

## Firenzza

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### PRODUCT DESCRIPTION

*Firenzza* is a natural aerial lime mortar with graphene technology. This material is highly flexible and resistant, ideal for creating highly decorative textures. Each texture presents a specific technique according to *The Textures of the Earth*. Applied in building, rehabilitation and restoration of historic buildings. Creates an entirely mineral and highly breathable finish.

#### Features:

Excellent flexibility and adhesion.  
Highly breathable. Avoids condensation.  
Tough and long-lasting.  
Low water absorption.  
Good workability.

Contains high quality lime and graphene fibres.  
Absorbs CO<sub>2</sub>.  
Suitable for interiors and exteriors.  
Free of VOCs and formaldehyde emissions.

#### Colours:

Offered according to the letter *The Colours of the Earth*. Please note that due to the mineral nature of the product, the final colour tone may vary slightly.

#### Format:

Bicomponent product available in pots of 4 l and 15 l. The pigmentation is supplied in a 250 ml pots.

### TECHNICAL PROPERTIES:

|  |            |                                       |
|--|------------|---------------------------------------|
| Apparent density                             |            |                                       |
| · Fresh                                      | EN 1015-6  | 1600 ± 100 kg/m <sup>3</sup>          |
| · Hardened                                   | EN 1015-10 | 1915 ± 100 kg/m <sup>3</sup>          |
| Compression strength                         | EN 998-1   | CS II                                 |
| Adhesion                                     | EN 1015-12 | ≥ 0.5 N/mm <sup>2</sup>               |
| Capillary water absorption                   | EN 998-1   | W 2                                   |
| Coefficient of water vapor permeability      | EN 1015-19 | ≤ 15 μ                                |
| Reaction to fire                             | EN 13501-1 | A1                                    |
| Thermal conductivity (λ <sub>10, dry</sub> ) | EN 1745    | 0.97 W/m·K (tabuled value)            |
| Yield on level substrate*                    | -          | 5 kg/m <sup>2</sup> (thickness: 5 mm) |

\* The exact consumption must be determined by the means of a sampling of the work.

### INDICACIONES DE APLICACIÓN

#### Application surfaces:

Usually applied on render. It can be applied to other surfaces with a correct preparation of the support: prefabricated panels, concrete, existing paint, tiles, etc.

#### Conditions of the substrates:

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 substrates:

If the substrate presents algae, mould, fungi and / or other impurities, it is recommended to do a thorough cleaning, eliminating in its entirety and with specific products for this purpose.

If the substrate has poor adhesion, brush and consolidate with *Minerseal Premium* diluted 3:1 with water.

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

On substrates without porosity, apply one coat of *Contak Premium*. On substrates with a few porosity or very absorbent, apply *Naturglue Premium* leaving it scratched or brushed.

### Product preparation:

Pour off the water from the *Kalgraphin Premium* pack (do not throw). Mix the contents of the sack (aggregates) with the remaining contents of the *Kalgraphin Premium* pack. Depending on the desired consistency, re-add water never more than 500 ml. Mix with mechanical mixer, until its total homogenization and adequate consistency. Let it rest 20-30 minutes before applying. For the pigmentation, previously add their respective dosage to the aggregates, shake with mechanical mixer until visually achieving homogenization.

### Application method:

Apply a first level coat and then apply a second one evenly until achieving the desired thickness (work thickness: 1-5 mm per day). At the start of drying, finish with the required texture. If there are substrates of different nature, meshes must be used.

### The Textures of the Earth:

#### **Mantra trowelled:**

*Tool:* wood float.

*Finish layer thickness:* 1-2 mm.

*Application method:* the material should be in a semi-humid state, about 5 minutes after its application. Pass the wood float in a circular way.



#### **Aqua trowelled:**

*Tool:* sponge float.

*Finish layer thickness:* 4-5 mm.

*Application method:* the material should be in a semi-humid state, about 5 minutes after its application. Pass the wood float moistened in a circular way.



#### **Natural trowelled:**

*Tool:* sponge float.

*Finish layer thickness:* 2-3 mm.

*Application method:* the material should be in a semi-humid state, about 5 minutes after its application. Pass the wood float in a common way.



#### **Fine brushed:**

*Tool:* fine hair brush.

*Finish layer thickness:* 2-3 mm.

*Application method:* after 10 minutes of the application, pass the brush moistened in vertical or horizontal way.



#### **Relief:**

*Tool:* spiked roller, trowel.

*Finish layer thickness:* 3-4 mm.

*Application method:* the material should be in a semi-humid state, about 5 minutes after its application. pass the roller with gentle pressure. After a few minutes, pass the trowel without applying pressure to achieve a more uniform texture.



## **Structural:**

*Tool:* trowel.

*Finish layer thickness:* 3-4 mm.

*Application method:* after 2-3 minutes of the application, pass the trowel parallel to the mortar, the entire surface of the trowel sits on the mortar to drag the aggregate. This application can be done vertically or horizontally.



## **Root brushed:**

*Tool:* root brush.

*Finish layer thickness:* 2-3 mm.

*Application method:* the material should be in a semi-humid state, about 5 minutes after its application. Pass the brush horizontally or vertically with gentle pressure. After a few minutes, pass the trowel without applying pressure to achieve a more uniform texture.



## **Pure pressed:**

*Tool:* metal trowel.

*Finish layer thickness:* 2-3 mm.

*Application method:* the material should be in a semi-humid state, about 5 minutes after its application- Smooth with the metal trowel.



## **Drying:**

In conditions of 25 °C and 60% relative humidity: 24-48 hours between layers for large thicknesses and 4 days for final protection. The carbonation process mainly occurs during the first 30 days.

## **Environmental conditions:**

The work temperature (environment and support) must be greater than +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 / Application: trowel / Finishing: according to the texture.

## **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 water for hardening, it hardens by absorbing atmospheric CO<sub>2</sub>. 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. It is recommended to protect the surface with *Minerseal Premium* or *Ferrara V*. The parts that are not going to be treated must be protected (glass, wood, etc.). Do not mix with other products or specific properties may change.

## **Complementary products:**

It is recommended to use the *Graphenstone®* product for the preparation of the substrate and protection of the finishing. Please, refer to the relevant Technical Data Sheets.

## ADDITIONAL INFORMATION

### 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. For more information visit our website: <http://graphenstone.com/Graphenstone-Global-Certificados.html>

### 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 36 months from the date of manufacture.

### Usage warnings:

None in particular for normal use and people who do not have special pathologies. 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 pots are made of polypropylene. Help protect the environment, do not throw waste through the drain and use the nearest recycling centre.

### Responsible gesture:

Minimize the mortar waste by estimating the amount you will need. Recover the unused mortar to give it a new use before 12 months, keep it under the Storage section.

### 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](mailto: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 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 one.