

# BEECK Protect Full Colour Paint

For tinting BEECK Protect Fine and as a reversible full colour paint in listed building conservation

## 1. Product Properties

Purely mineral pigmented full colour interior paints in the BEECK Protect system. For individual shading on the building site and for full colour coatings, decorative painting and trompe l'oeil, especially for wall paintings and decorative painting in listed buildings. Can be painted over with other products in the system and nevertheless can be gently removed with water at any time from waterproof (!) historical, white primed substrates. There is no substance changing effect on the waterproof substrate. BEECK Protect Full Colour Paint achieves a capillary-active, highly water-wettable surface, free from thermoplasticity and therefore attracts little dirt.

### 1.1. Composition

- Re-emulsifiable, alkali-resistant binder combination made from modified sizes, synthetic and natural resins
- Mineral pigments: lightfast and alkali resistant
- Calcitic extenders for typical lime look and feel
- Solvent free, paint film protection

### 1.2. Technical properties

#### 1.2.1. Overview

- Use on interior surfaces
- Opaquely full-colour 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

#### 1.2.2. Important building physics characteristics\*

Parameter	Value	Conformity
Density 20°C:	1.41 – 1.67 kg / L	
pH value 20°C:	9	
Dynamic viscosity 20°C:	approx. 5,000 mPas	
W <sub>24</sub> value:	> 1.00 kg / (m <sup>2</sup> h <sup>1/2</sup> )	
s <sub>d</sub> value (H <sub>2</sub> O):	0.03 m	
Colourfastness:	Class A1	BFS Information Sheet No. 26
Contrast ratio / hiding power:	Class 1-2	EN 13300
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

\* Values depend on colour

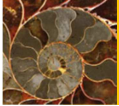
#### 1.2.3. Colour

- 11 full colours of the BEECK Mineral Paint Colour Chart:  
Black, Umber, Ochre Yellow, Maize Yellow, Lemon Yellow, Green, Cobalt Blue, Ultra Blue, Wine Red, Oxide Red, Brown.
- Can be mixed with each other as required and with BEECK Protect Fine, White.

## 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.
- 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.



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## 2.2. Brief information on the standard system for full colour coatings and full colour painting and decorating

- Apply two coats of BEECK Protect Full Colour Paint.
- Add water to optimally adjust BEECK Protect Full Colour Paint 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.
- A primer coat with for improved removability of full colour and tinted coatings, preferably with BEECK Protect White, Fine or Coarse.

## 2.3. Substrate and preparatory treatment

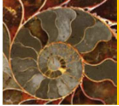
- **(Air) lime plaster (PI, CSI/CSII), lime-cement plaster (PII), cement plaster (PIII):**  
Check drying and strength of plaster. Use BEECK Etching Fluid to remove sinter skin on solid plaster or render, or grind off. Do not etch thin coat plasters or renders and composite material. Prime absorbent 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 Full Colour Paint, 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, 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 containers from the same production batch to coat self-contained areas.
- Ensure an even substrate, a sufficient number of qualified workers and a smooth, uninterrupted coating process for tinted and full coloured coats.
- Stir BEECK Protect Full Colour Paint uniformly with a powered mixing paddle before use.
- Add water to make optimally coatable.
- Do not use on hot surfaces.
- Minimum application temperature: +8°C



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- Drying time: at least 12 hours per pass.
- **Removability:** Wetten BEECK Protect Full Colour Paint with hand-hot water, leave it to take effect for a few minutes and then rinse 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. Use as full colour paint

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, use a BEECK Mineral Paint Brush to spread without brushing in any particular direction.
  - Coats:
    - Primer coat:* thin product with approx. 5 % to 10 % water.
    - Topcoat:* After at least 12 hours, unthinned or made optimally 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.

## 2.4.3. Use as tinting paint

- Use BEECK Protect Full Colour Paint solely to tint BEECK Protect, never use for lime or silicate paints.
- Before use, stir full colour paint and white paint thoroughly with powered mixing paddle.
- Tint the total quantity in one batch, e.g. in a drum or bucket.
- Only use containers from the same production batch to coat self-contained areas.
- Try out mixed colour on test area before use and check it matches the colour specification.

## 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 Full Colour Paint per m<sup>2</sup> and pass. Try out on a test area on site to determine substrate-related application rate differences.

*Container sizes:* 0.75 L / 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 Full Colour Paint 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.