

Technical Data Sheet

Rajasil LKP

(Air-Hardening Lime Render)

Rajasil LKP COARSE/ MEDIUM/FINE:

Air-hardening lime bonded, cement-free dry factory-mixed mortar GP CS I, W 0 in accordance with DIN EN 998-1 (P I according to former DIN V 18 550)

Colour: off-white

Properties:

Rajasil LKP is open-porous and has sufficient early strength and moderate final strength properties. Small "inactive" cracks can be closed through longer-period crystallisation processes.

Areas of Application:

Use on interior and protected exterior surfaces; especially in older buildings (e.g. on historic plaster fragments). Not for high up and/or extremely exposed surfaces (e.g. steeples) and structures of driving-rain exposure category II + III in accordance with DIN 4108 without any additional protective measures (roof overhang, water-repellent coating etc.).

Not suitable for wall base application!

Responsibility for any usage exceeding these areas of application lies solely with the user.

Composition:

white lime hydrate; pozzolanic silica; quartz sands with optimal grain-size distribution curve

Rajasil LKP are available colouriseded, with bonding additive and with flax fibres.

Rajasil Luftkalkputz grob (coarse):	max. grain size approx. 4.0mm
Rajasil Luftkalkputz mittel (medium):	max. grain size approx. 2.0mm
Rajasil Luftkalkputz fein (fine):	max. grain size approx. 1.0mm

Technical Data:

Mortar group	GP, CS I, W 0 with DIN EN 998-1, (P I with former DIN V 18550)
Cured mortar gross density	approx. 1,4 kg/dm ³
Flexural strength	approx. 0,6 N/mm ²
Impact resistance	approx. 1,5 N/mm ²
Rake DIN 4108 thermal conductivity	0,89 W (m·K)
E – module	approx. 2800 N/mm ²
c – value (capillary water absorption)	> 0,4 kg/(m ² ·min ^{0,5})
μ - value	approx. 7

Coverage:

approx. 1.5kg dry mortar / m² / mm of render thickness

Yield:

10kg dry mortar equal approx. 6.5 litres wet mortar

Substrate:

Structurally sound, mineral, evenly absorbent substrates. Also substrates of a lower strength if they meet the requirements of DIN 18 350 and former DIN V 18 550.

Preparation of the Substrate:

Remove dust, loose particles and separating layers from substrate.

Onto non-structurally-sound substrates, install suitable plaster base/lath, e.g. Stauss-Fassadenmatte.

On loam masonry and on loam substrates inside timber framings, especially new loam bricks, the installation of a plaster base/lath is recommended because of the hygric shrinkage and swelling of the substrate.

Moisten substrate.

On smooth, higher-strength and low-absorbent substrates, apply a bonding bridge using Rajasil SPB in a web-like pattern (covering approx. 50% of the surface).

Allow a curing time of at least one day for Rajasil SPB.

Application and Substrate Temperature:

+ 5 °C minimum; lower temperatures during the curing phase can have a sustained negative effect on product properties.

With high temperatures (and/or strong wind), additional measures are necessary to prevent premature loss of mixing water.

Please note: Pure lime mortars require a longer curing period than hydraulic renders. In order to prevent frost-related damage due to insufficient curing, do not use on exterior surfaces during autumn.

Preparation of the Product:

Mix Rajasil Luftkalkputz manually in a clean mortar bucket, or using a power stirrer or a hopper mixer, until a lump-free consistency is obtained.

Application of Rajasil Luftkalkputz is also possible using suitable plastering machines, e.g. PFT G4.

Application:

Prior to actual render application, cast hollow areas, holes and larger indentations with Rajasil LKP COARSE and allow to cure; roughen surface during the setting process.

Onto sufficiently prepared, moistened, pale damp substrate, Rajasil LKP is applied in at least two coats; roughen surface during setting process.

The second coat is applied in a thinner layer thickness.

Typically, the lower coat is applied in two layers wet-on-damp.
Maximum per-coat thickness:

Rajasil LKP COARSE:	20 mm
Rajasil LKP MEDIUM:	15 mm
Rajasil LKP FINE:	10 mm

Surface treatment:

Surface can be worked over for e.g. a rubbed or felted finish.
The use of wooden tools is recommended.

After Treatment:

Protect freshly applied Rajasil LKP adequately from premature dehydration (sun, wind) and from rain and frost.

Due to the slow curing process, careful after treatment is necessary in order to prevent premature loss of mixing water.

Please note: With purely lime-bonded renders, the possibility of shrinkage cracks cannot be ruled out (see also WTA Recommendation 2-4-07), especially with smoothed and felt-float finished surfaces.
We therefore recommend surface treatment using a wooden float.

Surface Coating:

Given a normal curing process, low-tension curing, open-porous systems, such as Rajasil SIF, can be applied after approx. 6 weeks.

Apply paint on Rajasil LKP in several thin-layer coats (at least one prime and top coat respectively).

Notes:

Due to the usage of mineral raw materials, follow-up deliveries may vary in colour shade. Only use material from the same production batch for continuous surfaces, especially if no surface coating is performed.

Variations in colour shade 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.

Safety Instructions:

Rajasil LKP contain lime and thus react alkaline when fresh.

Avoid contact with eyes and skin. If product gets in eyes, thoroughly rinse with water immediately and seek medical attention. If product is swallowed, seek medical attention.

Wear protective gloves and protective goggles.

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.

Quality Control:

Constant monitoring of production through laboratory analyses.



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