



MortarBase Premium

Version: feb-17

MortarBase Premium is a natural base mortar with graphene. It is used as a first regulation coat, as it contains coarse aggregates.

PRODUCT DESCRIPTION

Where to apply:

Ideal for renders, grouts in rehabilitation work and restoration of Listed Properties that require mortars identical to the original.

Especially suitable as a technological solution for pathologies caused by capillary water absorption, condensation and leaks.

Features:

- Excellent flexibility and adhesion.
- Low water absorption.
- Good workability.
- Absorbs CO₂.
- Contains high quality lime and graphene.
- Antibacterial/anti-mould effect.
- Insect repellent.
- Breathable. Avoids condensation.
- Tough and long-lasting.
- Suitable for interiors and exteriors.
- Free of VOCs and formaldehyde emissions.

Yield:

Coverage depends on the repair to be undertaken, type and condition of the substrate. As an estimate, for rendering of a brick wall we consider 20 kg/m² (thickness of 10 mm). The exact consumption must be determined by means of a sample of the job.

Format:

The aggregates are presented in a 13.5 kg sack. Separately, *Kalgraphin Premium* in a pot of 4.5 kg.

Storage:

Keep in original pack, closed and in a cool and dry place. Keep from freezing and avoid direct sun exposure. Unopened, it may be conserved for at least 12 months.

Technical properties:

Apparent density:

· Dry	EN 1015-10	1310 kg/m ³
· Fresh	EN 1015-6	1907 kg/m ³
· Hardened	EN 1015-10	1812 kg/m ³

Compression strength	EN 998-1	CS III 3.5 N/mm ²
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Adhesion	EN 1015-12	≥ 0.1 N/mm ²
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Capillary water absorption	EN 998-1	W 2 c ≤ 0.20 kg/m ² ·min ^{0.5}
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Coefficient of water vapor permeability	EN 1015-19	≤ 15 μ
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Reaction to fire	EN 13501-1	A1
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Thermal conductivity (λ _{10, dry})	EN 1745	0.93 W/m·K (<i>Tabulado value</i>)
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Components:

Rich aerated lime*, selected aggregates, graphene fibre, natural additives. Complies with the requirements of the standard DIN 18363 (≤ 5% of organic content).

**Derived from CL90-quality limestone and artisanal production recognised by UNESCO as Intangible Cultural Heritage of Humanity.*

Colours:

Offered in its natural colour, sand.

APPLICATION INSTRUCTIONS

Conditions of the substrate:



The substrate must be dry, firm, well adhered, free of any impurity and must have a grip to ensure the adhesion of the product.

Preparation of the substrate:

If the substrate contains impurities, it is recommended to clean it with pressurised water. Should there be colonies of mould, lichens, algae and bacteria, brush with sodium hypochlorite (bleach) and wait at least 48 hours before rendering.

If the substrate is sandy, dusty, etc. brush and consolidate with *Minerseal Premium* diluted 3:1 with water.

If the substrate has salt deposits, brush and apply *Neutralysal Premium*.

If the substrate contains pathologies such as moisture due to capillarity, condensation, leak, biodeterioration or movements of the substrate, etc., then it is necessary to resolve the structural problems first.

If the substrate has little absorption, grip (smooth substrates, plasticization, ceramics, wood, etc.), apply *Contak Premium*, after 24 hours apply *Naturglue Premium* leaving it scratched or brushed and dry for 24 hours.

Product preparation:

Pour off the water from the *Kalgraphin Premium* pack. Mix the contents of the sack (aggregates) with the remaining contents of the *Kalgraphin Premium* pack. If necessary re-add this water, never more than 1 l. Mix with an electrical beater or mechanically until it is completely even.

Application method:

Apply manually or by projecting, evenly. Set a ruler to the material applied to regulate the thickness and even out the material. At the start of drying, trowel.

In a two-coats system, leave the pores open: pass a toothed trowel or a sideways trowel (45° inclination) to create a coarser surface.

If the substrate has cavities, natural stones, etc., the mortar must be launched prior on the substrate to ensure adhesion and avoid future superficial cracks.

If the substrates are different, use mesh.

The working thickness is 5-15 mm (for one coat). For greater thicknesses, apply in coats.

Drying:

In conditions of 25 °C and 60% relative humidity, allow 24-48 hours between coats and at least 4 days for the desired finished.

The physical and chemical hardening (carbonation process) mainly occurs during the first 30 days.

Environmental conditions:

The work temperature (environment and support) must be greater than +5 °C and less than +30 °C. Do not apply in direct sunlight, strong winds, rain, freezing or on supports heated by the sun.

Tools:

Trowel, double-mix projecting machine, finishing trowel.

Tool cleaning:

Clean tools after use with warm water.

Notes:

Do not drench the substrate before application, only lightly moisten if very dry.

Careful not to add too much water into the mix.

Do not wet new mortar in order to harden it; it hardens by absorbing atmospheric CO₂.

The indicated times are for environmental conditions of 25 °C and 60% relative humidity.

Do not apply to surfaces in constant contact with water.

In case of rain, let the substrate dry for at least 48 hours before applying.

It is recommended to protect the treated surface from rain for at least 4 days.

If not being painted it is recommended to consolidate and protect the surface with *Minerseal Premium*.



If not being painted in very humid areas (tropical regions, bathrooms, covered swimming pools, etc.) or highly contaminated areas, *Hydroxéal Premium* is recommended to minimise water absorption. The parts that are not going to be treated must be protected (glass, wood, etc.).

Should there be strict aesthetic requirements, it is recommended to perform prior tests.

Do not mix with other products or specific properties may change.

Complementary products:

It is recommended to use the *Graphenstone®* product line for complementary actions, according to the required application, repair and/or finish. Please, refer to the relevant Technical Data Sheets.

DECLARATIONS

The manufacturer declares that the composition of the product, it does not contain hazardous substances and it is free of VOC emissions. It complies with the criteria of CE Marking according to UNE-EN 998-1.

ADDITIONAL INFORMATION

Usage warnings:

None in particular for normal use and people who do not have special pathologies. Alkaline product, protect skin and eyes especially. Apply with good ventilation, do not inhale product. Keep out of reach of children.

Waste management:

According to local legal provisions. The packages are made of recycled polypropylene.

Safety information:

For information regarding safety, physical, ecological and toxicological information see the latest version of the product's Material Safety Data Sheet.

Technical substrate:

For further information, please contact your local distributor or manufacture:

technicalsupport@graphenstone.com.

The information provided is given in good faith, based on current knowledge and IEdiSA's experience with the products when they are properly stored, handled and applied in normal situations and in accordance with the recommendations of IEdiSA. The Technical Specifications sheet is useful for information and consulting, but is not legally binding. In particular, it does not exempt the user from testing and

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verifying the suitability of the product for the desired application and purpose. IEdiSA reserves the right to modifications that improve the product or its application. This version invalidates previous ones.

