



EFFECTTO PU



EFFECTTO PU Polyurethane microcement

Effectto PU is a two-component water-based polyurethane microcement with high performance for continuous decorative finishes for both exteriors and interiors. Effectto PU is available in a wide range of colours and three grain sizes: Big Grain, Medium Grain and Small Grain.

Properties

- Continuous seamless cladding (always respect expansion joints).
- It can be applied on almost any surface if it is level and consolidated, allowing any room to be renovated in vertical and horizontal planes.
- Applicable indoors and outdoors.
- Excellent workability and easy application.
- High hardness and good abrasion resistance.
- Greater impermeability than traditional microcement systems.
- Water-based and low in volatile organic compounds.

Technical information

PROPERTIES	SPECIFICATION	UNIT	METHOD
Characteristics Comp. A	Acrylic paste		
Non-volatile contents % Comp	78-80	%	UNE-EN ISO 3251:2020
Density Comp. A	1,6±0.1	g/cm ³	UNE-EN ISO 2811-1
Characteristics Comp. B	Polyisocyanate aliphatic	g/cm ³	
Non-volatile contents % Comp	100	%	UNE-EN ISO 3251:2020
Density Comp. B	1,14±0,1	g/cm ³	UNE-EN ISO 2811-1
Viscosity Comp. B	700-1500	MPa-s	UNE-EN ISO 2555

MIXED PROPERTIES A+B (10:0,875)	PU EFFECT COMPONENT A+B (10:0,875)		
	SMALL GRAIN	MEDIUM GRAIN	BIG GRAIN
Yield Kg/m ²	0,250	0,450	0,900
Max. thickness per layer	0,3 mm	0,5 mm	0.8 mm
Non-volatile contents % Comp A+B	79-81	79-81	79-81
VOCs (g/L)	<5	<5	<5
Pot life (min)	60	60	60
Taber Abrasion (mg) (CS17, 1000g, 1000c) UNE 48250	122	87	61
Shore D hardness (EN ISO 868:2003-10)	51	55	59
Sandpaper grit	220	80	40
Drying time between layers (h)	12-24	12-24	12-24
Curing time (days)	7	7	7

Certifications

Tests CE marking according to harmonised standard EN 1504-2:2004	Services	Harmonised standard test
Determination of the permeability to liquid water	$w = 0,0022 \text{ kg}/(\text{m}^2\text{h}^{0,5}) \text{ W3}$	UNE-EN 1062-3:2008
Determination of water vapour permeability	SD = 8.46m Class II	UNE-EN ISO 7783:2019
Determination of adhesion by direct traction	2.75 MPa (Rigid systems with traffic loads)	UNE-EN 1542:2000

Preparation of the support

All surfaces must be level and consolidated. The surface to be coated must be clean and dry. It must be free of dust, grease, soaps, paint in bad condition, etc.

The use of a primer such as PRIMECEM PLUS (non-absorbent surfaces) or PRIMACEM ABS (absorbent surfaces) is recommended to ensure perfect anchorage to the substrate, see technical data sheet for correct application. If the substrate is damp, use PRIMAPOX 100 BARRIER.

In tiles and other coverings with joints, it will be necessary to cover these joints previously with PRIMACEM JOINT and allow to dry for 24 hours before applying the primer; for correct application see product data sheet.

Depending on the ambient temperature and humidity the drying time between layers may vary. It is recommended to carry out the application between 15-25°C and with humidity not exceeding 50%.

Application

Once the substrate has been properly prepared, EFECTTO PU can be applied. Before starting the application, it is necessary to homogenise component A with the help of a mechanical stirrer or manually. To pigment, add to component A, the corresponding ARCOCEM® PLUS colour toner.

Then add component B on top of component A and mix with a mechanical stirrer at low speed. The mixing ratio is 10 parts of component A to 0,875 parts of component B. The pot life of the mixture is approximately 60 minutes.

Spread and smooth the microcement in a thin layer with the ATENEA anti-scald steel trowel and leave to dry between layers for a minimum of 12h and a maximum of 24h, depending on the environmental conditions at the time of application. For floor applications we recommend 2 layers of EFFECT PU BIG GRAIN followed by 1 layer of EFFECT PU MEDIUM GRAIN. For vertical applications two layers of EFECTTO PU BIG GRAIN followed by 2 layers of EFECTTO PU SMALL GRAIN. Sand each layer with the appropriate grit sandpaper (see technical information table).

The trowel should be positioned with respect to the plane of the substrate at an angle of about 45° in order to avoid very thin layers, which can cause burns that leave dark stains on light colours, or very thick layers, which would delay drying and the possible appearance of blisters or cracks. Do not apply fresh on fresh.

Before sealing EFECTTO PU microcement, it is recommended to let it dry for at least 24 hours. It can be sealed with any varnish from the TOPSEALER® family. It is recommended to apply two layers of TOPSEALER® DRAGON (see technical data sheet). The sealed system reaches maximum performance one week after the application of the last layer of varnish.

Presentation

Component A: is presented in 10kg packages.
Component B: is packaged in 0.875kg containers.

Cleaning of tools

The tools are washed with water immediately after use.

Storage conditions

The product should be stored in its original closed container and protected from the weather at temperatures between 10°C and 30°C, in a dry and well ventilated place, away from sources of heat and direct sunlight. The shelf life is 1 year from the date of manufacture, if stored properly.



The product must not be used for purposes other than those specified, without first having written instruction in its handling. It is always the responsibility of the user to take appropriate measures in order to comply with legislative requirements. The Safety Data Sheets of the product are available to the professional.

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