

Technical Data Sheet

Rajasil SP2

(renovation render)

Rajasil SP2: dry factory-mixed mortar, R, CS II, W 2, in accordance with DIN EN 998-1 (P II, water-repellent according to former with DIN V 18 550); WTA-certified renovation render for moisture- and salt-contaminated substrates

Areas of Application: for interior surfaces (e.g. cellar rooms) and above-grade exterior surfaces
Responsibility for any usage outside these areas of application lies solely with the user.

Composition: cement, white lime hydrate, lightweight mineral aggregates, carefully composed aggregates, additives for water repellence, pore-forming and optimum workability properties
Rajasil SP2 COARSE: max. grain size approx. 3.5mm
Rajasil SP2 FINE: max. grain size approx. 1.5mm
colour: off-white and light colours

Technical Data: Rajasil Sanierputz SP3 meets the requirements of WTA Recommendation 2-9-04/D.

air void content of fresh mortar	> 25 volume percent
water retention	> 85 percent
gross density of set mortar	< 1.3 kg/dm ³
water vapour permeability resistance coefficient μ :	< 12
compressive strength f_{cd}	1.5 - 5.0 N/mm ²
strength ratio $f_{cd} : f_{bz}$	< 3
capillary water absorption W24	> 0.3 kg/m ²
water penetration depth h	< 5 mm
porosity of set mortar	> 40 volume percent
salt resistance	passed

Coverage: approx. 12kg of dry mortar / m² per cm of render thickness

Preparation of the Substrate: Rajasil SP 2 is normally applied onto Rajasil PGP (see Technical Data Sheet). Make sure Rajasil PGP is sufficiently cured and roughened. If a sinter skin is present, work it over mechanically to ensure proper adherence of the renovation render. If Rajasil SP2 is applied in two coats, apply Rajasil SPB in a web-like pattern as bonding bridge after adequate substrate preparation. Make sure to properly comb scratch the first coat of Rajasil SP2. In cases with high sulphate levels in the masonry use the Rajasil SP3 or Rajasil SP 3 PLUS system; see Technical Data Sheet.

Application and Substrate Temperature: + 5 °C minimum; lower temperatures during the curing phase can have a sustained negative effect on product properties.
With high environmental temperatures (and/or strong wind), additional measures are necessary to prevent premature loss of mixing water.

Preparation of the Product:
Manual application
Using a clean mortar bucket, add dry mortar to required amount of water and mix to a lump-free consistency using a power stirrer.
Machine application
All conventional mixing pumps can be used. Depending on the machine type, the use of a secondary mixer may be necessary. The decisive factor here is that the above-mentioned fresh mortar properties as per WTA Recommendation 2-9-04 are obtained.

Application: Rajasil SP2 is applied onto Rajasil PGP. In case of two-coat application without the use of Rajasil PGP, apply the second coat of renovation render onto properly roughened, sufficiently sound and superficially dry first coat. During the setting process, surface may be rubbed down with felt float or textured in other ways. In order to prevent cracks and visible joints, treat transitional areas between existing render and renovation render first as water loss may be accelerated here. Rajasil SP2 is also suitable for the creation of facade elements, e.g. cornices.

Application:**Render thickness:**

Application using Rajasil PGP:

Rajasil PGP: 1cm minimum
Rajasil SP2: 1.5cm minimum

Two-coat application of Rajasil SP2

- 1) Rajasil SP 2 coat thickness 1cm min.
- 2) Rajasil SP 2 coat thickness 1cm min. max. per-coat thickness: 2cm

Thoroughly roughen first coat. The second coat can be applied onto the superficially dry first coat. If the substrate is very uneven or has very deep, wide joints, it is recommended to apply a leveling render coat with Rajasil SP2; thoroughly roughen surface.

With unevennesses that would require an overall renovation render application thickness of more than 40mm, usage of Rajasil PGP is required (see Technical Data Sheet).

In order to prevent cracks, we recommend embedding Rajasil AGG as reinforcement into the upper third of the render layer.

After Treatment:

Protect freshly applied render adequately from premature loss of moisture (sun, wind, high temperatures), rain and frost.

In dry, warm weather, after treatment is required to prevent premature dehydration.

With extremely high air humidity, e.g. in cellars without sufficient ventilation, Rajasil SP2 cannot dry. Salts can penetrate the entire cross-section of the render. In order to ensure the successful completion of the renovation work, provide adequate drying conditions for several days, e.g. by setting up a condensation dryer. Environmental conditions must permit drying. However, in order to prevent tension cracks, do not heat up interior spaces too quickly after render application.

Surface Coating:

Prior to application of subsequent coatings on the renovation render system, allow 1 day per mm of render thickness to pass, or with render thicknesses above 10mm at least 10 days, depending on curing and drying conditions. Coating layers, such as finishing coats or paint coats, must not impair the water vapour permeability properties of the render system.

Requirements on coating layers:

diffusion-equivalent air layer thickness $s_d < 0.2\text{m}$ (of each individual layer)

For exterior use, the following additional requirements apply:

for paint coats:	$w < 0.2 \text{ kg}/(\text{m}^2\text{h}^{0.5})$
for finishing coats: water-repellent (former DIN V 18 550)	$w < 0.5 \text{ kg}/(\text{m}^2\text{h}^{0.5})$

Trowel-applied smooth coatings, using e. g. the traditional marmorino method or smooth lime finishes, are unsuitable even if mineral-based as this application method can result in a compacting of the surface.

Suitable finishing coats:

Rajasil SPG, Rajasil EP WD, Rajasil RP, Rajasil KFP, HECK SIP

Suitable paint coats:

Rajasil SHF, Rajasil SIF, Rajasil SIF INTERIOR for interior application

Important:

In many cases coating is not necessary if coloured Rajasil SP2 is used. If the surface is treated with a felt float or block brush, this will result in a "cloud effect" surface colour; a visual appearance often favoured in heritage protection. If an evenly-coloured appearance is required, application of an equalising paint coat onto the render is necessary. Pre-coloured renders have the significant advantage that mechanical damage to the surface will barely be visible in terms of colour differences.

Notes:

Colours (light colours only) will be adjusted according to the colour fan deck or according to the sample provided. Prior to the application of the coating, set up a test panel and compare to the colour on the colour fan deck or to the custom colour requested.

Application method and application conditions - such as absorbency and surface structure of the substrate (also see VOB DIN 18 363, paragraph 3.1.1), weather conditions or environmental reflexes - can result in divergences in colour.

When placing a follow-up order, please make sure to provide: the date of your initial order, the batch number, as well as the shipping note/invoice number.

Due to the usage of mineral raw materials, follow-up deliveries may slightly vary in colour.

We therefore strongly recommend using only material from the same production batch for continuous surfaces.

Complaints made after application of the product as to divergences in colour from the colour fan deck or from the sample provided cannot be accepted. Also, divergences in colour that are a result of the circumstances described do not constitute a reason for complaint.

Variations in colour and surface texture over the course of time due to weather and environmental factors, e.g. atmospheric particles, are not covered by warranty. Technical functionality remains unaffected.

Under adverse conditions, the possibility of the formation of micro-organisms, such as algae, cannot be ruled out when used as finishing coat; this does not constitute a reason for complaint. If Rajasil SP2 is used on surfaces in contact with the ground, it must be sealed using e.g. Rajasil DS FLEX.

Safety Instructions:

Rajasil SP2 contains lime and cement and thus reacts alkaline when fresh. Avoid contact with eyes and skin. Protect eyes and skin. If product gets on skin, wash off immediately. If product gets in eyes, rinse thoroughly with water immediately and seek medical attention. Wear suitable protective gloves. If product is swallowed, seek medical attention. Keep product out of the reach of children. For further information see Safety Data Sheet.

Storage:

Store in a dry place; shelf-life in original container: approx. 9 months.
Low chromate conforming to TRGS 613

Quality Control:

Constant monitoring of production through laboratory analyses

Quality Monitoring:

The Rajasil SP2 system with its components
Rajasil SPB
Rajasil PGP
Rajasil SP2
is certified by WTA: All requirements as laid down in WTA Recommendation 2-9-04/D, also those pertaining to internal and external controls, are met. The products are allowed to carry the WTA® service mark.



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