

EN 1504-2

EN 14891  
CM O2

# AQUATA ELASTIC

Elastic two component  
waterproofing slurry

EN 14944-3

CEN/TS 14416

EN ISO 2812-1

ISO/TS 11665-13

## DESCRIPTION

Elastic cementitious slurry for waterproofing of concrete and masonry. Consists of two components: (A) white, cement-based dry mortar, with selected quartz aggregates and special additives and (B) high performance acrylic-based liquid.

- Sealing and coating of holes of traverses to ensure waterproofing
- Suitable for applications on planted roofs. Provides resistance to root penetration (CEN/TS 14416)

## FIELDS OF APPLICATION

- Waterproofing of concrete that is subject to small movements or cracks
- Protection of the concrete from atmospheric agents
- Waterproofing coating on roofs, with the use of a fiberglass mesh, where necessary
- Sealing of basements, foundations, water tanks and pools (before the installation of tiles)
- Suitable for use beneath ceramic tiling bonded with adhesives (in accordance with EN 14891)
- Waterproofing of concrete tanks storing water intended for human consumption (In accordance with EN 14944-3)

## CHARACTERISTICS/ADVANTAGES

- Resistant to negative or positive water pressure
- Vapor permeable
- Quick and easy application
- Crack bridging capability
- Environmentally friendly
- Resistant to solar radiation
- Resistant to contact with sewage (EN ISO 2812-1)
- It functions as a radon barrier (ISO/TS 11665-13)

## PRODUCT INFORMATION

<b>Composition</b>	<ul style="list-style-type: none"> <li>• Component A: Portland cement, selected quartz aggregates and special additives</li> <li>• Component B: Acrylic based liquid</li> </ul>
<b>Appearance/Color</b>	White powder & liquid
<b>Packaging</b>	<ul style="list-style-type: none"> <li>• Component A: Paper bag 25 kg - 1500 kg pallet</li> <li>• Component B: Plastic container 8.75 kg</li> </ul>
<b>Storage conditions</b>	Store in the original, closed, sealed packaging, protected from direct sunlight and frost and at temperatures from +5°C to +35°C
<b>Shelf life</b>	12 months from date of manufacture

## TECHNICAL CHARACTERISTICS

**Specific gravity of wet mortar :** ~ 1.55 kg/lit (+20°C) (αναμικξη συστατικών 1 και 2)

*the following data refer to material applied at a thickness of 2 mm:*

<b>Water vapour permeability:</b>	Class I ( $s_D < 5$ m)	(EN ISO 7783)
<b>CO<sub>2</sub> Permeability :</b>	$s_D > 50$ m	(EN 1062-6)
<b>Adhesion strength by «pull-off» test :</b>	$\geq 1.0$ MPa	(EN 1542)
<b>Waterproofing:</b>	Resistant to positive and negative water pressure 5 bar	(EN 12390-8)
<b>Crack bridging ability :</b>	Method A – Static: Class A4 at -10°C (>1.25 mm) Method B - Dynamic: Class B2 at -10°C, tested with 1000 cycles of periodical change of crack width (0.10 – 0.15 mm)	(EN 1062-7)
<b>Capillary water absorption :</b>	$w < 0.1$ kg/m <sup>2</sup> h <sup>0.5</sup>	(EN 1062-3)
<b>Use beneath ceramic tiling bonded with adhesives :</b> <i>The tile adhesive used in the test was MARMOLINE FLEX 2000 (C2TES1):</i>	Class: CM O2 Impermeable to water under pressure (1.5 bar for 7 days) Initial adhesion: 1.0 N/mm <sup>2</sup> (> 0.5 N/mm <sup>2</sup> ) Adhesion after immersion in water: 0.7 N/mm <sup>2</sup> (> 0.5 N/mm <sup>2</sup> ) Adhesion after heating: 1.2 N/mm <sup>2</sup> (> 0.5 N/mm <sup>2</sup> ) Adhesion after freeze-thaw cycles: 0.7 N/mm <sup>2</sup> (> 0.5 N/mm <sup>2</sup> ) Adhesion after immersion in lime water: 0.6 N/mm <sup>2</sup> (> 0.5 N/mm <sup>2</sup> ) Crack bridging ability at 23°C: 1.84 mm (> 0.75 N/mm <sup>2</sup> ) Crack bridging ability at -20°C: 0.99 mm (> 0.75 N/mm <sup>2</sup> )	(EN 14891)

<b>Product suitable for contact with water intended for human consumption :</b>	After appropriate tests/measurements, it was proven that the product meets the requirements of the standard referring to the effects of cementitious products on water intended for human consumption (migration of substances). (EN 14944-3)
<b>Radon barrier:</b>	The product functions as a radon barrier, as proven following specific testing in a specialized laboratory. ISO/TS 11665-13:2017
<b>Resistance to root penetration:</b>	The product is not being penetrated by plant roots, as demonstrated by appropriate laboratory test. CEN/TS 14416
<b>Resistance to contact with sewage water:</b>	The product is resistant to contact with sewage water, without showing cracks or peeling off, as demonstrated following appropriate laboratory testing through exposure to a corresponding environment. EN ISO 2812-1

## APPLICATION INFORMATION

<b>Substrate temperature</b>	+5°C / +35°C
<b>Ambient temperature</b>	+5°C / +35°C
<b>Mixing ratio</b>	Component B (8.75 kg) / Component A (25 kg)
<b>Consumption</b>	Coverage with 1 kg: 0.60 – 0.75 m <sup>2</sup> , depending on the project's requirements and the thickness of the application

## DIRECTIONS OF USE

### SUBSTRATE PREPARATION

The substrate should be clean and structurally sound without cracks.

Before the application of AQUATA ELASTIC, you should water the substrate until saturated and remove any standing water.

### MIXING

Empty the liquid (component B) in a clean container, leaving a small quantity inside the container. Add the dry mortar (component A) slowly to the liquid, while you stir with the appropriate mixer. Mixing is performed with a mechanic mixer at a slow speed, until the mixture is homogenized and lump-free.

Leave the mixture to settle for 3 minutes and mix again, adding the rest of the amount of liquid. You should not add water to the mixture. During application, stir the mixture again at regular intervals.

### APPLICATION

The material is applied in two layers. Apply the first layer with a brush, by pressing the material on the surface. For applications where high stresses are expected to occur, it is recommended to reinforce the system with the MARMOLINE anti-alkaline fiberglass mesh (160 gr/m<sup>2</sup>), which is placed immediately after the application of the first layer, when the material is still fresh.

The second layer can be applied (with a brush, spatula or roller), once the first layer has dried, and always vertically to the first layer.

Period between the two layers: minimum time 12 hours and maximum time 48 hours at 20°C.

During summer months you should cure the mortar by spraying it with water and during winter months by covering it with plastic sheets/tarps (do not spray with water).

Curing is recommended to last for 3 days, while the material is protected from strong wind, extreme temperatures, frost and rain.

## TOOLS CLEANING

Fresh material should be removed from the equipment with water immediately after application. Hardened/mature material can only be removed by mechanical means.

## IMPORTANT NOTICE

- The application of the adhesive and installation of the tiles should be carried out at temperatures between +5°C and +35°C, without exposure to direct sunlight and strong wind.
- Apply only to stable, well-prepared substrates.
- Do not add any other material to the mixture.
- Do not add extra water to the material that has already started to set.

## COMPLIANCE WITH STANDARDS

CE marking and Declaration of Performance based on standards EN 1504-2 (surface protection systems for concrete) and EN 14891 (liquid applied water impermeable products for use beneath ceramic tiling bonded with adhesives).

Meets standards EN 14944-3 (for suitability of cementitious materials for contact with drinking water) and CEN/TS 14416 (for resistance to roots penetration), EN ISO 2812-1 (for resistance to contact with liquids other than water, and specifically with


sewage), ISO /TS 11665-13 (barrier to the diffusion of radon from the soil)


## HEALTH, SAFETY & ENVIRONMENTAL PROTECTION

Detailed information and instructions regarding the safe management of the product and in matters of Health & Safety, are provided in the most recent Safety Data Sheet (SDS), copies of which are available on the company's website <https://marmoline.gr/> or upon request.

## LEGAL NOTICE

We guarantee the quality of all our products, based on 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 depends 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. All data stated in this Technical Data Sheet are based on laboratory tests. The really measurable data might differentiate due to conditions that are not subject to our control. The recommendations and implementation instructions must be considered by the user as indicative, and always with given that the product has been traded and traded and stored according to its instructions. As it is not possible to control the parameters/conditions of its application product in practice, no guarantee is provided for the final result of each application. Consequently, no legal liability of the Company can be established based on the information and instruction given in this Technical Data Sheet. The Company reserves the right to modify data listed in this Product Data Sheet, with no previous warning. Users must refer to the latest version of the product Technical Data Sheet.

 21 DoP: 086 MARMO-CPR
NORDIA SA 364 Kifissias Av., 15233 Chalandri, Athens, Greece
EN 14891:2012 AQUATA ELASTIC Two component cementitious liquid-applied water impermeable product, with improved crack bridging ability at low temperature (CM O2), for use beneath ceramic tiling bonded with adhesives (class C2 S1 according to EN 12004 standard)
Initial tensile adhesion strength: $\geq 0.5$ N/mm <sup>2</sup> Water tightness: No penetration Crack bridging ability at 23°C: $\geq 0.75$ mm Crack bridging ability at very low temperature (-20°C): $\geq 0.75$ mm Tensile adhesion strength after heat ageing: $\geq 0.5$ N/mm <sup>2</sup> Tensile adhesion strength after water contact: $\geq 0.5$ N/mm <sup>2</sup> Tensile adhesion strength after contact with lime water: $\geq 0.5$ N/mm <sup>2</sup> Tensile adhesion strength after freeze-thaw cycles: $\geq 0.5$ N/mm <sup>2</sup> Dangerous substances: See product's SDS  see detailed DoP in <a href="https://marmoline.gr">https://marmoline.gr</a>

 14 DoP:209 MAR-CPR 0906
NORDIA S.A. 364 Kifissias Av., 15233 Chalandri, Athens/ Greece
EN 1504-2:2004 AQUATA ELASTIC Surface protection products -Coating
Permeability to water vapour : class I Permeability to carbon dioxide : $s_p > 50$ Adhesion strength by pull-off test: $\geq 1.0$ MPa Crack bridging properties (Method A - Static) : A4 (-10° C) (Method B - Dynamic) : B2 (-10° C) Capillary absorption and permeability to water : $w < 0.1$ kg/m <sup>2</sup> h <sup>0.5</sup> Dangerous substances: <i>comply with §5.3</i> Reaction to fire: B2-s1,d0  see detailed DoP in <a href="https://marmoline.gr">https://marmoline.gr</a>