

# KL 101

EN 998-2  
M10

## Polymer modified adhesive mortar for Autoclaved Aerated Concrete Blocks (AAC)

### DESCRIPTION

Polymer modified adhesive mortar for autoclaved aerated concrete masonry. Suitable for fixing aerated concrete elements in both external and internal masonry.

The product is accompanied by an Environmental Product Declaration (EPD) regarding the environmental impact during its life cycle (EPD registration number: S-P-09964).

### ΠΕΔΙΑ ΕΦΑΡΜΟΓΗΣ

Used as an adhesive for the construction of structural elements made of aerated concrete blocks as well as other similar elements in both external and internal masonry.

Also used to fix other building materials such as decorative bricks, etc

### ΧΑΡΑΚΤΗΡΙΣΤΙΚΑ/ΠΛΕΟΝΕΚΤΗΜΑΤΑ

- Excellent adhesion even on demanding substrates
- High initial and final adhesive strength
- Extended open time
- High resistance to temperature fluctuations (heat-cold) and humidity
- Easy application
- Excellent workability
- Compatible with all types of aerated concrete blocks
- Simply need addition of water
- Indoor and outdoor use

## PRODUCT INFORMATION

<b>Composition</b>	Portland cement, aggregates of selected grain size, special additives and polymer components
<b>Appearance /colour</b>	White powder
<b>Packaging</b>	25 kg paper bag – 1500 kg pallet (60 bags)
<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

<b>Specific gravity of wet mortar:</b>	~ 1.98 kg/lit (+20°C)
<b>Grading:</b>	Up to 1 mm
<b>Compressive strength in 28 days:</b>	>10.0 MPa (EN 1015-11)
<b>Flexural strength in 28 days:</b>	>1.5 MPa (EN 1015-11)
<b>Shear bond strength:</b>	0.30 N/mm <sup>2</sup> (EN 998-2 – Annex C. Tabulated value)
<b>Workable life:</b>	~4 hours (EN 1015-9)
<b>Correction time:</b>	~16 min (EN 1015-9)

## ΠΛΗΡΟΦΟΡΙΕΣ ΕΦΑΡΜΟΓΗΣ

<b>Substrate temperature</b>	+5°C / +35°C
<b>Ambient temperature</b>	+5°C / +35°C
<b>Mixing ratio</b>	~6.8 lt water / 25 kg bag
<b>Maximum application thickness</b>	5 mm
<b>Consumption</b>	1 bag of 25 kg is needed for 1.4 – 1.6 m <sup>3</sup> of aerated concrete.

## DIRECTIONS OF USE

### SUBSTRATE PREPARATION

Check that the substrate is clean, dry and free from loose particles and other materials

### MIXING

Add ~6.8 liters of water in a clean container and pour the dry mortar bag gradually, stirring constantly, preferably with an electric drill at low speed so that a homogeneous mass of mortar without lumps will be created. Leave the mixture for 5-10 minutes and then stir again slowly.

### APPLICATION

The laying of the mortar on the horizontal surfaces of the aerated concrete elements is completed with the use of a special-toothed spatula in thickness up to 5 mm.

The fixing – construction of the aerated concrete elements must be done within 10 minutes after laying the mortar, otherwise the mortar should be removed and fresh mortar should be relaid.

The same mortar can be used for the jointing of elements and for the coating (on spots) on the surfaces of masonry.

### 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

- Not recommended for use in extreme weather conditions (frost or heatwave). Application temperature +5 °C to +35 °C.
- 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

## COMPLIANCE WITH STANDARDS

CE marking and declaration of performance as M10 as thin layer masonry mortar (T) according to EN 998-2.

## 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 .

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NORDIA SA 364 Kifissias Av., 15233 Chalandri, Athens, Greece	
EN 998-2:2016 MARMOLINE KL 101 Thin layer masonry mortar (T)	
0654	
Compressive strength :	M10
Shear bond strength	0.30 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)	5/20
Thermal conductivity:	0.37 W/mK (λ <sub>10,dry</sub> P=50%)
Chloride content:	≤ 0.1%
Workable life:	240 min
Maximum grain size	1 mm
Correction time	16 min
Durability	NPD
Dangerous substances:	See SDS
See detailed DoP in <a href="https://marmoline.gr">https://marmoline.gr</a>	