

PLUVELASTIC

Bi-component waterproofing elastic cement mix for external protection and waterproofing



Description

PLUVELASTIC is a bi-component cement-based mortar, obtained by mixing COMPONENT A composed of selected inert cement binders and special additives and COMPONENT B composed of synthetic polymers in aqueous dispersion. Mixing the two components it creates a paste that can be easily worked and applied either horizontally or vertically.

Fields of use

PLUVELASTIC is used for waterproofing and protecting concrete structures, increasing the durability of concrete and reinforced concrete structures, for waterproofing and protecting both rendered and masonry walls (especially wainscots), for rendering with fissures where there is a risk of small leaks, waterproofing and protecting balcony, parapet, shower cubicle and kitchen cement screed before laying down ceramic tiles, or waterproofing foundations wall and protecting structures used to contain water.

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. Degraded concrete structures should be repaired.

For joints between vertical and horizontal structures, as for foundation walls that are then back filled, it is necessary to round off the corners by making a bevel. Any iron reinforcements prone to oxidation must be treated with non-corrosive grout.

The surfaces to be waterproofed must be even and have an adequate pitch to avoid excessive accumulation of the product. If the substrate is highly absorbent, it is advisable to wet it beforehand to avoid ponding at the time of application; if chalky consolidate with acrylic primer.

Product application

Prepare PLUVELASTIC by pouring COMPONENT B (liquid) into a clean receptacle and then mixing in COMPONENT A (powder) using a drill stirrer for three minutes, until a perfectly smooth paste without lumps is formed. Use an electric mixer at low speed to avoid drawing in too much air.

Let the paste rest for at least 5 minutes and then remix it briefly before use.

The mixing ratio in weight is COMPONENT A : COMPONENT B = 3 : 1. This ratio is already ready-mixed in the packaging.

PLUVELASTIC can be worked for approximately 90 minutes.

It can be applied with a builder's trowel or spray gun; in this case fluidify the mixture by adding to the whole package 1-1.5 kg of water.

Apply at least two coats of the product, each coat should be no more than 2 mm thick.

On surfaces subject to stress or fissured supports it is necessary to embed an ARMO 150 type fibreglass reinforcing mesh in the first fresh layer of PLUVELASTIC in order to distribute the stress evenly.

To treat wall-floor or wall-wall edges apply a thick layer of PLUVELASTIC and embed a strip of BANDTEC in it and go over this again with more of the fresh product.

The strip must extend over the floor for at least 10 cm.

If present, drains can be treated using special preformed grilles and laid with the above technique.

Construction joints or fracture joints are treated using BANDELLA, embedding the mesh sides with PLUVELASTIC and then applying a second coat.

If sealing expansion joints it should be laid as an "inverted omega" and not stretched.

If laying ceramic tile covering you must wait at least 5 days and use C2 S1/S2 flexible adhesive, in accordance with EN12004/2; seal expansion joints using cartridge sealant and expanded polyethylene bead.

Yield

3.5 kg/m² of PLUVELASTIC in two coats.

Packaging

PLUVELASTIC is supplied in packs of 32 kg of which 24 kg is component A (powder in a bag) and 8 kg is component B (liquid in a can).

Keep the product in a dry place and properly sealed in its original packaging, at a temperature no less than +5°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	Powder	Liquid
Mass density (g/cm³)	1,6 ± 0,05	1,05 ± 0,05
Solid residue	100%	45% ± 2%
pH	-	9
Product APPLICATION DATA		
Mix ratio	Part A : Part B = 3 : 1	
Pot life	90 min	
Application temperature range	from +5°C to +35°C	
Time before applying second layer	24 hours	
Time before covering	5 days	
Max thickness per layer	2 mm	
PERFORMANCE DATA		
Elongation at break (with ARMO 100) (EN 12311-1)	20% ± 15%	
Adhesion on concrete for flexible systems without traffic (EN 1542)	> 0,8 (N/mm ²)	
Permeability to water vapour (Sd) (EN ISO 7783-1)	≤ 5 m (breathable)	
Water permeability rate (EN 1062-3)	W < 0,1 (kg/m ² .h ^{0,5})	
Reaction to fire (EN 13501-1)	Euroclass C	
Static crack bridging ability (with ARMO 100) (EN 14891 A.8.2)	> 0,5 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)	

Data measured at 23±2°C and R.H. 50±5% without ventilation.

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
Pluvelastic	24 kg bag + 8 kg can

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