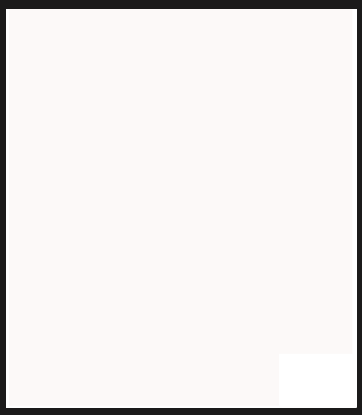
CEMHER



CONMARBLE

Earth, Lime & Clay
Plasters and Sustainable
Finishes

TECHNICAL DATA SHEET

CEMHER MICROTADELAKT
LIME BASE PLASTER

TECHNICAL DATA SHEET DOCUMENT NUMBER | 20250301

MICROTADELAKT - ONE COMPONENT LIME PLASTER

Microtadelakt® is a one-component lime-based mixed with marble Dust. It has been formulated to be applied as a low-thickness continuous coating on Ceilings and walls. It stands out for its handcrafted finish, its workability and its extreme hardness. It is applied by trowel in several coats allowing it to achieve a wide variety of effects such as tadelakt, Marmarino, or Polished Plaster Finishes. As part of an application system, the surface is prepared with Microtadelakt base followed by Microtadelakt Medium or Regular finishes.

Formulated with hydraulic binders, selected aggregates and lime, Microtadelakt must be mixed with water according to the proportions in this data sheet to guarantee the properties of the coating.

Once mixed, it allows the creation of a coating with a low thickness of 1 to 4 mm, with high mechanical resistance, very good workability and strong adhesion on any type of support: concrete, cementitious mortars, ceramics, MDF, plaster and plasterboard.

USES

Microtadelakt® is suitable for the realization of:

- Highly decorative continuous coatings for interior and exterior walls and ceilings.
- Coating of furniture, shelves, kitchen countertops, counters, etc.
- Coating of underfloor heating and fireplaces.
- Coating of old ceramic tile coverings.
- Applicable in interior and exterior rooms, as well as in kitchens, bathrooms and terraces.
- Decorative coating for stores, offices, lobbies, exhibition areas, homes, etc.

CHARACTERISTICS / BENEFITS

- Continuous seamless coating with a low thickness of 1 to 4 mm.
- Absorbs CO2
- Prevents Molds
- Regulates Moisture
- Excellent workability
- Wide range of colors and effects
- Matt, satin and gloss finishes
- High adhesion to the surface
- Handmade finish
- High hardness
- ECO-Freindly

METHOD OF USE AND APPLICATION

A. Surface preparation:

Before applying Microtadelakt®, it is necessary to prepare the surface according to the conditions of the surface. Certain applications require specific solutions: Compactec® consolidator for mortars in poor condition, fiberglass mesh, adhesion promoters Primer 100®, vapor barriers or Vapoepox® rising damp barriers. In any case, follow the recommendations of our technicians.

The application surface must be clean and free of grease and the base must be consolidated and in good condition of planimetry.

B. Mix:

Microtadelakt® is mixed with water and toners according to the selected color. To guarantee the properties of the coating, it is essential to respect the ratio between microtadelakt and water:

- 10kg of Microtadelakt® Fine - 4 liters of water.
- 10kg of Microtadelakt® Regular - 4 liters of water.
- 20kg of Microtadelakt® Medium - 6.5 liters of water.
- 20kg of Microtadelakt® Base - 5 liters of water.

C. Mortar preparation:

The mortar should be prepared in the following way:

1. Pour the water into a container, add the entire load of pigment corresponding to the amount of microtadelakt to be used and mix until a homogeneous colored liquid is obtained.
2. Pour the microtadelakt powder gradually while mixing the product with a mechanical mixer at low speed.
3. Mix for at least 2 minutes until a homogeneous, lump-free mixture is obtained.

D. Consumption:

The performance on a surface prepared with Microtadelakt® is the following

The better the leveling and preparation of the surface to be coated, the better the performance and the lower the cost of material and application time. It is convenient to choose the appropriate method for each application.

Microtadelakt® Fine	2m²/kg
Microtadelakt® Regular	1,7m²/kg
Microtadelakt® Medium	1,7m²/kg
Microtadelakt® Base	1m²/kg

E. Preparation coats:

Once the surface has been prepared and is in perfect condition, apply two coats of Microtadelakt® Base using a metal trowel. In floors apply fiber mesh before the first coat and then apply two coats of microtadelakt. Between coats, let dry the previous one for 4 hours and sand gently with a roto-orbital sander and 40-grit sandpaper, in order to remove imperfections.

F. Finish coats:

The application can be finished with a coat of Microtadelakt® Regular, Medium, Base depending on the desired aesthetic finish. Between coats, let the previous one dry for 4 hours and carry out a soft sanding with a roto-orbital sander and 40 or 80 grit sandpaper, in order to eliminate imperfections.

"Wet on wet marble effect" (Marmarino Finish-High Sheen)
Microtadelakt® can be worked using the "wet on wet" technique, applying the third coat as soon as the second coat stops having "tack" (when the freshly applied microtadelakt stops sticking to the fingers when you touch it) it should be pressed with the trowel to polish it and create that marble effect. The second coat of Microtadelakt® applied with this technique should not be sanded. Once the material is dry, sand gently with a roto-orbital sander or 220 and 400 grit sandpaper to remove imperfections (as soon as it has changed tone and is lighter in color).

"Wet on wet" (Polished Plaster Finish- Medium Sheen)
Microtadelakt® can be worked using the "wet on wet" technique, applying the next coat as soon as the first coat stops having "tack" (when the freshly applied microtadelakt stops sticking to the fingers when you touch it). This first coat of Microtadelakt®does not require sanding. If burrs or lumps remain, these should be eliminated with the spatula, removing the excess material. Apply the next coat working on extruded polystyrene boards. Once the material is dry, sand gently with a roto-orbital sander or 220 grit sandpaper to remove imperfections (as soon as it has changed tone and is lighter in color).

"Wet on dry". (Polished Stone Finish-Low Sheen)
Before applying a new coat, let the previous one dry (about 3 hours) and perform a gentle sanding with a roto-orbital sander or 220 grit sandpaper in order to remove imperfections.

G. Sealing:

Cemher® microcements must be sealed after they have hardened within 24 to 48 hours. The coating can be sealed when it has a humidity of less than 5 %, the measurement is carried out with instruments designed for this purpose. Cemher® microcements can be sealed with Hidroprimer® water-based primer and Aquamax® water-based or Maxipur® solvent-based varnish. We recommend carefully following the application advice in the technical data sheets.

PRODUCT POT-LIFE

The pot-life is 3 hours at about 20°C. We recommend mixing according to the applicator's experience.

GENERAL TECHNICAL DATA

Type:	One-component Microtadelakt-Lime Based plaster
Appearance:	White powder
Minimum temperature of application:	+ 10 °C
Workability (a 20 °C):	Approx. 120 minutes
Wheeled furniture:	Yes
Suitable for hot water/electric underfloor heating:	Yes/No
pH-range (After 1 day):	12 pH

MICROTADELAKT TECHNICAL SPECIFICATIONS

	STANDARD	RESULT
Determination of emissions into indoor air UNE EN 16516:2018	UNI EN ISO 16000-6:2019	A+
Thermal conductivity	UNI EN 12664:2002	λ=0,46 (W/mK)
Reaction to fire classification 1* UNE EN 13501-1:2019	UNI EN 13501-1:2019	Class A1 Class $A1_{FL}$
Determination of adhesion strength UNE EN 13813:2014	UNI EN 13892-8:2003	>4 N\mm² Class B 4,0
Impact resistance UNE EN 13813:2014	UNI EN 6272-2:2012	>18,5 Nm IR 18
Determination of the surface hardness 1* UNE EN 13813:2014	UNI EN 13892-6:2003	>200 N/mm² (SH 200)
Determination of compressive strength UNE EN 13813:2014	UNI EN 13892-2:2005	>40 N\mm² Class C40
Determination of abrasion resistance BCA 1* UNE EN 13813:2014	UNI EN 13892-4:2003	Class: AR 0,5 (max 50 µm)
Depth of water penetration under pressure 1* UNE EN 14891:2017	UNI EN 12390-8:2020	5 bars-3 days Direct pressure: No penetration Indirect pressure: No humidity

Determination of slip resistance Technical building code	UNE EN 12633:2003	Value (USRV): 41 Class 2
Permeability to liquid water UNE EN 1504:2005	UNE EN ISO 1062-3:2008	<0.1 Kg / (m^2*$h^{0,5}$)
Resistance to severe chemical attack UNE EN 1504:2005	UNI EN 13529:2005	Class: II No alteration and no reduction in hardness.
Determination of the transmission properties of water vapors UNE EN 1504:2005	UNE EN ISO 7783-2:2012	Clase: 1 Sd<5 m No alteration and no reduction in hardness.

1* = Without sealant

SPECIAL PRECAUTIONS

- Avoid contact with eyes and skin and avoid inhalation of dust.
- Use rubber gloves and protective glasses.
- Do not apply the product at room temperature below 10°C.

Low temperatures lengthen and high temperatures significantly reduce product shelf life and drying. Empty containers should be disposed of in accordance with current legislation. Keep out of the reach of children.

STORAGE CONDITIONS

The product should be stored in its original closed container and protected from the weather at temperatures between 10°C and 30°C, in a dry and well-ventilated place, away from heat sources and direct sunlight. The shelf life is 24 months from the date of manufacture if properly stored.

PACKAGING FORMAT

It is available in packages of:

- Microtadelakt® Fine - 10Kg.
- Microtadelakt® Regular - 10Kg.
- Microtadelakt® Medium - 20Kg.
- Microtadelakt® Base - 20Kg.

TOOL CLEANING

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