

Document type

Technical Data Sheet

Name	CALCITE
Description	Natural, lime-based material for decorative finishes on interior and exterior wall surfaces. Naturally anti-mould and breathable. The final finish alternates textured and smooth areas and has pleasant chiaroscuro effects.
Composition	Aged, slaked lime and selected marble powders
Grain size	1 mm
Appearance	Paste
Colour	White, it can be tinted in any colour with lime-compatible colourants
Packaging	24 kg net polyethylene containers
Application	By hand, with a steel trowel
Type of Surface	Interior and exterior walls <u>New Wall Surface</u> Plaster: no priming necessary Gypsum / Plasterboard / Medium Density: one coat of QUARTZ PRIMER <u>Old Wall Surface</u> Plaster: one coat of QUARTZ PRIMER Fast drying / Limewash: brush down and apply one coat of QUARTZ PRIMER Polished Lime: Abrade, brush down and apply one coat of QUARTZ PRIMER Washable Paint: one coat of QUARTZ PRIMER
Dilution	Ready to use
Consumption	3.8 kg after two coats
Drying	4 hours at 20°C / 68°F to the touch 48 hours at 20°C / 68°F below the surface 180 days stable
Application temperatures	min 5 max 25°C – R.U. < 85% ca
Coat Thickness	1.8 – 2.3 mm for a total of 2 coats
VOC Classification	EU Directive 2004/42/CE: EU limit value for this product (cat A/I – water-based decorative effect coating): 200 g/l (2010). This product contains less than 1 g/l of VOC.
Specific Weight	1.4 ± 0.2 (kg/l)
pH after 30 days	12.5 ± 0.50
Vapour Permeability	SD ~ 0,04 m (DIN 52 615)
Flammability	European Class of Reaction to Fire A1: non-combustible, no contribution to fire
Mould Resistance	ASTM D 3274 – “Standard Test Method to evaluate the degree of surface disfigurement of paint by microbial, fungal and algae growth. Result: Front Panel 10/10/10 Back Panel 10/10/10 = no growth
Scrub Test Resistance	ASTM D 2486-06 method A = was used: scrubbing fine sand + metallic brush for 10,000 cycles

Impact Test	UNI EN ISO 6272-2-2006. 1 kg doming punch was dropped from different heights and only at the height of 8 cm., it left a 5.5 mm. dent in the surface and a tiny crack appeared around its circumference.
Pencil Hardness	ASTM D3363- Pencil hardness 5H
Shore Hardness	Norm ASTM 2240 average
Adhesion	Norm UNI EN 13892-8 2004 average value = 2,0
Shelf life	36 months when stored according to the recommended guidelines
Storage	In original sealed packaging between 5° - 35°C in a dry, dark environment
Safety Norms	Irritating. / Risk of serious damage to eyes. / Irritating to the skin. / Keep out of children. / Avoid contact with eyes. / In case of contact with eyes, clean immediately with water without rubbing them, and consult a doctor. / Wear suitable gloves and eyes / face protection. / In case of ingestion of the products, consult immediately a doctor showing him the can or the label of the product. Danger labelling under directives 67/548/EEC and 1999/45/EC and following amendments and adjustments. The product must be transported, used and stored according to current standards of hygiene and safety.
Disposal	Product must be disposed of according to norms and regulations in force. Containers must be sent for recycling. Follow directions on the packaging
Application Instructions	<p>WARNINGS</p> <p>Water on the surface of the material in the bucket is normal and should be removed before use or addition of colourants. All lime-based products lose their viscosity when mixed and need a period of 6/12 hours after mixing to regain their density. This product is dense, and ready for use; thus it may be necessary to use an appropriate drill attachment to stir for a few minutes to reduce viscosity. Choose the colour and add the toner additive to the container and continue mixing until a homogeneous shade is obtained. Let the product rest for about 5 hours before you begin to use it.</p> <p>We recommend using materials from the same production batch for the same project. If you must use different batches, we suggest mixing their material together to avoid any slight variations in shading.</p> <p>To ensure proper usage, dilution, and application of the products mentioned in these pages, please consult the corresponding technical data sheets.</p> <p>When preparing the surface and applying the materials, we advise using appropriate tools and personal protective equipment (PPE).</p> <p>During application and for the following 72 hours, protect the surfaces from sudden temperature change, direct sun light and water. Don't apply in temperatures below 8°C or above 35°. During application make sure that the work area isn't too damp to avoid problems with application times.</p> <p>Remember to have a strong light parallel to the wall and situated on only one of the two sides of the wall you are working on (usually on the same side as other sources of light such as windows). In this way the shadow of the trowel allows you to see the actual state of the finish. Every so often, during the second and third coat, the light should be moved so that the wall doesn't dry out too much in one spot from the heat of the lamp.</p>

APPLICATION

Protection of the work area: Masking tape and protective material over the baseboards and around windows and doors. CALCITE can be applied on rough and smooth plasters, irrespective of them being new or old. Existing paints need a good brushing to remove surface dust and any inconsistent parts or chipping. Where necessary, apply a layer of QUARTZ PRIMER or UNIVERSAL PRIMER with a brush or roller, diluted with water according to the instructions.

The application must be carried out with a steel trowel in two coats. The possible presence of water on the surface is to be considered normal. Remove it completely before use or colouring. All lime-based products, once agitated, lose their viscosity, and require a rest period of about 6 hours after mixing to return to their density.

Coverage

One bucket of Calcite covers 6.2 sqm with two coats.

We recommend splitting this into approximately:

- **First coat:** 2 kg/m²
- **Second coat:** 1.8 kg/m²

Preparation of Buckets

Before application:

- Open the buckets and remove any excess water on the surface.
- Check whether it is necessary to remove all the water completely — especially in warm conditions — to achieve a more workable product during application.
- Carefully inspect the inner rim of the bucket and remove any dry material deposits before mixing.

Mixing and colouring:

Mix vigorously to ensure an even distribution of the material. This process helps bring some of the material from the bottom to the surface and vice versa, as the surface material tends to be softer. If necessary, add the colourant during this stage.

Application of Calcite

Calcite is applied in two coats.

First coat:

- Suitable substrates: even surfaces such as lime–cement/sand-based plaster, gypsum, or plasterboard, preferably primed.
- Apply evenly with a **metal trowel**.
- Average consumption: **1.8–2 kg/m²**.
- Ensure even thickness and avoid overlaps at joints between adjacent areas.

Second coat: applied when the first coat is dry (about 24h later)

- **Outdoor application precautions:**

- Avoid applying on windy days (winds exceeding 18–20 km/h). Check wind direction beforehand and prioritise working on sheltered walls.
- Ensure no rain is expected within the next 24 hours.
- If walls are not protected by a roof overhang, protect the plaster until the first layer carbonates (approx. 4–5 days).

- **Indoor application precautions:**

- Lighting should be parallel to the wall and from a single direction.

- Apply with a **metal trowel**.

- Average consumption: **1.6-1.8 kg/m²**.

- After covering approx. 1–2 m², return over the surface with the trowel blade held almost flat (10–15° angle) to remove or reduce any lines that may have formed.

Finishing

After a hardening time of **2–8 minutes** (depending on climate conditions), work the surface with a **sponge trowel** to achieve an even finish.

Timing is critical:

- Too early: excessive movement of material.
- Too late: ridges of Calcite may be difficult to remove.

Apply even pressure across the surface to create areas that are smoother and rougher, adjusting pressure to achieve a uniform effect over the entire wall.

Avoid creating grooves at this stage, especially outdoors, as these can become very visible when sunlight is parallel to the wall.

Additional Notes

- In the presence of surface cracks, apply mesh tape along the crack before covering it with the first coat of Calcite.
- Spraying a little water can help with smoothing the wall using the sponge trowel, especially when working outdoors on windy/hot days.

EXTERIORS: For exterior applications there are some rules to respect and some precautions to take. We remind you that carbonation, i.e. the process that takes place through the absorption of atmospheric CO₂, is completed in a few hours on the surface but takes several days to take place in depth. It is therefore important that the application takes place in the certainty of the absence of heavy rains in the three following days. It is also not recommended to apply it on walls that do not have at least a small roof overhang. Penetrating rain could ruin the finish even after weeks as deep carbonation is completed after more than a month. Avoid windy days, especially at high temperatures, as well as the risk of frost in the 48 hours following application. In external applications in hot climate conditions, it is also recommended to protect the

wall from the sun with shade cloths applied to the scaffolding. Lime-based products must dry slowly to better fulfil their characteristics. The application should be continuous and without linear brakes in the wall.

Finish Protection

Interiors: A protective treatment is optional in most circumstances. It is however necessary in bathroom, kitchen, and splashback walls.

Exteriors: This finish, as all lime-based plasters, absorbs water during rainy weather, which results in a temporary "wet effect" on the surface. However, this plaster releases the absorbed water within a few hours, allowing the surface to dry without any damage nor alteration to the finish. While a final treatment is therefore optional, it is highly recommended in areas with high pollution levels or if you wish to avoid the temporary wet effect that can occur after rainfall.

INTERIORS / EXTERIORS: after about 72 hours at least 20°C., proceed with the application of the colourless protective impregnation HYDROCALCE, especially designed for the protection of external lime-based coatings. Its Installation is done by brush in two coats, with a consumption of about 100-130 g/sqm.

Maintenance

Little maintenance is needed, brush off dust occasionally.

Tools

SI TROWEL, SPONGE FLOAT COARSE, SCRAPERS
Clean with water immediately after use

Decorative complements (optional)

TERRACOTTA / SALT & PEPPER / MOTHER OF PEARL / MILLED MARBLE / MICA
/ GLITTER / EBANO POWDER / VELATURA

We have drawn up the material presented above to the best of our technical and experiential knowledge. Nevertheless, our suggestions and recommendations are not guaranteed. All responsibility for the obtained results lies solely with the method and conditions adopted for the application of the product. Such indications constitute valid support for verifying the product's suitability for the specific case. We reserve the right to make modifications to the present information without previous warning.