

Application

Beeckosil

Beeckosil External Mineral Paint System

Beeckosil is a ready to use, highly breathable exterior mineral based paint. Beeckosil is a silicification active (A.S.F) paint, which results in superb durability, as it offers a full chemical bond to the substrate. Beeckosil also contains a hydrophobic addition to shed water from the surface and can reduce water ingress by up to 90%, whilst still maintaining high vapour permeability. Beeckosil has been used extensively worldwide in both conservation and new build applications, comfortably achieving a 10 to 15-year (or longer) lifespan, even in the most testing conditions. Designed to be applied to bare, mineral backgrounds such as natural stone and lime render.

Beeckosil is available in a coarse base coat, a fine base coat and a fine top coat. Beeckosil is available in white, colour group 1, 2, 3 and 4 from the Beeck Colorsil swatch.

Area of use: Exterior use onto bare lime renders and mineral backgrounds.

Beeckosil is applied as a 4-stage system, with the various application methods listed below.

Any critical surfaces, such as glass, need to be protected prior to painting. As Beeck paints chemically bond you may not be able to remove them. We recommend covering anything that you do not intend to paint.

Preparation - For Bare Render or Mineral Surfaces

Stage 1 – Beeck Etching Fluid

Etching Fluid is an acid cleaner, which removes excess binder which may be present on the face of new render or to clean mineral surfaces. The etching process cleans the render and exposes available silica in the substrate, which ensures a stronger chemical bond between paint and substrate.

Etching Fluid is diluted at 1 part Etching Fluid to 4 parts water.

It is brushed on the surface, left to dwell for 20 minutes and then washed off.

Leave the surface for a minimum of 12 hours after washing before continuing the system. The substrate needs to be dry.

Stage 2 – Beeck Fixative

Fixative is pure potassium waterglass, and is the base component for all Beeck mineral paints. Potassium waterglass or Fixative is the reactive component within the paint that promotes the chemical bond with the substrate. As waterglass is highly alkaline it reacts with available silica in the substrate, resulting in an inseparable bond. Fixative can be used as a primer for mineral backgrounds,



stabiliser for friable mineral substrates and as a thinning solution for Beeck mineral paints.

For this application, Fixative is applied to the wall to stabilise, harden and prime the substrate.

Fixative is diluted at 1 part Fixative to 2 parts water and applied to the wall with a brush to ensure it is worked into the substrate.

Leave the surface for a minimum of 12 hours before continuing the system. The substrate needs to be dry.

Beeckosil Coarse and Fine Application onto Bare Render or Mineral Surface (Brick, Stone)

Beeckosil Coarse is designed as a textured base coat for filling hairline cracks and minor imperfections that may be present on the surface, followed by a top coat of Beeckosil Fine.

Stage 3 – Beeck Beeckosil Coarse (Base Coat)

The base coat has to be tinted to the same colour as the top coat.

Beeckosil Coarse is a highly breathable, hard wearing, silicification active ready to use exterior silicate paint. Designed to be applied to mineral backgrounds such as natural stone and lime render. Beeckosil Coarse contains a fine marble dust, which has the ability to hide surface imperfections such as hairline cracks.

Beeckosil Coarse is only suitable for a base coat of paint and has to be finished with Beeckosil Fine.

As Beeckosil Coarse is absorbed into the surface and forms a chemical bond, the application demands more care and attention than conventional paints or lime wash. It is important that when applying mineral paints a wet edge is maintained during the application and any cutting in is carried out as you move across each section, as much as reasonably possible. If the application is across a large area, work to the natural breaks within the building or define break lines so a wet edge can be maintained. The principal reason for maintaining a wet edge is that the paint binds to the surface and pigments align together. If a wet on wet application is not maintained, the overlapping of the paint will be highlighted. A wet



edge is advised for most paint applications, conventional or mineral based, and is good practice.

Beeckosil Coarse needs to be thinned with 20% undiluted Fixative, stirred well and then applied.

Beeckosil Coarse can be applied with either a brush or roller. As it contains a marble dust, it may be easier to apply with a brush.

With the application of external mineral paints, weather is critical. Beeckosil requires a minimum drying time of 8 hours before it can take any rain.

Leave the surface for a minimum of 12 hours before continuing the system. The substrate needs to be dry.



Stage 4 – Beeck Beeckosil Fine (Top Coat)

The top coat has to be tinted to the same colour as the base coat.

Beeckosil Fine needs to be applied with the same care as the Beeckosil Coarse, maintaining a wet edge.

Beeckosil Fine can be brushed, rolled or spray applied. Please refer to the technical data sheet for sprayer requirements.

As a top coat, Beeckosil Fine can be thinned with a maximum of 5% undiluted Fixative, although we do recommend that is applied as a neat paint.

With the application of external mineral paints, weather is critical. Beeckosil requires a minimum drying time of 8 hours before it can take any rain.

Leave the surface for a minimum of 12 hours before continuing the system. The substrate needs to be dry.

Beeckosil Fine Application onto Bare Render or Mineral Surface (Brick, Stone)

Beeckosil Fine is suitable to use as a base coat and top coat on substrates that are free from imperfections such as hairline cracks.

Stage 3 – Beeck Beeckosil Fine (Base Coat)

The base coat has to be tinted to the same colour as the top coat.

Beeckosil Fine is a highly breathable, hard wearing, silicification active ready to use exterior silicate paint. Designed to be applied to mineral backgrounds such as natural stone and lime render.

As Beeckosil Fine is absorbed into the surface and forms a chemical bond, the application demands more care and attention than conventional paints or lime wash. It is important that when applying mineral paints a wet edge is maintained during the application and any cutting in is carried out as you move



across each section, as much as reasonably possible. If the application is across a large area, work to the natural breaks within the building or define break lines so a wet edge can be maintained. The principal reason for maintaining a wet edge is that the paint binds to the surface and pigments align together. If a wet on wet application is not maintained, the overlapping of the paint will be highlighted. A wet edge is advised for most paint applications, conventional or mineral based, and is good practice.

Beeckosil Fine needs to be thinned with 20% undiluted Fixative, stirred well and then applied.

Beeckosil Fine can be brushed, rolled or spray applied. Please refer to the technical data sheet

for sprayer requirements.

With the application of external mineral paints, weather is critical. Beeckosil requires a minimum drying time of 8 hours before it can take any rain.

Leave the surface for a minimum of 12 hours before continuing the system. The substrate needs to be dry.

Stage 4 – Beeck Beeckosil Fine (Top Coat)

The top coat has to be tinted to the same colour as the base coat.

Beeckosil Fine as a top coat needs to be applied with the same care as the Beeckosil Fine base coat, maintaining a wet edge.

Beeckosil Fine can be brushed, rolled or spray applied. Please refer to the technical data sheet for sprayer requirements.

As a top coat, Beeckosil Fine can be thinned with a maximum of 5% undiluted Fixative, although we do recommend that is applied as a neat paint.



With the application of external mineral paints, weather is critical. Beeckosil requires a minimum drying time of 8 hours before it can take any rain.

Leave the surface for a minimum of 12 hours before continuing the system. The substrate needs to be dry.



Beeckosil Redecoration

The Beeckosil mineral paint system has a proven longevity in even the most adverse conditions, with applications in the UK exceeding 15 years. However, like all paint, over time it may require a fresh coat to maintain performance and appearance.

As the paint is chemically bound to the substrate, Beeckosil can be recoated with ease.

Surface Preparation

Firstly, the surface needs to be cleaned with a fungicide/biocide to ensure no contaminates are present.

Any loose material to brushed down.

Beeckosil Fine Top Coat

Beeckosil Fine is to be used.

Thin Beeckosil Fine with 5% undiluted Fixative and apply with the same care as the above applications.

Beeckosil Fine can be brushed, rolled or spray applied. Please refer to the technical data sheet for sprayer requirements.

With the application of external mineral paints, weather is critical. Beeckosil requires a minimum drying time of 8 hours before it can take any rain.

Leave the surface for a minimum of 12 hours before continuing the system. The substrate needs to be dry.



The information given in this document is for guidance purposes only and is not intended to be a specification.