









Natural



Ecological



Recyclable



Eco-friendly





Resistant



Breathable



Non-toxic



Antibacterial



Disinfectant





Anti-mould



Biocide



Healthy



Restoration



Versatile



Reversible



Easy to use



Adherent Covering



Compressive strength



Elastic



Reliable



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M15

M15 biocompatible structural mortar, pre-packaged in powder form for indoor and outdoor use in compliance with UNI EN 998-2.

REINFORCEDLIME is totally free of cement or compounds belonging to the clinker group. It consists of a mixture of calcareous sands screened with a continuous grain size range from 0 to 1.6 mm. The binder is made up of **NHL 5 natural hydraulic lime** in compliance with Standard EN 459-1 and Kaolin.

The totally mineral and natural make-up of the raw materials used in the production of **REINFORCEDLIME** mortar, NHL 5 natural hydraulic lime and calcareous sands, guarantees the purity (almost total absence of water-soluble salts), non-toxicity, non-harmfulness, absence of volatile organic compounds (VOC) emissions and the total recyclability of the product.

Plasters made from **REINFORCEDLIME** biocompatible mortar have the following outstanding properties:

BREATHABILITY: very low resistance to vapour diffusion and high vapour permeability combined with an excellent drying index means that they are a guarantee against all deterioration problems caused by condensation and rising damp.

INSENSITIVITY TO MOULD: lime, a natural anti-mould par excellence with its very high basicity (pH > 12.5), guarantees that plastered surfaces are not attacked by biodeteriogens or their proliferation in indoor environments.

HIGH MECHANICAL RESISTANCE AND ADHESION TO SUBSTRATES: the remarkable mechanical properties of NHL5 natural hydraulic lime give hardened plasters excellent mechanical and impact resistance.

REACTION TO FIRE: being fully mineral, they do not contribute to the development of flames or combustion fumes.

CHARACTERISTICS

Product type	General purpose mortar for indoor/outdoor
	plasters (G) UNI EN 998:1 2010
Grain size curve	0 - 1.6 mm
Mixture pH	> 12,5
Bulk density in heap	Kg/m3 1515 approx.
Bulk density of fresh mortar	Kg/m3 1860 approx.
Bulk density of dried mortar	Kg/m3 1755 approx.
Total Porosity (%)	>30
Compressive strength (EN 1015-11)	>15 Mpa
Flexural strength	0.91 N/mm²
Adhesion to the substrate ADHESION (EN 1015-12)	0.12 N/mm ² FP-B
Water vapour coefficient (EN 1015-19)	μ<= 15
Thermal conductivity	EN1745:2002 prosp.A 12)
	0.67 W/mK(tabulated value)
Reaction to fire (EN13501-1)	Class A1
Mixing water	approx. 5/6 lt per bag
Coverage	approx. 15 Kg/m²circa per1cm of thickness
Packaging	25 kg bag
Pallet	56 bags kg 1400
Storage	18-24 months in its original packaging
	in a dry place
Applicable thickness per layer	2 cm approx. per coat
Application temperature	from +5°C to +35°C
Reach classification	See SDS

FIELDS OF APPLICATION

Thanks to its high mechanical resistance, cohesion and adhesion to the substrates, this mortar is particularly suitable for structural reinforcement with mesh (glass fibre, steel), FRP composite materials. REINFORCEDLIME metal or FRP can be applied directly to vertical and horizontal surfaces made of solid brick, load-bearing perforated bricks, lightweight perforated bricks, mixed bric, stone and tuff, etc. On all compact or non-absorbent surfaces (solid or perforated concrete conglomerate blocks and expanded clay granules, cellular conglomerate blocks, lime or cement-based substrates, reinforced concrete structures, magnesium wood) the use of REINFORCEDLIME must be preceded by the application of PONTELIME. REINFORCEDLIME is ideal for: consolidating primer coats, structural plasters, like-for-like replacement operations, filling of plain or reinforced mortar joints.



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APPLICATION

Before applying **REINFORCEDLIME** biocompatible mortar, prepare the substrate by milling the mortar joint of the masonry by at least 2/3 cm and then washing it to prevent residues from adhering to the substrate.

The substrate must be previously wetted if it is dry, with the exception of any surfaces treated with primer coats. **REINFORCEDLIME** mortar is applied mainly by means of a screw plastering machine

(stator/rotor D 6-3), in one or more coats with a thickness which may reach a maximum of 2 / 2.5 cm per coat, depending on the absorption capacity of the substrate and ambient temperatures. If you have to apply a further layer of mortar, wait until the first layer applied has started to set, losing part of the mixing water, or until it is dry (approximately the time it takes to spread the first layer of mortar over all the walls of the space).

If the first layer of **REINFORCEDLIME** applied is already perfectly dry, it is advisable to wet it before proceeding with application of the next one, allowing the new layer of **REINFORCEDLIME** to be more workable, for greater plasticity and thorough adhesion with the underlying layer.

To make the surfaces even, level them with an aluminium straight edge and then finish them off through float finishing with a plastic/wooden trowel, felt finishing with a sponge float or scraping by planing.

The plasters obtained with **REINFORCEDLIME** must be separated from walkway surfaces to avoid rising damp due to water stagnation on these surfaces.

WARNINGS

Do not apply with substrate and air temperatures below $+5^{\circ}$ C or above $+35^{\circ}$ C. After application, avoid direct sunlight and, if necessary, keep the surface moist to avoid rapid water loss and possible detachment.

Store the product in a dry place protected from rain.

The introduction of any amount of cement into the mix will compromise the quality of the products and the quality of the results.

The data given refers to average values found during production and to the technical and application knowledge we have for proper use of the product.

Since our company is not the executor of the works and cannot directly intervene on the construction site conditions or on work methods, the information provided is to be considered as indicative, general and therefore non-binding.

It is advisable to carry out a preliminary practical test to check the suitability of the product for its intended use.

The company reserves the right to make any changes it deems necessary at any time and without prior notice.

Please consult our technical service for further information and practical product demonstrations.

SPECIFICATION

Implementation of a base coat plaster with a thickness of cm.... with REINFORCEDLIME, biocompatible, pre-packaged plaster in powder form for indoor and outdoor use in compliance with Standard UNI EN 998-1:2010. General purpose mortar (GP) with the following control parameters: mixture pH > 12.5, bulk density of dried mortar kg/m³ 1515, compressive strength (1015-11) > 15 Mpa, water vapour diffusion coefficient (EN 1015-19) μ <10, adhesion (EN 1015-12) 0.12 N/mm² FP-B, capillary water absorption W1, thermal conductivity 0.60 W/mK Tabulated, reaction to fire (EN 13501-1): Class A1. REINFORCEDLIME is totally free of cement and hydraulic compounds of any type and consists of a mixture of calcareous sands screened with a continuous grain size range from 0 -1.7 mm. The only binder present is NHL 5 Natural Hydraulic Lime in compliance with Standard UNI EN 459-1. NHL 5 lime is white in colour, without the addition of any pozzolan materials or hydraulic binders of any kind.



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