



BEECK Protect Fine

Removable, temporary protective coating for historical interior substrates

1. Product Properties

Highly water vapour permeable topcoat, white or tinted. For the protection of historical substrates, especially for wall paintings in the preservation of listed buildings. Suitable for lime plaster, natural stone, plaster stucco and old mineral or emulsion coating. BEECK Protect Fine is a reversible, i.e. removable, opaque coating for interior use. Can be removed again at any time, even after a lengthy dwell time, without the use of chemicals, solely with clean, hot water. With no substance-changing effect on the waterproof (!) substrate. Therefore ideal for temporary renovation of valuable historical wall paintings and decorative painting in consultation with the building conservation authority. Irrespective of its removability, BEECK Protect Fine creates absolutely wipe and abrasion-proof, mechanically durable coatings with a matt, mineral character. It is therefore also suitable for highly frequented public and representative buildings. As a brushed surface it achieves attractive and authentic finishes on historical lime plasters of listed buildings. This surface is capillary-active, highly water-wettable, free from any thermoplasticity and therefore attracts little dirt. Candle soot and similar dirt can generally be cleaned easily and cost effectively with a dry sponge.

1.1. Composition

- Re-emulsifiable, alkali-resistant binder combination made from modified sizes, synthetic and natural resins
- Opaquely pigmented with titanium dioxide and fine white chalks
- Calcitic extenders for typical lime look and feel
- Lightfast mineral pigments for tinted coatings
- Solvent free, paint film protection

1.2. Technical properties

1.2.1. Overview

- Use on interior surfaces
- Opaquely pigmented
- High yielding and intensely coloured
- Absolutely lightfast and colourfast in all shades
- Abrasion resistant and free from chalking
- Can be coated over as frequently as required using system materials
- Reversible in the interests of listed building conservation
- Capillary-active and non-vapour retarding
- Highly alkali-resistant
- Water thinnable
- Nonflammable

1.2.2. Important building physics characteristics*

Parameter	Value	Conformity
Density 20°C:	1.58 kg / L	
pH value 20°C:	9	
Dynamic viscosity 20°C:	approx. 4,000 mPas	
W ₂₄ value:	> 1.00 kg / (m ² h ^{1/2})	
s _d value (H ₂ O):	0.03 m	
Hiding power / Contrast ratio:	Class 1	EN 13300
Colourfastness**:	Class A1	BFS Information Sheet No. 26
Grain size:	fine	EN 13300
Gloss level at 85°:	dull matt	EN ISO 2813
Flammability class:	A2 nonflammable	EN 13501-1, DIN 4102
VOC content (max.):	12 g / L	ChemVOCFarbV Cat. A / a

* applicable to White | ** applicable to tinted

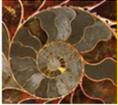
1.2.3. Colour

- White and Off-White and ready-mixed in the 200 mixed colours of the BEECK Mineral Paint Colour Chart.
- Colour groups: I – IV
- Tintable and full colour coatings with BEECK Protect Full Colour Paint; can be mixed with White as required.

2. Use

2.1. Substrate requirements

- In the case of historical buildings, consult the site engineers and the building conservation authority. Treat substrates carefully; preliminary restoration investigations and documentation are indispensable.



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- The substrate must be clean, dry, firm and stable and must be free from efflorescent (e.g. salts, aniline dyes, lignin) and separating substances. Apply renovation plaster to substrates with moisture damage and salt contamination.
- Check drying and strength of new plaster.
- Carefully make good chipped surfaces and misses with the same type of material and the same texture.
- Ensure uniform substrates and careful application on high visual quality surfaces.

2.2. Brief information on the standard system

- Apply two coats of BEECK Protect Fine.
- Add water to optimally adjust BEECK Protect Fine to the substrate and use.
- Prime and consolidate highly absorbent and somewhat crumbling substrates with BEECK Protect Primer.
- Use plaster to repair cracked substrates. Areas of plaster with hairline cracks and minor structural defects: coat the whole surface with BEECK Protect Coarse. Try out on a test area.
- For improved removability of full colour and tinted coatings, use preferably BEECK Protect, Fine or Coarse, in White as a primer.

2.3. Substrate and preparatory treatment

- **(Air) lime plaster (PI, CSI/CSII), lime-cement plaster (PII), cement plaster (PIII):**
Check drying and strength of plaster. Use BEECK Etching Fluid to remove sinter skin on solid plaster, or grind off. Do not etch thin coat plasters and composite material. Prime absorbent or weakly sanding plaster with BEECK Protect Primer. Try out first on test area of lime-air plaster.
- **Gypsum plaster, plaster stucco:**
Apply primer coat with BEECK Protect Primer. Grind off any sinter skin beforehand.
- **Gypsum boards:**
Ensure proper installation and required surface quality and evenness tolerances under the given on site and glancing light conditions (VOB/C and quality level 3 or 4, according to good practice guide No. 2 issued by the German gypsum industry association (Bundesverband der Gipsindustrie e.V.)). Apply primer coat to whole surface with BEECK Protect Primer. If using full colour coatings it is advisable to cover substrate with a fabric or non-woven wall covering.
- **Natural stone, concrete, calcium silicate masonry, brick, wood:**
Test for absorbency, moisture damage and efflorescence (salt edges!). Clean, make good crumbling joints. Coat highly absorbent surfaces with BEECK Protect Primer. Thoroughly clean concrete with water and BEECK Formwork Oil Remover according to the factory specifications and rinse off with clean water. Test the wettability of the cleaned substrate by spraying on water. Always try out on a test area of critical substrates such as old wooden beams, half timbering or panelling. Precoat, as required, with BEECK Wood Primer, BEECK Bonding Coat Fine (irreversible!) or BEECK Protect Primer. Prefer a coloration similar to substrate to reduce undesirable discolourations and stains.
- **Clay or loam:**
Clay or loam must be through-dry, firm and stable. Repair cracks with plaster beforehand, brush off any sanding grain. Prewetten and prime with BEECK Protect Primer, thinned with water. Then 2 – 3 extremely thin layered, thinned coats with BEECK Protect Fine, with at least 24 hours drying time between each. Always try out on a test area first before using on clay or loam!
- **Firm mineral coatings:**
Brush down lime and silicate coatings, if chalking and highly absorbent, consolidate with BEECK Protect Primer. Rinse off distemper and tempera paint, note and follow listed building conservation specifications! Emulsion coatings: clean and try out on a test area. Remove oil paint, lacquer and latex coatings or renovate in proper style by using BEECK stand oil paints.
- **Unsuitable substrates** are efflorescent, organic and damp substrates, e.g. plastics, metals and areas with hygroscopic or rising damp. Pretest when using on loam, clay or wood.
- **Defective substrates** require a differentiated approach. Apply renovation plaster to damp, salt contaminated areas, basement walls and base areas.

2.4. Application instructions

2.4.1. General information

Check substrate suitability as required (see 2.1 and 2.3). Pay particular attention to the absorbency, strength and texture of the respective substrate. Try out on a test area before using on high quality and critical surfaces. Ensure that the product is used by qualified persons only.

- Note and follow the listed building conservation specifications for historically valuable building materials.
- Carefully cover surfaces which are not to be treated – especially glass, ceramics, window sills, expansion joints, lacquer and anodic coatings – and protect them from splashes.
- Provide personal protective equipment.
- Only use material from the same production batch if applying tinted coats and on self-contained areas.



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- Stir BEECK Protect Fine thoroughly with a powered mixing paddle before use.
- Add water to make optimally coatable.
- Do not use on hot surfaces.
- Minimum application temperature: +8°C
- Drying time: at least 12 hours per coat
- **Removability:** Wetten BEECK Protect Fine with hand-hot water, leave it to take effect for a few minutes and then wash off with a sponge and brush. Rinse with clean water. A primer coat with BEECK Protect, Fine or Coarse, in White is recommended to ensure pore-deep removability of full colour and tinted coatings.

2.4.2. Application

With roller, brush or using an airless spraying method. Apply on self-contained areas in one pass, with an absolutely thin coating, free from overlapping and uniformly by cross coating.

- **Application preferably with a brush:**
 - Avoid roller edge marks, ridges and joins.
 - Cut-in edges smoothly and seamlessly, wet-on-wet, together with the main area.
 - As a brushed surface, spread in no particular direction with BEECK Mineral Paint Brush. Produces an authentic surface finish suitable for listed buildings.
 - Coats:
 - Primer coat: thin product with approx. 5 % – 10 % water to make it optimally coatable.
 - Topcoat: After at least 12 hours, unthinned or made coatable with approx. 5 % water.
- **Spraying method (airless):**
 - Nozzle: 0.79 mm / 0.031 inch
 - Always sieve the product before use.
 - Apply uniformly and as a thin coat, then use a brush to lay-off.

3. Application Rate and Container Sizes

The application rate, i.e. the quantity required for smooth, normally absorbent substrates is approx. 0.14 L BEECK Protect Fine per m² and pass. Try out on a test area on site to determine substrate-related application rate differences.

Container sizes: 5 L / 12.5 L

4. Cleaning

Thoroughly clean equipment, tools and soiled clothing with water immediately after use.

5. Storage

Stored cool and frost-free, BEECK Protect Fine can be kept for at least 12 months. Use up opened containers as soon as possible.

6. Hazard notes, safety instructions and disposal

Comply with the EC Safety Data Sheet. Safety data sheet available on request.

Precautionary statements: Keep out of reach of children. Do not get in eyes, on skin, or on clothing. Wear protective gloves. May cause sensitisation of susceptible persons. May produce an allergic reaction. Do not breathe vapours, spray-mist and dust. Carefully protect the area surrounding the surface to be coated, wash off splashes immediately with water. Disposal in accordance with the official regulations.

Waste disposal number: 080112

7. Declaration

This technical information is offered as advice based on our knowledge and practical experience. All information is provided without guarantee. It does not release the user from their responsibility to check the product suitability and application for the specific substrate on which it is to be used. Subject to change without notice as part of our product development. Non-system additives for tinting, thinning, etc. are not permitted. Check the colours before use. This information sheet automatically becomes invalid when a new edition is issued. The information in the current version of the EC Safety Data Sheets is binding for classification according to the Hazards identifications, disposal considerations, etc.