The Earth Collection

# GRAPHENSTONE

# **Modena** Superfine lime mortar Technical Data Sheet

Bi-component aerated lime mortar with Graphenstone technology. Continuous coating with a superfine finish, natural matt and with lime effects for vertical and horizontal surfaces. Highly breathable. For application in construction, restoration of historic buildings and high decoration.



## Features

Artisanal lime base and Graphenstone technology. Superfine natural finish. Highly breathable. Absorbs CO2 (2.7 kg/15 l). High strength, flexibility and adhesion. Low water absorption. Good workability. 16 colours of The Earth Collection. Suitable for vertical and horizontal surfaces. Environmental Product Declaration. Cradle to Cradle Certified™ GOLD.

# **Technical properties**

#### **Apparent density**

Fresh EN 1015-6	1850 ± 100 kg/m <sup>3</sup>
Hardened EN 1015-10	2050 ± 100 kg/m <sup>3</sup>
<b>Compression</b> strength EN 998-1	CS II
Adhesion EN 1348	> 0.5 N/mm²
Capillary water absoprtion EN 998-1	W 2
<b>Coefficient of water</b> <b>vapor permeability</b> EN 1015-19	≤ 15 µ
Composition	Areated lime putty
Fire reaction EN 13501-1	A1
VOC Content	< 1 g/l



## Pack size

#### 15 l:

11.25 kg Aggregates (A) + 4.5 kg Lime putty (B)

# Pigmentation

16 colours: The Colours of The Earth. Powder pigment pots are sold separately.



# Yield/Coverage

4,5 kg/m<sup>2</sup> (2-3 mm thickness) on level substrate

Depends on the type and state of the substrate, tools and application. The exact consumption should be determined by sampling on site.

# Storage

Store in original container. Keep tightly sealed in a cool and dry area with no direct exposure to sunlight. Protect from freezing. Protect from temperatures below 5°C (41°F) and above 35°C (95°F) for extended periods of time. Unopened, storage stability is 12 months from date of manufacture. Product may thicken without losing its efficacy. Shake well before use.

#### Substrate preparation

It is generally applied on plaster or render. It can be applied on other surfaces with a correct preparation of the substrate.



**Modena** Superfine lime mortar Technical Data Sheet

The substrate must be dry, firm, well adhered, even and free of any impurities that could hinder the perfect bonding of the product.

- Any organic growth and/or other impurities should be removed by thorough cleaning using specific products for this purpose.
- On plasterboard panels, apply a coat of *Naturglue* beforehand, leaving it scratched or brushed, to ensure the adherence and workability of the finishing mortar.
- If the substrate is very uncohesioned, brush and consolidate with *Minerseal* diluted 3:1 with water.
- On substrates without porosity, apply a coat of *Contak*. On substrates with little porosity or very absorbent, apply *Naturglue* leaving it scratched or brushed.
- For application on façades and on substrates of a different nature, it is recommended to reinforce the previous coat of *Naturglue* with mesh.

#### **Product preparation**

For pigmentation, add previously the respective dosage to the aggregates (MATERIAL A) and mix mechanically until visually achieving homogenization.

Pour off the surface water from the lime putty (MATERIAL B), do not throw away. Pour the lime putty into a bucket. Gradually add the aggregates (MATERIAL A) and mix mechanically until homogenised. Depending on the desired consistency, add the water withdrawn, never more than 500 ml.

Allow to stand for 15-20 minutes before application.

#### **Method application**

Apply a first coat with a thinned topcoat and then apply the second coat evenly to the desired thickness (working thickness: 1-5 mm per day). At the beginning of drying, finish with a smooth, ironed or trowelled finish. On exteriors and in case of substrates of different nature, reinforcing mesh should be used.

## Drying

At 25 °C (77 °F) and 60% relative humidity: 24 hours between thick coats and 4 days for final protection.

Total curing occurs after 30 days, presenting good hardness and resistance. It is advisable not to clean and/or scrub during this period.

## **Ambient conditions**

The working temperature (ambient and substrate) must be between +5 °C and +32 °C. Do not apply in direct sunlight, strong winds, rain, freezing or on supports heated by the sun.

#### Tools

- Preparation: Mechanical mixer, bucket.
- Aplication: Trowel, finishing trowel.
- 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 water for hardening, it hardens by absorbing atmospheric CO2.

Do not apply to surfaces in constant contact with water.

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

Outdoors or in damp rooms, it is recommended to protect the surface with Hydroxeal or Beewax, which also minimises water absorption.

On horizontal surfaces and in shower areas, it is recommended to protect the finish with a waterbased polyurethane varnish.



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Parts that are not going to be treated should be protected (glassware or carpentry).

Do not mix with other brands to maintain product efficacy.

#### **Complementary products**

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

#### **Usage warnings**

None, particularly in situations where normal product application is expected and by people without any specific medical conditions. Alkaline product, protect skin and eyes especially. Do not inhale the product. Keep out of reach of children.

#### Waste management

According to local legal regulations. The containers are made of polypropylene. Please contribute to the protection of the environment, do not throw waste down the drain and use the nearest recycling point.

#### Sustainability gesture

Minimise product waste by carefully estimating the amount you will need. Store any unused product for future use according to the "Storage" guidelines.

#### **Safety information**

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

#### **Technical support**

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

technicalsupport@graphenstone.com

The information provided is given in good faith, based on IEdiSA's current knowledge and experience of the product, when correctly stored, handled and applied, in normal situations and according to IEdiSA's recommendations. The Technical Data Sheet serves for information and advice, but is not legally binding. In particular, it does not exempt the user from test and check the suitability of the product for the desired application and purpose. IEdiSA reserves the right to make modifications that improve the product or its application. This edition invalidates previous editions.

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