

I BIO CAM

Organic and highly breathable plaster for interiors and exteriors based on natural lime certified UNI EN 459-1:2015.

CAM certified according to UNI ISO 14021/SGS.

Certificate n° 21.20408-1 (CEMENT-FREE PRODUCT).



Product identification

I BIO is a highly biological, antibacterial and breathable base plaster.

The formula is designed with pure NHL lime certified to UNI EN 459-1:2015 standards, as well as river sand, marble dust and pozzolana powder.

The natural raw materials inside are the same as from the ancient historical plasters present in archaeological sites around the world which have demonstrated over the centuries that they can resist the degradation of time while maintaining the underlying walls in excellent condition.

The I-BIO plaster gives unrivaled living comfort as its great breathability captures and retains the right amount of humidity during daily needs, releasing it as soon as the temperatures rise or the rooms are ventilated, thus cyclically creating a natural phase of regulation and purification of the air thanks also to its antibacterial power derived from natural lime.

The percentages of NHL lime, pozzolana and natural sands also guarantee notable resistance to humidity, salts, mold and bacteria.

Pluses of the product

- ❖ Antibacterial;
- ❖ Cement-free product;
- ❖ Can be used in Eco&Bio compatible projects;
- ❖ Can be used in historical heritage conservation projects.

Main applications

- ❖ Replastering of new/old buildings, both indoors and outdoors where you want to achieve high breathability, good resistance to bacteria and high living and living comfort.
- ❖ Internal/external plasters in renovation or construction contexts in green building, increasing LEED scores in dedicated projects.
- ❖ Plaster on new/old walls and ceilings as long as they are free of non-solid or particularly damp and damaged parts.
- ❖ External and internal plasters in historical contexts where historical and cultural tradition is to be guaranteed.

PLEASE NOTE

Being based on natural NHL limestone, the product has setting and hardening times that are almost double that of cement plasters, therefore the finishing operations can vary from 1 to 15 days depending on the season.

Preparation of the support

- ❖ Before plastering any surface, carefully make sure to remove any inconsistent, crumbly parts, damaged masonry, loose bodies, wooden parts, glass, plastic, mould, lichens or any other situation that compromises the I BIO adhesion to the masonry.
- ❖ Suitably moisten the supports, according to the season, before plastering.
- ❖ In the event of damaged walls or punctures, intervene preventively by means of seams and seams, infills and any plaster and/or reinforcement nets of the type or similar REINFORCED series using I BIO as bedding mortar, after which, once completely hardened and based on the season, can proceed with plastering.
- ❖ In the case of mixed walls where materials of different types intersect or join together such as; concrete/brick, solid brick/hollow brick, tuff/brick, and it is always advisable to create expansion joints or previously install plaster and/or reinforcement nets of the REINFORCED type or similar series, with margins of at least 40/50 cm. beyond the affected area.
- ❖ In case of application on plastered walls it is always advisable to remove the old plaster by applying I-BIO directly on the wall surfaces.

How to use with plastering machines (recommended)

How to use with plastering and grouting machines (recommended choice)

The application of the mortar using plastering and grouting machines amplifies the yield per m² as well as a better homogeneity of the mixture.

If you use I BIO with plastering machines such as Pft G4/ Pft G5/ Maltech M5 and/or similar ones with lung and screw type or similar, start the plastering machine by increasing the water flow meter to high flow rate (about 400 l/h), then start the material loading wheel into the mixing chamber and gradually lower the water to obtain the firmest mortar possible.

This procedure is recommended especially when using new lungs or when starting the machine for the first time after stops.

If the machine remains unused for more than 40 minutes, it is always advisable to clean the pipes by emptying them. In summer, these times decrease considerably depending on the temperature. However, it is always a good idea to avoid exposing the pipes to the sun. as well as not using tube lengths longer than 15/20 ml.

An excessive dosage of water significantly reduces the mechanical characteristics.

How to use with concrete mixer and/or mixer drills at low speed

If you prepare I BIO in a concrete mixer or with mixer drills at low speed, it is advisable to pour in the clean water beforehand and then the powdered product gradually in order to obtain homogeneous mixtures free of lumps, making sure to remove any residues that do not mixed by the walls of the concrete mixer and/or the mixing container, when dosing the water do not exceed the recommended dosages, in order to avoid significant shrinkage and mechanical reductions, furthermore do not exceed the mixing times of the product (usually estimated in average 3/5 minutes in a concrete mixer and 1/2 minutes with a drill in a 20 liter bin) after having poured in both cases the total amount of product and the quantity of water.

Finishing solutions with smoothing

Depending on the needs and application context, I BIO can be finished with various high-quality solutions.

If you want to obtain a floated or smooth finish on the outside and/or inside, use RASAUNI BIO powder smoothing compounds in the various grain sizes available based on the degree of smoothing you want to obtain.

Before any finishing it is a good idea to make sure that the support is completely cured, hardened and free of dust. In the case of applications in summer periods where temperatures exceed 20 °C, moisten evenly before application.

Mix RASAUNI BIO with clean water using mixer drills at low speed or with a plastering machine at the rate of 5.5/6.5 liters of water per 25 kg bag, based on the quality of the plastered support, spread and imprint uniformly with an American

trowel or Fracasso one or more coats of RASAUNI BIO, after which, once it has hardened slightly, proceed to float with a plastic spade and/or sponges of various softness until obtaining a homogeneous surface.

Once the work is completed and completely dry, the support can be painted with our paints from the COLOR line using a compatible uniforming fixative.

Outdoors, where it is planned to leave the plaster unpainted, it is advisable for durability purposes to at least treat the surface with the appropriate FIXACR PRIMER.

[Finishing solutions with colored plaster \(used outdoors\)](#)

Depending on the needs and application context, I BIO can be finished with various high-quality solutions.

If you want to obtain a trowelled finish already colored on the outside or inside, use RASECO in the various grain sizes available based on the degree of smoothing you want to obtain.

Before any finishing it is a good idea to make sure that the support is completely cured, hardened and free of dust.

24/48 hours before smoothing and depending on the season, apply a coat or, better yet, two brushes or rollers of the specific PRIMER leveling primer, covering the surfaces evenly.

Once the primer is completely hardened and cured, you can proceed with the application of the RASECO colored plaster, mixing vigorously with mixing drills at low speed without any addition of ready-to-use cans, based on the quality of the plastered support, spread and imprint uniformly with American trowel or fracasso one or more coats of RASECO, then once it has slightly hardened proceed to float with a plastic spade and/or sponges of various softness until obtaining a homogeneous surface.

[Warnings](#)

- ❖ Avoid exposure to the sun, especially in the hottest periods, of I BIO during application.
- ❖ For warnings, methods and requirements for each material mentioned, refer to the specific technical data sheet.
- ❖ Do not use I BIO at temperatures below 6 degrees, in summer periods wet and moisten constantly before, during and after the application operations in order to avoid dehydration and rapid shrinkage of the mortar.
- ❖ The product must be allowed to mature well before any finishing (summer period 10/15 days / winter period 15/20 days). However, it is advisable to check that the plaster is uniformly dry before any type of finishing.
- ❖ Do not add any other product to I-BIO other than the doses of water prescribed above which must be scrupulously respected.
- ❖ Any containing containers and mixture dirty with other materials must be cleaned beforehand.
- ❖ I-BIO must be consumed fresh from the mix, do not reuse the partially hardened material by mixing it with additions of water.
- ❖ Do not use I BIO on damp and moldy walls.
- ❖ Carefully follow the instructions in the following technical data sheet.
- ❖ Product for professional use.

[Cleaning](#)

The wet product can be removed from surfaces with water, it is advisable to protect any delicate surfaces before application as it could alter colors as well as indelibly staining, the hardened product has considerable hardness and toughness, once cured it can only be removed mechanically.

Technical data

<u>Description</u>	<u>Data</u>	<u>EN test standard</u>	<u>998-1</u>
<u>Classification according to EC regulations</u>	GP internal/external plaster mortar. CS II	-	X
<u>Type of binder</u>	Can be combined NHL 3.5 & NHL 5	459-1	X
<u>Theoretical product yield</u>	± 12.00/13.00 kg/m ² per cm of thickness	-	
<u>Mixing water</u>	19 liters of clean water for every 100 kg of product	-	
<u>Dry specific weight</u>	Approximately 1500 kg. every m ³ of product	-	
<u>Mechanical compression performance</u>	CS II category (from 1.50 to 5.00 N/mm ²)	1015-11	X
<u>Mechanical bending performance</u>	At 28 days. > 1.00 N/mm ²	1015-11	X
<u>Adherence to the brick support</u>	Approximately 0.30 N/mm ²	1015-12	X
<u>Inert diameter</u>	Diam. Max mm. 1.80	-	X
<u>Water absorption</u>	W 0	1062-3	X
<u>Permeability</u>	0.01 Sd	7783	X
<u>Thermal conductivity/ volume mass.</u>	(λ 10, dry) 0.57 W/ mK (tab. val. P=50%)	-	
<u>Reaction to fire</u>	Class A1	-	
<u>Min. temperature and max. applicable</u>	+6°C / +32°C	-	
<u>Applicable thickness per coat</u>	± 2 cm per hand	-	

*The information contained in this sheet is the result of knowledge and tests available at the date of publication.
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