K100 PoroBlock



Fine-grained, cementitious, masonry mortar for autoclaved aerated concrete (AAC) blocks

Description

K100 PoroBlock is a fine-grained, cementitious, masonry mortar for autoclaved aerated concrete (AAC) blocks.

It consists of high-quality white cement, limestone aggregates of graded granulometry and special additives & resins, that prevent the material from "settling" under the weight of the masonry elements, and ensure: high mechanical strength, protection from rapid dehydration, almost negligible shrinkage during curing, excellent adhesion and workability. Does not contain lime in its composition. For its use only the addition of water is required.

It is classified as type M5 mortar according to EN 998-2.

Field of Application

K100 PoroBlock is used as a cementitious masonry mortar ideally for autoclaved aerated concrete (AAC) blocks, such as **THERMAVER** series by **TITAN**, as well as for other materials: cement blocks, natural stone, bricks, paving slabs, etc. Also suitable for rendering & leveling masonry surfaces locally. Due to its fine-grained composition, it is ideal for applications where small joint thickness of building elements, high mechanical strengths & extended drying time (protection from rapid dehydration), are required.

Suitable for indoor & outdoor usage.

Technical Data		
Technical Characteristics		
Appearance	Cementitious powder	
Colour	White	
Maximum grain size	<2mm	
Apparent density of dry mortar	1,50±0,05kg/cm³	
Application Properties@ 23oC / 50% RH		
Mixing ratio	5,5-6,0kg water per 25kg	
Apparent density of fresh mortar	1,80±0,05kg/cm³	EN 1015-6
Application temperature	5°C-35°C	
Workable time	>90min @ 20°C	
Application thickness per layer	5 – 20mm	
Open time on AAC block	5-10min	
Consumption	1,4 – 1,5 Kg/m²/mm	
Perfomance		
Compressive strength	≥10N/mm ²	EN 1015-11
Flexural strength	≥2N/mm²	EN 1015-11
Bond strength	≥0,75N/mm ² FP:B	EN 1015-12
Capillary water absorption	<0,5kg/m².min ^{0,5}	EN 1015-18
Water vapour permeability coefficient, µ	≤15/35	EN 1015-19
Thermal conductivity (λ10, dry)	0,84W/mK	EN 1745
Reaction to fire	Class A1	EN 13501-1
Reaction to fire	Class A1	EN 13501-1

Technical Data Sheet

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Directions for Use

- **1. SUBSTRATE PREPARATION:** The application substrate should be clean, solid, free of loose parts, dust, oil, tar, lime, etc. Before application, light soaking the surface with water, without creating stagnant water. In cases of highly absorbent building elements of autoclaved aerated concrete (AAC) blocks etc., as well as during the hot months (summer period), it is recommended to light soaking surface with water, without creating stagnant water, or to apply a suitable water-based acrylic primer.
- **2. MIXING:** In a clean container with pure water, gradually add the package content, under constant stirring with a low-speed electric mixer (5,5 6 It water per 25Kg **K100 PoroBlock**). Mix carefully until the mixture becomes homogeneous, without lumps and taking care not to leave any amount of package content on the walls or bottom of the container. Let the mixture rest for 5 minutes and stir again. The mixture is ready to use for the next 90 minutes at 20°C.

3. APPLICATION:

Apply **K100 PoroBlock** to the substrate with a special notched trowel, in a thickness of a few mm (<5mm) and then place and level the autoclaved aerated concrete (AAC) blocks in the desired position. The open time for micro-adjustments is approximately 10 minutes. Ensure to remove any excess material from the joints of the building elements. For other building elements, apply as usual like common masonry mortar, using a trowel. The total maximum layer thickness is <15mm. Plastering, rendering of other coverings of the building elements can follow after at least 24 hours, depending on conditions.

For further information about installation techniques, please contact to Technical Support of INTERMIX.

4. CLEANING OF TOOLS: Remove as much product as possible from tools while still fresh and clean using water. When the material hardens it can be removed by mechanical means.

Important Notes

Do not apply at substrate & environment temperatures below +5°C and above +35°C.

Do not apply in case of impeding rain for at least the next 24 hours after application.

It is recommended to protect the surfaces from strong air currents & direct, intense solar radiation using protective covers.

Do not add additional water and/or cement, gypsum, lime, or other materials that may affect the properties of the mortar.

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Packaging - Colors

Available in 25Kg paper bag package (pallet of 60 bags), in white color.

Storage

For 12 months from the date of production, in sealed, original packaging, at a cool, dry and well-ventilated place.

Consumption

 $1,4 - 1,5 \text{ Kg/m}^2/\text{mm}$.

It depends on the type of substate, the method, the tools and the application conditions.

Additional Notes

INTERMIX bagged products help keep the environment clean.

- They reduce waste and material losses
- They reduce environmental pollution.
- Their packaging is fully recyclable.

TITAN CEMENT SA 22A Halkidos Str., 111 43, Athens, Greece 24

> EN 998-2:2016 **DoP No: INTERMIX 41** Thin layer masonry mortar

Compressive strength: Class M5

Cement: 13% **Proportion of constituents:** Filler: 87%

Additives: 0,5%

< 0,1 % Contents of chlorides: Reaction to fire: Euroclass A1 ≤0,70 kg/(m²-min^{0,5}) ≤15/35

Water absorption: Water vapour permeability: Thermal conductivity: 0,84 W/mK

