# CLAYCOAT

CLAY BASED COATING

LUNIK
COATING CULTURE

# TECHNICAL DATA SHEET

## Description

ClayCoat is a clay-based, single-component mineral render designed as a thin, continuous wall coating. It is characterised by its handcrafted aesthetic, smooth application and very high surface hardness. The formulation combines high percentage of clay (> 20%), quartz, lime and organic additives (<5%) (no cement in the formulation).
After mixing with water it delivers high mechanical performance, easy trowelability and excellent adhesion on almost all of substrates.

## Uses

- Highly decorative continuous finishes on interior walls and ceilings.
- Coatings on furniture and built-in elements.
- Refurbishment of existing ceramic wall coverings, provided that the tiles are sound and well bonded.
- Interior and exterior spaces, including areas such as kitchens, bathrooms and terraces, when used in combination with the appropriate Lunik sealing system.
- Wall coatings on cement-based substrates, both indoors and outdoors.
- Decorative finishes in residential and commercial projects, such as shops, offices, lobbies, showrooms, exhibition areas and living spaces.

## Technical Data

| | CLAYCOAT |
|---|---|
| Adhesion Strength | >1,5 N/mm² |
| Abrasion resistance | Class: AR 0,5 (max 50 µm) |
| Compressive Strength | >35 N/mm² |
| Flexural strength | ≥6 N/mm² (28 days) |

**Step by step**

**1. Substrate inspection and preparation**

Before applying CLAYCOAT (S or L), the substrate must be checked and prepared according to its condition.

Depending on the project, additional measures may be required, such as:

- consolidation primers on weak or dusty renders,
- fibreglass mesh on cracked or unstable areas,
- adhesion promoters on very smooth or low-porosity substrates,
- vapour barriers or specific systems where rising damp or moisture problems are present.

In all cases, the recommendations issued by Lunik's technical department take precedence.

As a general rule, the substrate must be:

- sound and stable,
- clean and free of dust, grease, release agents and contaminants,
- sufficiently flat and regular for a thin-coat system.

On regularised, dry surfaces with no active moisture issues, apply one continuous coat of PRIMER or PRIMERQUARTZ and allow it to dry completely before using CLAYCOAT.

**2. Choice of granulometry (ClayCoat L / ClayCoat S)**

CLAYCOAT is available in two grain sizes, which can be used separately or combined:

- ClayCoat L (large grain)
  - Ideal as a levelling and base coat,
  - Can also be used as a textured decorative finish where a more rustic or pronounced effect is desired.
- ClayCoat S (small grain)
  - Designed as a fine finishing coat,
  - Suitable for smooth, refined and highly decorative surfaces,
  - Recommended for polished or "marble effect" finishes.

**3. Mixing ratio**

Both ClayCoat S and ClayCoat L are mixed only with clean water.

To maintain the designed performance of the product, the following ratio must be respected to approx. 3 litres of water/10 kg of Claycoat (higher in S than L).

Any significant variation in the water dosage may affect consistency, strength and adhesion.

**4. Preparation of the mix**

- Pour the required amount of clean water into a suitable container.
- While mixing with a slow-speed mechanical mixer, gradually add the CLAYCOAT powder (S or L).
- Mix for at least 2–3 minutes until a smooth, homogeneous paste is obtained, free of lumps and dry pockets.
- Allow the mix to stand briefly and remix lightly before application if needed.

Do not add water once the product has started to stiffen.

**Step by step**

5. Application sequence
5.1 Base coat with ClayCoat L

- Apply a first coat of ClayCoat L on the primed, levelled substrate using a metal trowel.
- Adjust the thickness according to the required regularisation and texture (within the recommended total system thickness).
- Allow to dry, then lightly sand if necessary to remove trowel marks or irregularities.

This base coat creates a stable background and can already provide a decorative textured finish if ClayCoat L is also used as the top layer.

5.2 Finishing coat with ClayCoat L (textured look)
For more pronounced texture or a slightly rustic appearance:

- Apply a second coat of ClayCoat L, working the material with the trowel or chosen tool to build the desired relief and pattern.
- Once dry, minor imperfections may be corrected with a gentle sanding, taking care not to flatten the design excessively.

5.3 Finishing coat with ClayCoat S (smooth / refined finish)
Where a smoother, more elegant appearance is required:

- After the ClayCoat L base coat has dried and been lightly sanded, apply one or two thin coats of ClayCoat S.
- Work the material with the trowel to close the surface and create a fine, continuous skin.
- Allow each coat to dry and sand lightly between coats if a very smooth finish is required.

On substrates that are already very flat and regular, ClayCoat S can also be applied directly in one or two coats, following the same procedure.

**6. Finishing techniques**
Both granulometries can be used to achieve different decorative effects, although ClayCoat S is especially suitable for polished or marble-style finishes.

6.1 Typical finish

- Work the final coat (L or S) with the trowel until the desired level of movement and texture is obtained.
- The surface can be slightly misted with water to re-open the material and extend the working time if it begins to tighten too quickly.

6.2 Marble effect (mainly with ClayCoat S)
For a more dynamic, marble-like appearance:

- Apply a second coat of ClayCoat S while the previous coat is still slightly fresh (firm to the touch but not fully dry).
- Compress and polish the surface with the trowel, working in overlapping strokes to create a burnished, stone-like effect.

The coat produced using this technique is generally not sanded. Once fully dry, small defects can be corrected by very light sanding with 220–400 grit abrasive if required.

## Step by step

6.3 “Wet-on-dry” technique
For a more controlled and uniform pattern:

- Allow each coat (S or L) to dry for approximately 3 hours (depending on environmental conditions) before applying the next one.
- Lightly sand the dry surface with an orbital sander or 220-grit sandpaper to remove trowel marks and imperfections.
- Apply the next coat, repeating the process if a multi-layer effect is required.

7. Sealing and protection
Once the CLAYCOAT system (S, L or a combination of both) has hardened, the surface may be protected with a suitable sealing system.

- Sealing is normally carried out 24–48 hours after application, provided that the residual moisture content of the coating is below 5%, measured with appropriate equipment.
- A typical protection build-up consists of:
  - one coat of water-based primer compatible with mineral coatings,
  - followed by one or more coats of water-based or solvent-based varnish, selected according to the type of use (interior, wet rooms, countertops, etc.) and the desired sheen (matt, satin or gloss).

Always follow the application instructions and consumption rates indicated in the specific technical data sheets for Lunik primers and sealers.

## Special Precautions

In case of contact with eyes, rinse with plenty of water for 15 minutes. In case of contact with skin, wash with soap and water. Do not eat. In case of ingestion, do not induce vomiting and seek medical attention immediately. It is recommended to comply with the following measures:

· Good ventilation
· Protective glasses to avoid splashes
· Rubber gloves

## Cleaning and Storage

Tools must be cleaned with water immediately after use. Once the material has hardened, it can only be removed by mechanical means.

The product must be stored in its original closed container and protected from the elements at temperatures between 10°C and 30°C, in a dry and well-ventilated place, away from sources of heat and direct sunlight. The time of use is 1 year from its date of manufacture, properly preserved.



The indications and technical data that appear in this brochure are based on our current knowledge and on the most typical uses and applications of the product and are for guidance only, and may be subject to changes and modifications without prior notice. Depending on the commissioning conditions, in which we have no participation, the specific values may suffer certain variations, as well as normal differences in manufacturing tolerances, tests carried out, etc. For this reason, our guarantee is limited solely to the quality of the product supplied.