

# Biocalce® Silicato Consolidante

**Natural, eco-friendly, breathable, stabilizing cortical consolidant based on pure stabilized potassium silicate, solvent-free, ideal for use in GreenBuilding and Historical Restoration. Contains raw materials of only natural origin. Provides natural ventilation to improve indoor air quality. Safeguards the health of both operators and the environment.**



Biocalce® Silicato Consolidante is specifically intended for consolidating and evening out absorption of mineral substrates before applying decorative silicate cycles; also suitable for consolidating plasters and renders that are anchored to the underlying masonry, not covered with synthetic finishings. Naturally protected with pine oil in accordance with DIN 18363.



**GREENBUILDING RATING®**

**Biocalce® Silicato Consolidante**  
 - Category: Inorganic Natural Fluids  
 - Class: Natural, coloured breathable finishes - Pure silicate range  
 - Rating: Bio 4

	Highly effective (5/5)		Water-based formulation	Non-toxic and non-hazardous	No environmental hazard rating

**PRODUCT STRENGTHS**

- Naturally breathable, allows walls to breath
- Acts to promote silication
- Does not alter the finish of the surfaces
- Suitable for diluting Biocalce® Silicato Puro Pittura
- High smoothness, easy-to-apply

**NATURAL INGREDIENTS**

	Pure potassium silicate
	Pine oil

With less than 5% added organic emulsion, as required under DIN 18363

**AREAS OF USE**

**Use**  
 Biocalce® Silicato Consolidante is suitable to consolidate cured new lime or hydraulic cement-lime based plasters/renders, and old plasters/renders that are well anchored to the masonry substrate, not coated with synthetic finishes. Biocalce® Silicato Consolidante is suitable for diluting Biocalce® Silicato Puro Pittura.  
 Biocalce® Silicato Consolidante 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 and permeability to water vapour.  
 Biocalce® Silicato Consolidante is suitable for decoration in Historical Restoration projects, where the choice of traditional materials such as pure potassium silicate guarantees conservation interventions in full respect of the existing structures and original materials.

**INSTRUCTIONS FOR USE**

**Preparation of substrates**  
 The substrate must be clean using suitable equipment, to make it free from loose debris, dust and mould. New plaster patch layers must be left to cure.  
 On surfaces coated with paint or partially deteriorated decorative coatings, remove all partially deteriorated areas that are fragmenting or separating from the substrate.  
 Not suitable for surfaces subject to moisture rising.  
 Not suitable for gypsum-based surfaces and plasters.  
 The support must be dry at the time of application.

## INSTRUCTIONS FOR USE

### Preparation

Mix carefully before use. Biocalce® Silicato Consolidante is ready-to-use.

### Application

**Consolidation:** apply one or more coats using a brush, taking care to apply the consolidating agent in an irregular, criss-cross manner and avoiding drips. Apply a second coat after 12 hours.

**Dilution:** dilute the first and second coats of Biocalce® Silicato Puro Pittura with 20 – 30% Biocalce® Silicato Consolidante.

Apply Biocalce® Silicato Consolidante at temperatures from +8 °C to +30 °C and relative humidity lower than 80%. Protect from frost.

### Cleaning

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

## SPECIAL NOTES

When Biocalce® Silicato Consolidante fully hardens, apply the subsequent paint layer; but no later than 12 hours after the last finished application.

Given the purity of the Biocalce® Silicato Consolidante formula and its high alkalinity, adjacent surfaces must be protected during application. Contact with silicate products can damage urban furniture and glass, ceramic, natural stone, terracotta and metals. Any splashes of product must be removed immediately with clean water.

## ABSTRACT

*Biocalce® Silicato Consolidante is a cortical silication promoting consolidant based on pure, stabilised potassium silicate and pine oil, compliant with DIN 18363, with a high penetration capacity to consolidate the substrates prior to application of silicate-based decorative cycles. Biocalce® Silicato Consolidante is ready-to-use. Provides natural ventilation to improve indoor air quality, natural bacteriostatic and fungistatic effect, GreenBuilding Rating® Bio 3. Specifically intended for mineral substrates in Edilizia del Benessere® (Building for Wellness) and Historical Restoration of Environmental and Architectural Heritage buildings.*

*Biocalce® Silicato Consolidante coverage: ≈ 0.2 l/m<sup>2</sup> per single coat.*

## TECHNICAL DATA COMPLIANT WITH KERAKOLL QUALITY STANDARD

Appearance	neutral liquid
Shelf life	≈ 6 months in the original packaging
Warning	Protect from frost, avoid direct exposure to sunlight and sources of heat
Pack	5 and 10 l cans
Temperature range for application	from +8 °C to +30 °C
pH on packaging	≈ 12
R.H. limit value	≤ 80%
Density (specific weight)	≈ 1,1 kg/l
Dry 105	≈ 63%
Fully dry at 23 °C and 80% RH	72 hrs
Coverage	≈ 0.2 l/m <sup>2</sup> per single coat

*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	247 µg m <sup>2</sup> /h	+65%	JRC method
Pinene	297 µg m <sup>2</sup> /h	+107%	JRC method
Formaldehyde	4785 µg m <sup>2</sup> /h	+53%	JRC method
Carbon dioxide (CO <sub>2</sub> )	305 mg m <sup>2</sup> /h	+335%	JRC method
Humidity (Humid Air)	42 mg m <sup>2</sup> /h	+95%	JRC method

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

## WARNING

### - Product for professional use

- abide by any standards and national regulations
- use at temperatures between +8 °C and +30 °C
- make sure the substrate is not frozen
- do not apply in the event of strong wind, strong sunlight, rain or if there is a risk of frost in the following 24 hours
- protect from direct rainfall until the silication has completed (rain interval 72 hours at +23 °C and humidity lower than 80%)
- do not apply on dirty or loose surfaces
- 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 April 2014 (ref. GBR Data Report - 05.14); 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

**KERAKOLL**  
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