

# AQUAMAT-ACTIVE

## Two-component, ultra-flexible, fast-setting, waterproofing cement-based slurry

### Description

AQUAMAT-ACTIVE is a two-component, ultra-flexible, fast-setting, waterproofing cement-based slurry. It consists of a cementitious powder modified with recycled aggregates and additives (component A) and a polymer emulsion (component B). It offers the following advantages:

- Easy application with a trowel at a thickness of up to 4 mm in one layer.
- Fast setting – the treated surface becomes quickly resistant to rain, after just 4 hours.
- After drying, it forms a highly flexible, seamless, and joint-free membrane.
- Exceptional crack-bridging ability.
- Total waterproofing against positive hydrostatic pressure up to 5 atm according to EN 12390-8. It can also withstand negative hydrostatic pressure.
- Excellent adhesion to any substrate, including concrete, cement screed, plaster, masonry, cement block, and brick.
- Resistance to frost and UV radiation.
- Adhesion to slightly wet surfaces without prior priming.
- No corrosive effect on the reinforcing steel in concrete.
- Suitable also for brush application.
- Environment-friendly – contains recycled raw materials.

Certified according to EN 1504-2 and classified as coating for surface protection of concrete. Certificate No.: 2032-CPR-10.11. CE marked.

### Fields of application

Suitable for waterproofing of surfaces made of concrete, cement blocks, bricks, solid bricks, etc., in cases ranging from simple moisture to water under pressure. Ideal for waterproofing of below ground structures (basement walls, foundations, manholes, etc.) and of surfaces under cement screeds and masonry to stop rising damp.

### Technical data

	Component A cementitious powder	Component B aqueous polymer dispersion
Base:		
Colors:	grey	white
Mixing ratio: (by weight)	~ 1.36 parts (14.4 kg)	1 part (10.6 kg)
Mixing time:		<u>Wet mix:</u> ~ 3 min
Bulk density of dry mortar:		1.03 ± 0.05 kg/l
Bulk density of fresh mortar:		1.00 ± 0.1 kg/l
Pot life:		45 - 60 min (+23°C)
Application temperature:		+5°C - +35°C
<u>Final properties according to EN 1504-2 (Thickness layer ≥ 2.0 mm)</u>		
Adhesion strength: (EN 1542, requirement without traffic: ≥ 0.8)		1.0 N/mm <sup>2</sup>
Capillary absorption and permeability to water: (EN 1062-3, requirement: $w < 0.1 \text{ kg/m}^2 \cdot \text{h}^{0.5}$ )		0.0048 kg/m <sup>2</sup> ·h <sup>0.5</sup>
Water vapor permeability: (EN ISO 7783-1) (Permeable: Class I: $S_d < 5 \text{ m}$ )		$S_d = 1.21 \text{ m}$
Permeability to CO <sub>2</sub> : (EN 1062-6 Method A, requirement $S_d > 50 \text{ m}$ )		456 m
Tensile stress at break: (EN ISO 527-1 & -2)		≥ 1.10 N/mm <sup>2</sup>
Tensile strain at break: (EN ISO 527-1 & -2)		≥ 43%
Water penetration under positive hydrostatic pressure: (DIN EN 12390-8, 3 days at 5 bar)		no penetration
Water penetration under negative hydrostatic pressure: (at 1.5 bar)		no penetration

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Crack-bridging ability:  $\geq 2.1$  mm (+23°C)  
(EN 14891)

## Durability against\*:

- Rain: ~ 4 hours
- Walkability: ~ 4 hours
- Water under pressure: 24 - 72 hours
- Backfill: 24 - 72 hours

\*+23 ± 2°C και 50% ± 5% RH

## Directions for use

### 1. Substrate preparation

- The substrate must be clean, free of oil or grease, loose material, dust, etc.
- Water leaks should be plugged with AQUAFIX ultra rapid-setting, cementitious leak-plugging mortar.
- Any cavities on concrete surface should be filled and smoothed out with DUROCRET, RAPICRET or a cement mortar improved with ADIPLAST, after loose aggregates have been removed and the surface has been well dampened.
- Starter bars and spacers should be cut to a depth of about 3 cm into concrete and holes should be filled, as described above.
- Existing construction joints are opened longwise in a V shape to a depth of about 3 cm and are subsequently filled, as above.
- Corners, like wall-floor junctions, should be filled and smoothly rounded with DUROCRET or a cement mortar improved with ADIPLAST (formation of a fillet, triangular in cross section, with sides of 5-6 cm).
- In case of masonry walls, joints should be first filled carefully, otherwise it is recommended to apply a cement mortar layer first improved with ADIPLAST.
- For waterproofing basements in old buildings, the existing plaster should be removed to a height of at least 50 cm above water level, before proceeding as above.
- In case a flat surface formation is required (smoothing, slope creation, etc.) the use of DUROCRET, RAPICRET or a mortar improved with ADIPLAST is recommended.

### 2. Application

The 14.4 kg bag (component A) is added to the 10.6 kg of the liquid component B under continuous stirring, until a homogeneous paste is obtained. The substrate should be well dampened but without standing water.

The material is applied with a trowel in at least two layers. Each new layer is applied after the previous one has dried. Depending on the water load, additional layers may be necessary.

For brush or spray application, component B (resin) must be diluted 5-10% by weight with clean water.

The freshly coated surface must be protected from high temperatures, rain and frost.

In case AQUAMAT-ACTIVE needs to be locally reinforced (inside corners where forming fillets is not necessary, junctions, etc.), the use of a 10 cm wide fiberglass mesh strip (65 g/m<sup>2</sup>) or the 12 cm wide JOINT SEALING TAPE AR is recommended

## Consumption

Approx. 1.2 kg/m<sup>2</sup>/mm of dry film thickness.

## Packaging

25 kg packaging (14.4 kg cementitious powder + 10.6 kg emulsion).

## Shelf life – Storage

9 months from production date if stored in original, sealed packaging in frost-free and dry conditions, protected from direct sunlight.

## Remarks

- In case of water under pressure, the structure bearing the waterproofing layer (wall, floor, etc.) should be properly designed to be sufficiently static to withstand hydrostatic pressure.
- Temperature during application should range between +5°C and +35°C.
- Due to cement content, component A of AQUAMAT-ACTIVE reacts with water forming alkaline solutions, thus is classified as irritant.
- Please consult the instructions for safe use and precautions written on the packaging before use.

# AQUAMAT-ACTIVE

## Volatile Organic Compounds (VOCs)

According to Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory j, type WB, is 140 g/l (2010) for the ready-to-use product.

The ready-to-use product AQUAMAT-ACTIVE contains a maximum of 140 g/l VOC.



2032

### ISOMAT S.A.

17<sup>th</sup> km Thessaloniki – Ag. Athanasios  
P.O. BOX 1043, 570 03 Ag. Athanasios, Greece

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### 2032-CPR-10.11

DoP No.: AQUAMAT-ACTIVE / 1650-01

EN 1504-2

Surface protection products  
Coating

Permeability to CO<sub>2</sub>: Sd > 50 m

Water vapor permeability: Class I (permeable)

Capillary absorption:  $w < 0.1 \text{ kg/m}^2 \cdot \text{h}^{0.5}$

Adhesion:  $\geq 1.0 \text{ N/mm}^2$

Reaction to fire: Euroclass F

Dangerous substances comply with 5.3

### ISOMAT S.A.

BUILDING CHEMICALS, MORTARS & PAINTS

HEADQUARTERS – THESSALONIKI, GREECE

17<sup>th</sup> km Thessaloniki – Ag. Athanasios Road

P.O. BOX 1043, 570 03 Ag. Athanasios, Greece

T +30 2310 576000

[www.isomat.eu](http://www.isomat.eu) e-mail: [support@isomat.eu](mailto:support@isomat.eu)