

BioMUROMALT M5

REINFORCED PLASTER MORTAR
 BASED ON NATURAL HYDRAULIC LIME
 FOR MASONRY AND FOR INTERIOR AND EXTERIOR
 STRUCTURAL REINFORCEMENT
 WITH REINFORCE NET ALKALI-RESISTANT (AR) FIBREGLASS NETTING

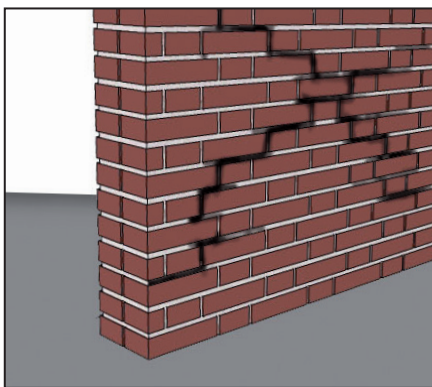
GRANTS *LEED* CREDITS



CHARACTERISTICS	ENVIRONMENTAL	METHOD OF USE			PRECAUTIONS
 ALLOWS TO BREATHE	 ECO GREEN	 RECYCLABLE	 MIX MECHANICALLY	 APPLY BY TROWEL	 STORAGE: IN A DRY PLACE

PROBLEM

STRUCTURAL REINFORCEMENT OF MASONRY BUILDINGS



Masonry subject to subsidence and cracking due to seismic events and poor shear strength requires reinforcement so as to reach an acceptable level of safety and increase its strength.

SOLUTION

BioMUROMALT M5 is a low elastic modulus premixed mortar based on NHL 3.5 hydraulic lime for stabilizing masonry substrates made of stone, brick and rock, with added reinforcement fibres and special water repellents. It can also be used for erecting exterior and interior masonry according to the properties of the M5 compressive strength class.

BioMUROMALT M5 allows a wide range of applications in combination with reinforcement in F.R.P. REINFORCE NET.



GP
 MORTAR FOR
 INTERIOR AND EXTERIOR PLASTER
 FOR GENERIC USE



M5
 MORTAR FOR MASONRY
 WITH PRESCRIBED COMPOSITION

APPLICATION FIELDS

BioMUROMALT M5 is suitable for erecting exterior and interior masonry and for making plaster reinforced with AR (alkali resistant) glass fibre mesh for the structural strengthening of wall facings, vaults and various elements made of brick, stone, rock, mixed or rubble-cored masonry. It is excellent for structural reinforcement in the case of stress induced by seismic events, thanks to the increase in shear strength provided by REINFORCE NET reinforcement.

ADVANTAGES

- Adaptability for use as a mortar for masonry work and plastering.
- Easy machine or manual application.
- Low elastic modulus for all renovation requirements.

METHOD OF USE

• PREPARING THE SUBSTRATE

The masonry substrate must be free from crumbling parts, dust, saline efflorescence and old paint. Use a high pressure water jet cleaner suitable for the type of masonry. Any cracks and cavities must be filled and repaired before application. On surfaces with difficult adhesion, make a bonding render by adding Collaseal latex to the **BioMUROMALT M5** mortar in the proportion 1:1 with the mixing water.

• PREPARING THE MIX

BioMUROMALT M5 can be mixed in a cement mixer, with a drill or with a manual horizontal mixer, adding 17% clean water (4.25 litres per 25 kg bag), or with automatic dosing if using plastering machines for premixes (1).

A latex such as COLLASEAL can be added

to **BioMUROMALT M5** in the proportion 1:1 or 1:2 with the mixing water in order to increase adhesion to the various substrates.

• APPLICATION

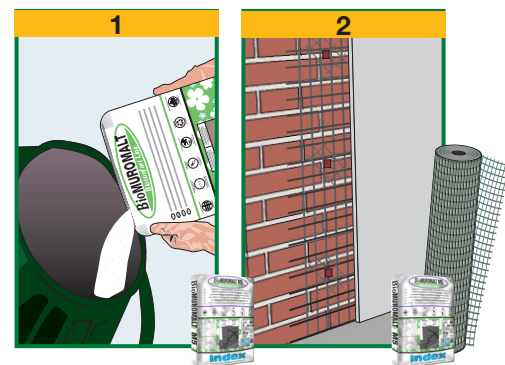
BioMUROMALT M5 can be applied by mechanical projection or with a trowel, following the normal rules and precautions required for plaster and mortar for masonry. We therefore recommend wetting the surface in hot weather and protecting the mortar from frost in colder periods (2).

• FINISHES

After the natural curing period, **BioMUROMALT M5** can be covered with any finish such as DECORFINE, SILICOLOR or similar.

• COVERAGE

14 kg/m² per cm of thickness.



(See following)

TECHNICAL CHARACTERISTICS

	Standard	BioMUROMALT M5
Appearance		Powder
Colour		Grey
Particle size		0 ÷ 1.3 mm
Apparent density		1.40 ± 0.10 kg/litre
Mixing water		17% ± 1%
Storage in original packaging in a dry place		12 months
Mix properties and workability	Standards	
Density of the mix	EN 1015-6	1.80 ± 0.10 kg/litre
Application temperature		+5°C to +35°C
Minimum application thickness		8.0 mm
Maximum application thickness per layer		30.0 mm
Application		Manual or mechanical
Performance characteristics	Standards	Product performance
Class and type	EN 998-1	GP
Class and type	EN 998-2	M5
Resistance to compression - after 28 days	EN 1015-11	5.0 N/mm ² - CS III
Resistance to bending - after 28 days	EN 1015-11	1.0 N/mm ²
Adhesion to substrate	EN 1015-12	≥0.5 N/mm ² - FP: A
Water absorption through capillarity	EN 1015-18	w ≤ 0.4 kg/m ² ·h ^{0.5} - W1
Water vapour permeability coefficient	EN 1015-19	μ = 15 to 20
Thermal conductivity λ_{10,dry}	EN 1745 A.12	0.76 W/mK
Durability	EN 998-1 EN 998-2	5.2.3.2 compliant 5.5.7 compliant
Chloride ion content	EN 1015-17	Absent
Initial shear resistance	EN 998-2 App.C	≥0.15 N/mm ²
Compressive elastic modulus	EN 13412	7 GPa
Thermal resistance - Working temperature		-30°C to +90°C
Reaction to fire	EN 13501-1	A1
Hazardous substances	EN 998-1 EN 998-2	According note in ZA.1

Test conditions: temperature 23±2°C, R.H. 50±5% and air speed in the test area <0.2 m/s. These figures may vary depending on the specific conditions of the worksite: temperature, humidity, ventilation, absorbency of the base coat.

(*) The stated times may be longer or shorter as the temperature decreases or increases.

Compliant with the general principles defined in **EN 998-1** - Principles for evaluation of the use of products and systems.

(See previous)

• PRECAUTIONS

- Use cold water in the summer and water at 20°C in the winter.
- Application temperature from +5°C to +35°C.
- Do not add other materials such as bonding agents, aggregates or additives.
- In hot weather, keep the surface of the laid mortar wet, preventing the product from drying out quickly, for at least 8 hours.
- Wet the surfaces in high temperatures.
- Do not add water when the mix starts to set.
- Avoid sudden temperature changes while the plaster is setting.
- For application on smooth or poorly absorbent surfaces, always apply bonding render and check that it adheres properly.
- Store in original closed packaging in a dry place. Protect against frost and high temperatures.

PACKAGING

BioMUROMALT M5

- 25-kg Sack

• FOR ANY FURTHER INFORMATION OR ADVICE ON PARTICULAR APPLICATIONS, CONTACT OUR TECHNICAL OFFICE • IN ORDER TO CORRECTLY USE OUR PRODUCTS, REFER TO INDEX TECHNICAL SPECIFICATIONS •

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The figures shown are average indicative figures relevant to current production and may be changed or updated by INDEX at any time without previous warning. The advice and technical information provided, is what results from our best knowledge regarding the properties and the use of the product. Considering