

KL 101

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.

FIELDS OF APPLICATION

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.

CHARACTERISTICS/ADVANTAGES

- 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

Composition	Portland cement, selected granulometry aggregates, special additives and polymers
Appearance/Colour	Powder, white
Packaging	25kg bag - 1.500 kg pallet (60 bags)
Storage conditions	In the original, closed, sealed and undamaged packaging, protected from direct sunlight and frost, at temperatures between +5°C and +35°C
Storage conditions	12 months from the date of production in unopened package, in a dry place

TECHNICAL CHARACTERISTICS

Color	white	
Granulometry	Max 0,5 mm	
Specific gravity of wet mortar	1980 kg /m ³	
Compressive strength at 28 days	>10.0 MPa (EN 1015-11)	
Flexural strength at 28 days	>1.5 MPa (EN 1015-11)	
Adhesion strength:		
Average values based on production control laboratory tests:		
<i>On concrete after 28 days:</i>	1.0 N/mm ²	(EN 1348)
<i>After heating at 70°C:</i>	0.8 N/mm ²	(EN 1348)
<i>In water:</i>	0.8 N/mm ²	(EN 1348)
<i>After 25 cycles of freezing - thawing:</i>	0.7 N/mm ²	(EN 1348)
<i>Open time for application:</i>	20 minutes	
<i>Time for minor corrections:</i>	5 minutes	
<i>Pot life:</i>	3-4 hours	

APPLICATION INFORMATION

Substrate temperature	+5°C / +35°C
Environmental temperature	+5°C / +35°C
Mixing ratio	For a 25 kg bag, add approximately 7 liters of clean water
Consumption	1 bag of 25 kg is needed for 1.4 – 1.6 m ³ of aerated concrete.
Application thickness	5 mm

DIRECTIONS OF USE

SUBSTRATE PREPARATION

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

APPLICATION

Add 6.5-7 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.

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.

IMPORTANT NOTICES

- 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

TOOLS CLEANING

The tools are cleaned with hot water and soap.


HEALTH, SAFETY & ENVIROMENTAL 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 www.marmoline.gr or upon request.

LEGAL NOTICE

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.

 23 DoP: 266 MAR-CPR	
NORDIA S.A. 364 Kifissias Av., 15233 Chalandri, Athens/ Greece	
MARMOLINE KL 101	
EN 998-2:2016 Thin layer masonry mortar (T)	
<i>Compressive strength</i>	<i>M10</i>
<i>Shear bond strength</i>	<i>0.30 N/mm²</i>
<i>Reaction to fire</i>	<i>Class A1</i>
<i>Water absorption</i>	<i>≤ 0.5 kg/m² min^{0.5}</i>
<i>Water vapour permeability (μ)</i>	<i>5/20</i>
<i>Thermal conductivity</i>	<i>0.38 W/mK</i>
<i>Chloride content</i>	<i>(λ_{10,dry} P=50%)</i>
<i>Workable life</i>	<i>≤ 0.1%</i>
<i>Maximum grain size</i>	<i>240 min</i>
<i>Correction time</i>	<i>0.75 mm</i>
<i>Durability</i>	<i>16 min</i>
<i>Dangerous substances</i>	<i>NPD</i>