

# Biocalce® Tinteggio

**Certified, eco-friendly, natural wall paint based on selected pure CL 90-S lime putty compliant with EN 459-1 and natural coloured soils, for the highly breathable decoration of plaster/render coats, ideal for use in GreenBuilding and Historical Restoration. Contains raw materials of only natural origin. Provides natural ventilation to improve indoor air quality, natural bacteriostatic and fungistatic effect. Safeguards the health of both operators and the environment.**



Biocalce® Tinteggio, natural lime putty, is especially recommended for the decoration of domestic and restoration render coats to achieve high-end decorative finishes.



**GREENBUILDING RATING®**

**Biocalce® Tinteggio**  
 - Category: Inorganic Natural Semi-fluids  
 - Class: Natural, coloured breathable finishes - Lime range  
 - Rating\*: Bio 4

\* Rating based on average colour formulations

	Highly effective (5/5)		No development of bacteria or fungi	Non-toxic and non-hazardous	No environmental hazard rating

**PRODUCT STRENGTHS**

- Allows walls to breath
- Ideal for ensuring healthy interior living spaces for a greater psychophysical wellbeing
- Natural bacteriostatic and fungistatic classified B+ e F+ (CSTB method)
- Outdoors, it gives new facades a traditional, aged look
- Available in 61 colours to reflect the many shades of traditional lime paints

**NATURAL INGREDIENTS**

	Pure CL90 lime putty
	Natural earth powder pigments and coloured minerals

**AREAS OF USE**

**Use**  
 Natural lime putty for the decoration of civil and restoration plaster/render coats. Biocalce® Tinteggio is particularly well suited to achieve decorations of high aesthetic quality in Edilizia del Benessere® (Building for Wellness) in which the all-natural ingredients guarantee compliance with the required levels of breathability.  
 Biocalce® Tinteggio is suitable for decoration in Historical Restoration projects, where the choice of traditional materials such as natural lime, natural coloured earths and minerals, mixed in carefully-studied proportions, guarantees conservation interventions in full respect of the existing structures and original materials.

**Do not use**  
 On wet substrates (not cured); on substrates which are dirty, non-cohesive, powdery. On previous paint coats or lime putty coverings.

**INSTRUCTIONS FOR USE**

**Preparation of substrates**  
 The substrate must be cured, clean and solid, free from loose debris, dust and mould. Old plaster must adhere to the masonry structure and must be damage-free, dry, carefully cleaned to remove remaining traces of previous processes (lime putty coverings, old finishing coats, etc.) and suitably finished using products from the Biocalce® finishing line according to the level of finish and smoothness of the plaster.  
 Preparation of new or old substrates using products in the Biocalce® finishing line helps save time and colour product, guaranteeing a superior quality decorative layer.  
 Treat surfaces in advance with Biocalce® Fondo or Biocalce® Fondo Fino according to the support finish level 24 hours before applying Biocalce® Tinteggio. Particular care must be taken during the summer and when working in direct sunlight.

## INSTRUCTIONS FOR USE

Apply Biocalce® Fondo Universale before applying Biocalce® Tinteggio to indoor surfaces coated with gypsum, plasterboard or synthetic paints. In the case of plastered surfaces that have been repaired or patched, these must be allowed to cure for at least 30 days. To even up the absorption in old or inconsistent substrates use one or more coats of Biocalce® Fondo according to the absorption found.

### Preparation

Biocalce® Tinteggio can be applied both externally and internally in several coats according to the level of coverage and chromatic effect required.

Dilute the first coat of Biocalce® Tinteggio with clean water to a maximum ratio of 40% by volume. The second coat must be diluted to a maximum of 20%; this all depends on the porosity of the support and the level of preparation.

Under no circumstances must more water be added to the mix during application.

Always use the same dilution ratio in subsequent mixes.

### Application

Biocalce® Tinteggio can be applied with ease using a brush alone, taking care to apply the colour using crossed, irregular strokes.

The base must always be treated in advance with Biocalce® Fondo or Biocalce® Fondo Fino in order to allow proper curing of the lime and fixing of the coloured earths, it is not necessary to damp between applications of the product.

Biocalce® Tinteggio is pigmented exclusively with natural earths, so there may be slight differences in colour between one batch and the next and slight chromatic variations in the final result according to the level of absorption in the supports or variable atmospheric conditions during application

### Cleaning

Biocalce® Tinteggio is a natural product and tools can be cleaned using water before the product hardens.

## SPECIAL NOTES

Apply Biocalce® Tinteggio at temperatures from +8 °C to +30 °C and relative ambient humidity lower than 80%. In the event of strong wind, do not apply the product.

When the product is applied externally the scaffolding must be protected with suitable sheets to protect it from direct sunlight, wind and rain during the first 15 days.

Rain may result in carbonation and/or surface percolation, coating the original colour with a veil of white.

Particular care must be taken when carrying out decorations over full backgrounds. Avoid interruptions between scaffolding levels or on large continuous surfaces.

When applying internally it is recommended that the rooms be well aired for a few days after application, to promote hardening of the binder by carbonation.

## ABSTRACT

*In Edilizia del Benessere® (Building for Wellness) and Historic Restoration highly hygroscopic and breathable decorative layers are created on internal and external plaster using natural coloured earths and pure lime putty (such as Biocalce® Tinteggio), naturally ventilated to help dilute indoor pollutants, naturally bacteriostatic and fungistatic, GreenBuilding Rating® Bio 4.*

*Apply Biocalce® Tinteggio using brushes alone, after first treating the support with Biocalce® Fondo or Biocalce® Fondo Fino, making sure the product is carefully and evenly distributed. Applicare il prodotto in minimo due riprese o più in funzione del grado di copertura desiderata, su fondi precedentemente rasati con prodotti della linea di finiture Biocalce® Intonachino.*

*Coverage Biocalce® Tinteggio: ≈ 0.3 l/m<sup>2</sup> for two coats.*

## TECHNICAL DATA COMPLIANT WITH KERAKOLL QUALITY STANDARD

Appearance	Natural lime putty
Chemical nature of binder	CL 90-S calcium lime putty
Shelf life	≈ 12 months in the original packaging
Warning	Protect from frost, avoid direct exposure to sunlight and sources of heat
Pack	4 / 14 l buckets
Temperature range for application	from +8 °C to +30 °C
Waiting time between 1st and 2nd coat	≈ 12 hrs
Rain interval at +20 °C and RH ≤ 80%	at least 72 hrs
Dry to touch at +20 °C	≈ 4 hrs
pH on packaging	13,5 ± 0,5
Brookfield viscosity RVT6 RPM10	33.000 cp ± 500 cp
Volumetric mass (specific weight) at +20 °C	≈ 1,33 kg/l
Coverage per m <sup>2</sup> on support finished with Biocalce® Intonachino Fino	≈ 0.2 – 0.3 l/m <sup>2</sup> for two coats

*Values taken at +20 ± 2 °C, 65 ± 5% R.H. and no ventilation. Data may vary depending on specific conditions at the building site.*

## PERFORMANCE

### ACTIVE INDOOR AIR QUALITY (IAQ) - DILUTION OF INDOOR POLLUTANTS \*

	Flow	Dilution	
Toluene	278 µg m <sup>2</sup> /h	+27%	JRC method
Pinene	383 µg m <sup>2</sup> /h	+48%	JRC method
Formaldehyde	6244 µg m <sup>2</sup> /h	+38%	JRC method
Carbon dioxide (CO <sub>2</sub> )	584 mg m <sup>2</sup> /h	+62%	JRC method
Humidity (Humid Air)	71 mg m <sup>2</sup> /h	+3%	JRC method

### BIOACTIVE INDOOR AIR QUALITY (IAQ) - BACTERIOSTATIC ACTION \*\*

Enterococcus faecalis	Class B+ no proliferation	CSTB method
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### BIOACTIVE INDOOR AIR QUALITY (IAQ) - FUNGISTATIC ACTION \*\*

Penicillium brevicompactum	Class F+ no proliferation	CSTB method
Cladosporium sphaerospermum	Class F+ no proliferation	CSTB method
Aspergillus niger	Class F+ no proliferation	CSTB method

### HIGH-TECH

Coeff. for resistance to vapour circulation (µ)	µ = 10	DIN 52615
Equivalent air layer (for 2 coats)	s <sub>0</sub> = 0,0006 m	EN ISO 7783-2

Values taken at +20 ± 2 °C, 65 ± 5% R.H. and no ventilation. Data may vary depending on specific conditions at the building site.

\* Tests carried out according to JRC method - Joint Research Centre - European Commission, Ispra (Varese, Italy) - to measure the reduction of polluting substances in indoor environments (Indoortron Project). Flow and speed in proportion to a standard interior paint (0,2 mm).

\*\* Tests carried out according to CSTB method, bacterial and fungal contamination

## WARNING

### - Product for professional use

- abide by any standards and national regulations
- do not add water during application
- scaffolding must be screened with suitable sheets to protect from sun, wind and rain during application and during the curing phase (15 days)
- applying at temperatures below +8 °C with high atmospheric humidity, or failing to protect from rain in the first 15 days may result in carbonation and/or surface percolation which creates a white film over the original colour
- we recommend removing the material in a single action
- on large surface areas, gaps must be left around joints, drain pipes, corners and edging, or insert technical joints
- if necessary, ask for the safety data sheet
- for any other issues, contact the Kerakoll Worldwide Global Service +39 0536 811 516 - [globalservice@kerakoll.com](mailto:globalservice@kerakoll.com)

The Eco and Bio classifications refer to the GreenBuilding Rating® Manual 2013. This information was last updated in November 2013 (ref. GBR Data Report - 12.13); please note that additions and/or amendments may be made over time by KERAKOLL SpA, for the latest version, see [www.kerakoll.com](http://www.kerakoll.com). KERAKOLL SpA shall therefore be liable for the validity, accuracy and updating of information provided only when taken directly from its institutional website. The technical data sheet given here is based on our technical and practical knowledge. As it is not possible for us to directly check the conditions in your building yards and the execution of the work, this information represents general indications that do not bind Kerakoll in any way. Therefore, it is advisable to perform a preliminary test to verify the suitability of the product for your purposes.

Kerakoll  
Quality  
System

ISO 9001  
CERTIFIED

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