

Technical Data Sheet

Rajasil ZP

(Cement Render)

Rajasil ZP: Dry factory-mixed mortar, mineral basecoat and finishing coat render, GP, CS IV, W 0 in accordance with DIN EN 998-1 (P III according to former DIN V 18 550)

Properties: High-strength render suitable for use in outdoor areas; to be processed manually and using a plastering machine; not set as water-repellent

Areas of Application: Exterior application on wall bases (strong masonry and concrete); not suitable on lightweight masonry made from Poroton or aerated concrete. Large-area application on high-strength masonry only. As basecoat (undercoat) for Rajasil and HECK finishing coats.
Responsibility for any usage outside these areas of application lies solely with the user.

Composition: cement; carefully composed limestone sands; max. grain size approx. 2mm; admixtures for optimal workability

Technical Parameter:

Mortar group	GP, CS IV in accordance with DIN EN 998-1
Gross density of set mortar	1,4 – 1,5 kg/dm ³
Flexural strength	2,5 – 3,5 N/mm ²
Compressive strength	approx. 6,0 N/mm ²
e-module	7500 – 8500 N/mm ²
Calculation value for thermal conductivity λ_R (DIN 4108)	1,40 W/(mK)
w-value	> 2,0 kg/m ² h ^{0,5}
c-value	$c \geq 0,20 \text{ kg/m}^2 \times \text{min}^{0,5}$, W 0 in accordance with DIN EN 998-1
μ -value	approx. 35

Coverage: approx. 1.4kg dry mortar / m² / mm render thickness

Substrate/Preparation of the Substrate: All substrates must be dry, stable, structurally sound, free from dust and frost, absorbent, and free from separating substances (e.g. formwork oils).
Thoroughly moisten normally absorbent masonry (clay brick). On non-structurally-sound substrates install a suitable plaster base. Knock mould marks/flashings off concrete surfaces.
Concrete surfaces and low-absorbent substrates require Rajasil SPB, applied in a web-like pattern, as bonding bridge; mixed masonry requires the fully-covering application of Rajasil SPB.
Level hollow joints, flaws in the masonry and larger indentations prior to actual render application; trowel flush with the surface, roughen during setting process and allow to cure.

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.

Application: Application thickness:
On the outside, min. 8 mm, max. 20 mm per layer, total render thickness (base-coat and finishing render) 20 mm
Exterior surfaces: 8mm min., 20mm max. per-coat thickness; observe overall render thickness of 20mm (basecoat and finishing coat) as required by former DIN V 18 550.
Add dry mortar to required amount of tap water in a clean mortar bucket and manually or using a power stirrer mix to a lump-free consistency.
Application using mixing pumps is also possible.
Apply Rajasil ZP onto prepared substrate in two passes. First, apply a render layer of approx. 8 to 10mm thickness. Once this layer begins to set, apply a second layer wet-on-damp to obtain the required render thickness.
On surfaces prone to tearing/cracking, embed Rajasil AGG into upper third of render layer; make sure edges of mesh overlap by 10cm.
Curing time prior to application of additional coatings: 1 day per mm of render thickness; or at least 10 days with render thicknesses above 10mm, depending on curing and drying conditions.

Application:	<p><u>Surface treatment:</u></p> <ul style="list-style-type: none"> If a thin-layer textured or felt-float finish render is to be applied as finishing coat, vertically and horizontally level and smooth surface with h-profile feather edge (smoothing board) immediately after render application. In case of multi-coat application in addition roughen surface during setting process. <p>Use as finishing coat: texture surface by e.g. rubbing down with felt float.</p>
After Treatment:	Protect freshly applied mortar from premature dehydration (sun, wind, high temperatures), and from frost and rain.
Surface Coating:	renders suitable for wall base application, such as Rajasil HM, HECK SHF, HECK KHP Coatings: e.g. two-coat priming with Rajasil NIG and subsequent two-coat application of Rajasil SHF or HECK FF UNI. Protect render system on surfaces in contact with the ground from rear moisture intrusion. For this, use Rajasil DS FLEX.
Notes:	<p>When used as finishing coat: 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. Under adverse conditions, the possibility of the formation of micro-organisms, such as algae, cannot be ruled out; this does not constitute a reason for complaint.</p>
Safety Instructions:	Rajasil ZP contains cement and thus reacts alkaline. Avoid contact with eyes and skin. If product gets on skin, wash off immediately. If product gets in eyes, thoroughly rinse with water immediately and seek medical attention. Keep product out of the reach of children. If product is swallowed, seek medical attention immediately. Wear suitable protective gloves during work. 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.



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