

PLUVICEM GUAINA

Elasto-cement waterproofing system



Description

PLUVICEM GUAINA is a waterproofing system to produce waterproofing membranes.

Component A is an acrylic elastomer-based liquid in an aqueous solution and component B a cement-based powder that works as the catalyst and a special alkali-resistant synthetic fibre reinforcement mesh.

By mixing the two components a fluid paste is obtained, perfectly embedding the mesh.

The reinforced coat made with PLUVICEM GUAINA is treadable and can be covered with ceramic tiles, directly with glue or covered with a coloured protection for waterproof membranes.

Fields of use

Used as waterproofing agent below tiles on terraces and flat roofs, balconies, flat covers, cement screeds, parapets, walls and perimeter pavements, even directly over the old pavement without the need to demolish it.

Main advantages are the application practicality and productivity in cases where the final required thickness of the coating is very thin, on geometrically complex surfaces, the possibility to apply the product even in wintertime with short curing time, as well as the fact that it can be applied while standing upright without inhaling fumes.

Support preparation

Clean the surface thoroughly to remove anything that could affect adhesion of the product, such as saline efflorescence, mildew, old paint, greasy substances and

all parts that are loose and giving way. It is advisable to clean with a sander, jet sander or pressurized water.

Horizontal supports should have an adequate pitch.

Parts lacking screed or paving should be repaired using shrinkage-free mortar. Degraded concrete structures should be repaired.

Surfaces subject to stress, fissures or construction joints are treated using BANDELLA fixed by embedding the meshed sides with PLUVICEM GUAINA and applying a second layer.

If sealing expansion joints lay as an "inverted omega" and fix by embedding it in the waterproofing under the external meshed edges.

Drains can be treated using special preformed grilles and laid using the above technique.

If applying on very porous cement supports it is advisable to apply a coat of PLUVICEM GUAINA diluted with 30% water before applying the product, to reduce absorbency and avoid the creation of air bubbles during application.

In case of application on old non-absorbent supports (ceramic) it is recommended to clean the surface with an alkali cleaning product.

Surfaces with slight residual curing humidity of the cement compound can be treated using PLUVICEM GUAINA, in particular during winter (do not apply if the support is affected by continuous rising moisture or soaked with water).

Product preparation

Stir component A alone using an electric mixer at low speed.

Mix PLUVICEM GUAINA by slowly pouring component B (powder) into the component A (liquid) tub and stir with an electric mixer at low speed to avoid drawing in too much air, until a perfectly smooth paste without lumps is obtained. Leave the mixture to rest for about 5 minutes and then stir it again briefly before use.

To increase workability of the compound, especially during summer, the product can be diluted with 1 l. of clean water per package.

Product application

Treatment of special points such as the wall-floor edge and floor screed, internal-

external corners, drains and expansion joints is the first step of the application procedure.

To treat the wall-floor edge (internal-external corners) a thick coat of PLUVICEM GUAINA must be applied, in which a pre-cut stripe (or pre-shaped in the case of corners) of BANDTEC is embedded, after which another layer of the fresh product is applied.

The stripe must overlap the floor by at least 10 cm.

Subsequently, the horizontal surfaces must be treated, by applying a thick coat of PLUVICEM GUAINA using a roller or spray gun, onto which (the relevant area) the ARMO 100 mesh is unrolled immediately and pressed with a roller (preferably a paint roller) for a perfect impregnation of the reinforcement and expel any trapped air.

When dry apply the second coat of the product until the reinforcement is completely covered, and in any case for a total consumption of 2-2.5 kg/m².

For visible coats it is necessary to render and protect the coat using IDROGUM or VOLTAIKA.

For treadable and transitable coats tiling is required, and can be applied directly onto PLUVICEM GUAINA using cement adhesive class C2 S1/S2 EN12004/2 and respecting expansion joints which must be sealed using cartridge sealant and expanded polyethylene strip.

Yield

2.5 kg/m² of PLUVICEM GUAINA in two coats, reinforced with ARMO 100.

Packaging

PLUVICEM GUAINA is available in 20 kg packs, of which 13 kg is component A (liquid) in a tub and 7 kg of component B (powder) in a plastic bag.

Component B is placed in boxes, each containing 4 pieces.

Keep the product in a dry place and properly sealed in its original packaging, away from ice, direct sunlight and at a temperature not exceeding +35°C.

In these conditions the product will remain stable for at least 12 months.

Technical characteristics

SPECIFICATIONS for each component	COMP. A	COMP. B
Appearance	Liquid	Powder
Mass density (g/cm³)	1,25 ± 0,05	1,1 ± 0,05
Solid residue	58% ± 2%	100%
pH	9	12
Product APPLICATION DATA		
Mix ratio	Part A : Part B = 1,85 : 1	
Pot life	60 min	
Film formation temperature	from +1°C	
Application temperature range	from +5°C to +35°C	
Time before applying second layer	12 hours	
Time before covering	48 hours	
Complete hardening	5 days	
PERFORMANCE DATA		
Longitudinal break load (with ARMO 100) (EN 12311-1)	355 (N/5 cm) ± 20%	
Elongation at break (with ARMO 100) (EN 12311-1)	35% ± 15%	
Cold flexibility (EN 1109)	-20°C	
Adhesion on concrete for flexible systems without traffic (EN 1542)	> 0,8 (N/mm ²)	
Permeability to water vapour (Sd)	Between 5 and 50 m	
Reaction to fire (EN 13501-1)	Euroclass E	
Static crack bridging ability (with ARMO 100) (EN 14891 A.8.2)	> 1,50 mm	
Permeability to water under positive pressure (EN 14891 A.7)	7 days at 150 kPa no penetration	
Initial bond strength (EN 14891 A.6.2)	> 0,5 (N/mm ²)	
Bond strength after curing (EN 14891 A.6.3/5/6)	> 0,5 (N/mm ²)	

The information contained in this data sheet corresponds to the best of our experience. We cannot assume responsibility for any incorrect use of the products. You are advised to assess their suitability and conduct preliminary tests.

Packaging

	Pail size
Pluvicem Guaina	13 kg pail + 7 kg plastic bag

Pluvitec reserves the rights to change or modify the nominal values without prior notice or advice.