

## TECHNICAL DATA SHEET MARMORINO NATURALE

### Technical qualities

MARMORINO NATURALE by OIKOS is a coloured, decorative, vapour permeable, lime putty based coating for interiors and exteriors. The product allows the quick and easy realisation of a beautiful decorative finish similar to that commonly known as "marmorino". The thickness of MARMORINO NATURALE makes it possible to decorate whilst at the same time covering small imperfections, thus saving on the cost of screeding the surface. The product creates a stable link with the surface, preserving the vapour permeability of the whole wall structure. The product also impedes the development of moulds and bacterial colonies. The product can give a matt finish or can be polished with FINITURA AUTOLUCIDANTE by OIKOS. MARMORINO NATURALE has a low odour level, is non inflammable and is friendly to both humans and the environment.

### Ideal use

Interior and exterior walls of historical and prestigious buildings

### Surface preparation

The surface must be dry and mature, new plasters should be left to mature for at least 30 days to allow complete carbonation of the support. Carefully brush or strip the surfaces and remove loose and flaking material. In case of restoration work, water infiltrations and leakages must be repaired. For the best results, it is recommended to apply the product directly on lime plasters or on existing coatings of lime paint once they have been carefully washed and brushed clean. Only if really necessary, CONSOLIDANTE CALCE correctly diluted, can be used to consolidate very absorbent or powdering surfaces. On interior surfaces it is possible to apply the product on to already painted surfaces only after having carefully evaluated the adhesion of the product. Paints with low absorption levels should be sanded down to increase porosity and facilitate the adhesion of the product however if this is not sufficient, screed the surface with RASATURA ALLA CALCE.

### Application method.

The application should be carried out in two coats using an inox steel trowel by OIKOS to completely screed over the surface leaving 7 ÷ 8 hours between coats.

### Finish

The "shiny marble" finish is gained by applying the finish FINITURA AUTOLUCIDANTE by OIKOS, spreading it with an inox steel trowel in a thin coat and immediately smoothing over the surface with the same tool to polish it. For exterior applications: on FINITURA AUTOLUCIDANTE by OIKOS, after 7 days it is recommended to apply PROTETTIVO PER STUCCO E MARMORINO by OIKOS to obtain greater water repellence and protect the surface from atmospheric agent.

### Technical characteristics: application

Dilution:	Ready to use
Yield:	2 Kg/m <sup>2</sup> in two coats according to surface absorption.
Application tools:	Inox steel trowel by OIKOS
Primers	CONSOLIDANTE CALCE by OIKOS.
Protection	PROTETTIVO PER STUCCO E MARMORINO by OIKOS
Application temperature:	+5°C ÷ +36°C (with relative humidity not exceeding 80%)

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Drying time until touch dry:	2,30 h (temperature = 20°C with relative humidity at 75%)
Total drying time:	24 h (temperature = 20°C with relative humidity at 75%)
Tools cleaning:	Water
Warning:	<b>Protect surfaces from rain for atleast the first 24+48 hours after applications.</b>

**Technical characteristics: The product**

Composition:	Slaked lime putty, selected marble grains fillers, titanium dioxide, iron oxide based inorganic pigments and coloured earth.
Specific weight:	1,5 kg/l +/- 3%
Granulometry:	Max=0,8 mm
PH:	12,5÷13,5
Storage temperature:	+2°C ÷ +36°C. Keep from freezing
Water absorption:	Class W <sub>2</sub> (Medium Permeabilità) w = 0,42kg/(m <sup>2</sup> h <sup>0,5</sup> ) (EN 1062-3:2001)
Permeability to water vapour:	ClassV <sub>1</sub> (High permeability) Sd=0,08 m (EN ISO 7783-2:2001)
Measurement of bond strength by pull off:	f <sub>h</sub> = 0,7 MPA (min. f <sub>h</sub> > 0,3 MPA) (EN 1542:2000)
Durability:	f <sub>h</sub> = 0,7 MPA (min. f <sub>h</sub> > 0,3 MPA) (EN 13687-3:2003)
Thermal conductivity:	λ <sub>10,dry</sub> = 1,28 W/mK (P=90%) (EN 1745:2005)
Reaction to fire:	Euroclass B-s1,d0 (EN 13501:2009)
CE Labelling:	Conforms (EN 15824:2009)
Emission limits of Volatile Organic Compounds (VOC) according to directive 2004/42 CE:	Classification: A/a; VOC: 3 g/l (max); Phase I limits (from 1.1.2007): 75 g/l, Phase II limits (from 1.1.2010): 30 g/l
Colours:	White + shades of the colour chart
Packaging:	Kg 1 – 5 – 20 – 25

**Toxicological Data**

The product is free of heavy metals such as lead or chrome. It does not contain toxic solvents, aromatics or chlorides. There is no risk of any dangerous polymerisation. The product is considered to be a non-dangerous substance if used in the technically correct manner. Normal cautionary measures for the handling of water based paints are advised. No special arrangements are required for the storage, movement and transportation of the product; the containers, residue, eventual spilt material should be cleaned up using absorbent inert material such as sand, soil etc. and then disposed of in accordance with the regional and national regulations in force at that time. Transportation must be carried out in accordance with international agreements.

**Specifications**

The surface must be dry and mature, new plasters should be left to mature for at least 30 days to allow complete carbonation of the support. Carefully brush or strip the surfaces and remove loose and flaking material. In case of restoration work, water infiltrations and leakages must be repaired. For the best results, it is recommended to apply the product directly on lime plasters or on existing coatings of lime paint once they have been carefully washed and brushed clean. Only if really necessary, CONSOLIDANTE CALCE correctly diluted, can be used to consolidate very absorbent or powdering surfaces. On interior surfaces it is possible to apply the product on to already painted surfaces only after having carefully evaluated the adhesion of the product. Paints with low absorption levels should be sanded down to increase porosity and facilitate the adhesion of the product however if this is not sufficient, screed the surface with RASATURA ALLA CALCE.

The application of MARMORINO NATURALE should be carried out in two coats using an inox steel trowel by OIKOS to completely screed over the surface leaving 7 ÷ 8 hours between coats.

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To obtain the "shiny marble" effect apply the finish FINITURA AUTOLUCIDANTE by OIKOS, spreading it with an inox steel trowel in a thin coat and immediately smooth over the surface using the same tool to polish it.

For exterior applications: on FINITURA AUTOLUCIDANTE by OIKOS, after 7 days it is recommended to apply PROTETTIVO PER STUCCO E MARMORINO by OIKOS to obtain greater water repellence and protect the surface from atmospheric agent.

All must be carried out in accordance with the norms of application, at a cost of ..... mq.. inclusive of materials and labour, excluding scaffolding.

**Note**

*The company Oikos S.r.l guarantees, to the best of its own technical and scientific knowledge, that the information contained in this technical data sheet is correct.*

*Notwithstanding that indicated above, Oikos takes no responsibility for the results obtained through the use of this product in as much as it is not possible for Oikos to check or control the application method used. For this reason, we recommend that you check carefully that each product chosen, is suitable for each individual use to which it is put.*