechanical loading, the colour may change at affected locations (crazing). This does not affect the product quality and functionality. Conni S is formulated ex-works with biocide film preservation. It protects the product against algae and mould growth. Permanent protection against algae and mould cannot be guaranteed, as the susceptibility depends on the local and environmental conditions. Observe Code of Practice no. 26 “Farbveränderungen von Beschichtungen im Außenbereich - Colour changes in exterior coatings” of the Bundesausschuss Farbe und Sachwertschutz (German Paint and Property Protection Committee) (German only).

Number of mesh layers dependent on the grain size and luminosity

Render finish	Graining	Luminosity of the final coat (or paint coat if necessary)					
	mm	**100** to **30**	**29** to **25**	**24** to **20**	**19** to **15**	**14** to **10**	Autol TSR[1)] Fassadol TSR[1)] **< 20**
Conni S	1.0	●	●	●	●●●	●●●	●
	1.5 – 2.0	●	●	●	●●●	●●●	●
	3.0	●	●	●	●●	●●●	●

1) Functionality only on at least 5 mm thick mineral reinforcement layer and only also on white, newly created final coats.

- ● *Single-layer mesh reinforcement*
- ●● *Double-layer mesh reinforcement*
- ●●● *Double coat, only small surfaces, larger surfaces on request*

Technical data

Description	Standard	Unit	Conni S
Reaction to fire	EN 13501-1	Class	A2-s1, d0
Density	EN ISO 2811-1	kg/dm^3	approx. 1.8
Water vapour permeability	EN ISO 7783-2	Category	V_1 (high)
Water absorption	EN 1062-3	Category	W_c 3 (low)
Bond strength	EN 1542	MPa	≥ 0.3
Durability (frost resistance): Permeability w	EN 1062-3	kg/(m^2·h$^{0.5}$)	≤ 0.5
Thermal conductivity $\lambda_{10,dry,mat}$	EN 1745	W/(m·K)	0.7

The stated technical data were evaluated acc. to the respective test standards. Deviations under site conditions are possible.

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Observe the safety data sheet!
For safety data sheets and CE marking see
pd.knauf.de

Videos for Knauf systems and products can be found under the following link:
youtube.com/knauff

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