

## LM 400

### WHITE ADHESION MORTAR FOR MARBLES AND GRANITES

*Modern material used in a traditional way*

**Description :** LM 400 is a ready white thick bed mortar, based on high-strength Portland white cement (I - 52.5), white marble aggregates and special additives to improve adhesion of marble and granite tiles and boards to difficult surfaces.

**Usages :** A reliable solution for strong adhesions of marble and granite boards to floors, when a thick layer of mortar is needed. LM 400 Plus is especially suitable for white or light colored marbles, which are sensitive to stains coming from the substrate. It can be also used for other natural stones such as granite, sandstone, limestone, travertine, etc, or artificial stone tiles and boards. Add MARMOLINE MP 20 resin for further adhesion strength and more flexibility.



**Advantages:**

- Unique product for marble fixing
- High strength
- Water and frost resistant
- Easy to apply - simply add water
- Indoor and outdoor use
- Its formula, based on white cement, protects the colour of marbles.

**Packaging :**

- Bags of 25 kg.
- Palette of 1500 kg, 60 paper bags


**Storage:** 12 months from the date of production in unopened package, in a dry place.

**Safety precautions :** This product contains cement and reacts as alkaline with moisture, so it is classified as irritant. It must be used with care according to the instructions for use. In order to avoid any injuries due to alkalis of the cement, wear gloves, protective glasses and avoid breathing the dust. Please consult the SDS of the product.

**Specifications :** EN 998-2:2016

## TECHNICAL DATA:

<b>Colour :</b>	Λευκό
<b>Grading :</b>	3 mm
<b>Specific gravity of fresh mortar:</b>	1800 Kg/m <sup>3</sup>
<b>Compressive strength in 28 days:</b>	≥10 MPa (EN 1015-11)
<b>Flexural strength in 28 days:</b>	≥2 MPa (EN 1015-11)
<b>Adhesion strength</b>	0,4 MPa

 23 DoP: 265 MAR-CPR	
NORDIA S.A. 364 Kifissias Av., 15233 Chalandri, Athens/ Greece	
EN 998-2:2016 MARMOLINE LM 400 General purpose masonry mortar (G)	
Compressive strength:	M10
Shear bond strength:	0.15 N/mm <sup>2</sup>
Reaction to fire:	Class A1
Water absorption:	≤ 0.5 kg/m <sup>2</sup> min <sup>0.5</sup>
Water vapour permeability (μ):	15/35
Thermal conductivity:	0.73 W/mK (λ <sub>10,dry</sub> P=50%)
Chloride content:	≤ 0.1%
Workable life:	130 min
Durability:	NPD
Dangerous substances:	see SDS

## APPLICATION:

**Mixing ratio:** 3.1 – 3.8 lt /bag of 25 kg

**Consumption:** 15 - 16 kg /m<sup>2</sup>, per 1 cm thick coat of fresh mortar

- Application mode:**
- Check and prepare the application surface.
  - Mix by means of a cement mixer or a special mixing machine, until a homogeneous, lump-free mixture is obtained.
  - MARMOLINE LM 400 is applied in the same way as with traditional materials.
  - For stones with adhesiveness problems, it is recommended to apply first on their surface the KM 100 adhesive.
  - It is recommended to add MARMOLINE MP 20 resin to a ratio of 50% in the mixing water of the fresh mortar, as well as to wash thoroughly the marbles, granites or other stone boards before fixing them on clean MARMOLINE cement screed (GB 30 - GTL 30 - FLOW 200 - FLOW SL 500)
  - The boards must be fixed within 10 minutes and before the fresh mortar skins-over.
  - Pay special attention when fixing white marbles, to avoid any stains coming from dirty mixing water, or wood, oils, coffee, cigarette butts, etc on the substrate
  - On outside stairs and in courtyards, avoid the use of bricks behind or under marbles, because over time and due to humidity, the colour of the brick may pass through the marble

**ATTENTION:**

- The content of the bag should be protected from humidity
- Do not add excessive amounts of water because this can reduce the product's strength and cause cracks
- Not recommended for use in extreme weather conditions (frost or heatwave). Application temperature +5°C to +35°C

The above application guidelines are indicative, for the correct use of the product. For more technical details please contact the company's technical department.

*We guarantee the quality of all our products, on the basis of their technical specifications, as described in the Declaration of Performance (CE) and this technical data sheet. Such guarantee refers only to the products that we deliver for use and never to its application or final result, which largely depend on the experience and quality of work of each user and on the application conditions. The user is advised to test the product on a small scale, and if he is satisfied with the result, then to use the product on large scale in his project. This edition of technical data sheet automatically cancels any previous version*