

AQUASMART® -PB

Water-based, Bitumen extended Polyurethane liquid membrane for waterproofing.

DESCRIPTION

AQUASMART®-PB is a bitumen extended, water based polyurethane coating with exceptional thixotropic properties ideal for the waterproofing of foundation walls and wet rooms. The material unlike most bitumen emulsion-based material, is quick drying and can be applied in thick coats. Furthermore, the material has the characteristics of a true elastomer and does not resemble the thermoplastic materials of the same genre.

As with all the products in the **AQUASMART®** range, **AQUASMART®-PB** is available in a fire-retardant version: **AQUASMART®-PB-FR**.

Apply with brush, roller or airless spraying in one or two coats with minimum total consumption of 2-3 kg/m² reinforced with geotextile fabric available from **ALCHIMICA®**.

CERTIFICATION

CE certified acc. EN 1504-02
No: 2928-CPR-55 (AQUASMART PB).
See table below.

RECOMMENDED FOR

Waterproofing and protection of:

- Foundation walls,
- Wet rooms

LIMITATIONS

Not recommended for:

- Unsound substrates,

FEATURES & BENEFITS

- Water based
- Easy to apply & repair.
- Thixotropic

- Seamless.
- Elastic.
- Quick curing

APPLICATION PREREQUISITES

Can be successfully applied on:

Concrete, fibrous cement, cement roof tiles, wood, corroded metal, galvanized steel. For information about other substrates, please contact our tech department.

Standard concrete substrate conditions

Hardness: $R_{28} = 15 \text{ MPa}$.

- Humidity: $W < 10\%$.
- Temperature: $5-35 \text{ }^{\circ}\text{C}$.
- Relative humidity: $< 85\%$.

Suitable primers:

AQUASMART®-DUR, **MICROSEALER-PU** depending on the substrate. Please contact our technical department for primer selection advice.

APPLICATION PROCEDURE

Clean the substrate using a high-pressure washer, if possible. Remove oil, grease and wax contaminants. Cement laitance, loose particles, mould release agents, cured membranes must also be removed. Surface irregularities should also be filled.

Priming:

Apply recommended primer according to Technical Data Sheet specifications.

Mixing:

Mix thoroughly before application. Although thinning is not necessary, the material can be further thinned by 5-10% water. In the case of airless spraying, dilution with water is highly recommended.

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Application:

Apply with roller, brush or airless spraying in two coats.



Do not apply under conditions of extreme wet weather or imminent rain or near freezing temperature. As is the case with all water-based materials, the coating should be left to fully cure/dry for at least 5 days before tile adhesive and tiles are applied over in wet room waterproofing applications. Similarly, in foundation wall waterproofing a minimum of 5 days of curing in dry conditions is required. The dried coating should be covered with a protective coat to protect it permanently from static, dynamic and thermal wearing and only then is it possible to refill the excavation pit. Outdoor weathering over an extended period must be avoided as this might lead to cracking on the surface.

CONSUMPTION

Minimum total consumption: **2-3 kg/m²**.

CLEANING

Clean tools and equipment with water.

SHELF LIFE

Can be kept for 12 months minimum in the original unopened pails in dry places and at temperatures of 5-25 °C. Once opened, use as soon as possible.

SAFETY INFORMATION

The MSDS (Material Safety Data Sheet) is available on request.

TECHNICAL SPECIFICATIONS

In liquid form (before application):

PROPERTY	UNITS	METHOD	SPECIFICATION
Viscosity (Brookfield)	cP	ASTM D2196-86, @ 25 °C	3,000-8,000
Specific weight	gr/cm ³	ASTM D1475 / DIN 53217 / ISO 2811, @ 20 °C	0.95-1.05
Required application temperature	°C	-	> 5

In cured form (after application):

PROPERTY	UNITS	METHOD	SPECIFICATION
Hardness	Shore A	ASTM D2240 / DIN 53505 / ISO R868	50
Tensile strength at break @ 23 °C	Kg/cm ² (N/mm ²)	ASTM D412 / EN-ISO-527-3	45-50 (4.5-5.0)
Elongation @ 23 °C	%	ASTM D412 / EN-ISO-527-3	> 200
Adhesion to concrete	MPa	ASTM D4541	>1,2 Mpa
H ₂ O absorption	%	-	< 4

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ALCHIMICA S.A. 7 Lampsakou, Athens-GREECE
2928-CPR-55
EN 1504-2:2004 2928 AQUASMART PB Concrete surface protection systems - Coating
www.alchimica.com

Essential characteristics	Performance	Harmonized technical specification
CO ₂ permeability, m	$S_D > 50$	EN 1504-2:2004
Permeability to water vapor, m	$S_D < 5$ Class I	
Capillary absorption, $\text{kg/m}^2 \cdot \text{h}^{0.5}$	$w < 0.1$	
Adhesion strength by pull-off test, N/mm^2	≥ 0.8	
Abrasion resistance, mg	< 3000	
Impact resistance, N.m	≥ 4 Class I	
Reaction to fire	Euroclass F	

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