

Note on English translation / Hinweise zur englischen Fassung

This is a translation of the technical data sheet valid in Germany.

All stated details and properties are in compliance with the regulations of the German standards and building regulations. They are only applicable for the specified products, system components, application rules, and construction details in connection with the specifications of the respective certificates and approvals.

Knauf Gips KG denies any liability for applications outside of Germany as this requires changes acc. to the respective national standards and building regulations.

KNAUF



Plaster and Façade Systems

P203.de

Product Data Sheet

2017-11



Rotkalk Fein

Lime basecoat and finishing plaster for interiors and exteriors

Product description

Lime basecoat and lime finishing plaster with Kaolin and clay dust on all types of masonry and concrete preferably for interiors. The high share of lime facilitates optimum light application properties.

Composition

Hydrated lime, hydraulic binder, metakaolin, clay dust, graded quartz or limestone grains, water-retaining additives, air entraining admixture, bonding and processing additives.

Storage

Store the bags on wooden pallets in a dry environment. The product can be stored for at least 6 months.

Quality

In compliance with EN 998-1, the product is subject to initial type testing and continuous factory production control and bears the CE marking.

Tested by the Institut für Baubiologie (building biology) in Rosenheim (IBR) and awarded the "Tested and recommended by the IBR" seal of approval.

For detail see www.baubiologie-ibr.de

Properties and added value

- General-purpose rendering/plastering mortar GP acc. to EN 998-1
- Compressive strength category CS I acc. to EN 998-1
- For interior and exterior use
- For machine or hand application
- Moisture regulating, thus favourable for the interior climate (vapour permeable)
- Highly alkaline, and acts as a preventative measure against health hazards posed by the formation of mould and mildew
- Contaminant reduction effect for VOC's, formaldehyde and Nitrogen oxide
- Water-resistant
- Grain size 0.6 mm
- Colour shade red-brown



Field of application

Basecoat and finishing coat preferably in interiors. In conjunction with Rotkalk Filz or Rotkalk Struktur it is particularly suited when high level of physical building requirements are placed on the room hygiene, room air and quality of living.

- As a mineral bonding plaster primer for Rotkalk Grund in interiors
- As a basecoat for use in interiors
- As a finishing coat for sponged or freely structured surfaces in interiors
- As a thin-layer plaster on precision block masonry, concrete walls and ceilings in interiors
- As a basecoat for soft wood fibre board in interiors
- As a basecoat for Rotkalk in-Board 045

Ideal for the preservation of historical monuments if historically relevant lime plasters are required.

Application

Substrate and pretreatment (interiors)

Substrate	Pretreatment
Aerated concrete	Apply in two coats fresh-in-fresh
Smooth concrete, prefabricated concrete units	–
XPS-R insulation panels	–
Rough formwork concrete, lime sandstone with thin-bed mortar, small format wood wool slabs	–
Non-stable substrate	Suitable plaster base
Rotkalk in-Board	Suction block 1:3

Preparation

Check the substrate for compliance with VOB part C, DIN 18350, chapter 3.1 and/or according to VOB part B, DIN 1961 paragraph 4 section 3. Clean the substrate of dust and loose parts and remove ensuring that the surface is smooth. Cover easily-soiled building components before commencement in accordance with Code of Practice "Abklebe- und Abdekarbeiten für Maler- und Stuckateurarbeiten - *Masking and covering for painting and stucco work*" (German only) issued by the Bundesverband Ausbau und Fassade.

Preparation of the substrate in accordance with the table "Substrate and pretreatment". 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.

Machines / equipment

PFT mixing pump G 4

- Stator D6-3
- Rotor D6-3
- Mortar hoses Ø 25 mm
- Pumping distance 30 m

Mixing

Mixing by hand

Mix the content of one bag with approx. 6.6 litres of clean water without further additions until an application-ready lump-free consistence is achieved. When mixing, use clean water and do not add other additives.

Mixing by machine

For machine application using mixing pumps, e.g. PFT G4, set the desired consistence by adding water.

Application

As a bonding plaster primer for Rotkalk Grund in interiors

- 2 Rotkalk Fein with a thickness of about 5 mm. Spread the mortar using a

widely notched trowel and roughen the surface. Allow to dry for at least 3 days.

As a thin-layer plaster on precision block masonry and concrete walls and ceilings in interiors

Apply Rotkalk Fein plaster to existing flaws and voids and allow to dry and harden. Apply Rotkalk Fein with an average plaster thickness of 5 to 10 mm and embed reinforcement mesh 4x4 or 5x5 mm near the surface if required. Rule the Rotkalk Fein smooth and scrape.

With concrete covers, press fill the joints with Der Haftputz, strike off level, and allow to dry and harden. Apply approx. 3 to 4 mm Rotkalk Fein as a scrape skimming. Then apply fresh-in-fresh to the required plaster thickness (maximum 10 mm) and embed a mesh strip over the cover joints overlapping the edges by 200 mm in the top third of the plaster layer.

As a basecoat for Rotkalk IN insulation system

Apply Gewebeeckwinkel mesh corner angles to all corners and edges. Apply Rotkalk Fein in the required layer thickness on pretreated Rotkalk in-Board 045 and even and strike off level. Embed Gewebeeckpfeil mesh corner arrows in the corner areas of all openings. Embed additional mesh strips/lintel corner strips in the interior corners of lintels/reveals. Subsequently embed reinforcement mesh 4x4 or 5x5 mm without wrinkles, near the surface in the upper third near the surface with a 10 cm joint overlap. The reinforcement mesh should be fully covered with Rotkalk Fein.

As a finishing coat for sponged or freely structured surface

On the solidified Rotkalk Fein, apply approx. 2 to 3 mm of Rotkalk Fein on the following day and sponge finish. For a sophisticated sponge finished structure, apply Rotkalk Fein in 2-times grain thickness, allow to dry and then apply again in a slightly thinner consistence and sponge finish. For a free style texture apply about 3 to 4 mm and structure as required. All mineral plasters sponge finished with water will not dry with a uniform colour shade. To ensure a homogeneous colour shade, you should additionally apply Rotkalk Farbe E.L.F. paint that is optimally matched to the Rotkalk system in interiors.

Plaster thickness

Apply a maximum thickness of 10 mm of Rotkalk Fein. Use Rotkalk Grund for greater plaster thicknesses.

Reinforcement

For interior plasters, with a change of material in the background, with insulation panels and multi-layer wood wool slabs etc. applied over small areas, apply reinforcement mesh 4x4 or 5x5 mm in the upper third of the plaster layer with at least 100 mm joint overlay and 200 mm overlap on all sides to the flanking component or apply an additional full-surface mesh reinforcement (reinforcing mesh 4x4 or 5x5 mm) with Rotkalk Fein. Embed diagonal reinforcement at corners, on building openings, etc.

For final coating with Rotkalk Glätte finish, in the Rotkalk Fein applied as a basecoat a full surface embedded layer of reinforcement mesh 4x4 oder 5x5 mm should be applied just below the surface.

Application temperature / climate

Do not apply material at air and/or substrate temperatures below +5 °C and above +30 °C. Protect fresh mortar from frost and rapid drying.

Drying time

Before working area further, allow to dry and harden for at least 2 weeks.

Cleaning

Clean the machines and tools with water immediately after use.

Coatings and linings

Finishing plasters

In interior areas

On the solidified Rotkalk Fein as basecoat, apply approx. 2 to 3 mm of Rotkalk Fein on the following day and sponge finish. After a drying time of at least 2 weeks and after successful installation of the screed, it is possible to apply the optimally suitable finishing coats such as Rotkalk Filz 05, Rotkalk Filz 1, Rotkalk Filz 2 or Rotkalk Struktur 1.5 on the Rotkalk Fein without a primer coat.

When applying smoothed surfaces, after the application of Rotkalk Fein the first layer of Rotkalk Glätte can be applied on the following day. After successful application of screed, the further necessary smoothing steps are applied with Rotkalk Finish.

Paints

Basecoats must be fully hardened and dry before the paints are applied.

In interior areas

To ensure a homogeneous colour shade, you should additionally apply Rotkalk Farbe E.L.F. paint that is optimally matched to the Rotkalk system in interiors.

Notes

Renderers must be applied according to EN 13914-1, DIN 18550-1, and/or DIN 18550-2 and DIN 18350, VOB part C as well as the generally recognized building engineering rules and valid guidelines.

With previous application of gypsum plasters or plasters containing gypsum, it is essential that the plastering machine is thoroughly cleaned (wet zone, plaster spiral, rotor, dry zone, gear wheel, hoses; For dry material feed: transfer hood, supply hose, pressure vessel, injection hood, feed manifold).

With different application thicknesses as well as pronounced joints in the mortar, the substrate may shimmer through after sponging.

Due to sponge finishing with water as well as due to processing, consistency, weather-related or drying condition factors, it is possible that a uniform colour hue may not be achieved. These features, however, in no way impair quality and shall not provide any justification for claims in respect of the material as they stem from uncontrollable physical conditions at the site and they can be equalized by application of the necessary coat. Should the basecoat remain exposed during the winter, we recommend application of Grundol primer before the finishing plaster is applied in spring.

Heating in rooms should only be put into operation in stages. Rapid dehumidification, e.g. using dehumidifiers should be avoided.

If mastic asphalt screed is applied after plastering, sufficient transverse ventilation is required to avoid thermal stresses and Rotkalk Grund basecoat must be sprayed again with water on the following day.

Technical data

Description	Unit	Value	Standard
Reaction to fire	Category	A1	EN 13501-1
Graining	mm	0.6	–
Compressive strength	Category	CS I	EN 1015-11
Bond strength	N/mm ²	≥ 0.08	EN 1015-12
Failure pattern	–	A, B or C	
Water vapour permeability μ	–	≤ 10	EN 1015-19
Capillary water absorption	Category	W0	EN 1015-18
Thermal conductivity $\lambda_{10, \text{dry mat}}$ at P = 50 %	W/(m·K)	≤ 0.82	EN 1745
P = 90 %	W/(m·K)	≤ 0.89	

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

Material requirement and efficiency

Application	Coat thickness mm	Consumption approx. kg/m ²	Efficiency	
			m ² /bag	m ² /ton
Sponged finish (interior)	2.0 – 3.0	3.6	8.4	277.0
Thin plaster	5.0	7.2	4.2	140.0
Basecoat	10.0	14.3	2.1	70.0

The exact consumption can only be determined with a test application on the individual object.

Product range

Product designation	Application	Graining	Packaging unit	Material number	EAN
Rotkalk Fein	30 kg	0.6 mm	36 bags/pallet	00046397	4003950024634
	Bulk		Silo	00046398	4003950035937



The iPad App Knauf Infothek now provides all the current information and documents from Knauf Gips KG at any time and in every location in a clear and comfortable way.

[Knauf Infothek](#)

Knauf Direct
Technical Advisory Service:

▶ knauf-direkt@knauf.de

▶ www.knauf.de

Knauf Gips KG Am Bahnhof 7, 97346 Iphofen, Germany

All technical changes reserved. Only the current printed instructions are valid. The stated information represents current state-of-the-art Knauf technology. The entire state of approved engineering rules, appropriate standards, guidelines, and rules of craftsmanship are not included herewith. These and all application instructions have to be adhered to separately by the installer. Our warranty is expressly limited to our products in flawless condition. All application quantities and delivery amounts are based on empirical data that are not easily transferable to other deviating areas.

All rights reserved. All amendments, reprints and photocopies, including those of excerpts, require our expressed permission.