

POLYUREA PS-008

Polyurea membrane, elastic for protection and waterproofing of concrete slabs, roofs and terraces.

- Rehabilitation of terraces.
- Waterproofing of bridges.
- Waterproofing and encapsulation of fibre cement roofs.
- Waterproofing of concrete slabs.
- Waterproofing of walkways and balconies.
- Parking pavements and roofs.
- Industrial and production facilities.
- Protective coatings.



PRODUCT DESCRIPTION

POLYUREA PS-008 is a two-component polyurea. It provides a fast-curing, medium-elasticity membrane. It is 100% solid, without any solvent. Suitable only for application with a two-component hot spraying machine.

POLYUREA PS-008 is translucent, so it is easily pigmented to obtain the desired color. Its properties make it ideal for application in most commonly found applications.

RECOMMENDED USES

Its main uses are:

- Rehabilitation of terraces. Waterproofing of bridges.
- Waterproofing and encapsulation of fibre cement roofs.
- Waterproofing of concrete slabs.
- Waterproofing of walkways and balconies.
- Parking pavements and roofs.
- Industrial and production facilities.
- Protective coatings.

CARACTERÍSTICAS Y VENTAJAS

- Fast reaction and curing time.
- Almost immediate commissioning time. 100% solids.
- Excellent crack bridging properties.
- High resistance to solvents, acids and bases (consult the technical department).
- Excellent corrosion protection.

PRESENTATION

The **POLIUREA PS-008** system comes in two formats:

Part A ISOCYANATE: Metal drum of 50, 220 Kg.

Part B RESIN: Metal drum of 50, 210 Kg.

Part C PIGMENT: 1.5 Kg buckets.

Standard colours: Red-Tile 3009, Grey 7012, White 9003, Blue 5012 and 5017, Green 6010, Suede 1002, Black 9005, also custom-made according to RAL Chart request:

STORAGE CONDITIONS

Part A ISOCYANATE: 9 months from the date of manufacture, in its original containers either closed and not damaged, in a dry place at temperatures between +5° C and +30°

Part B RESIN - 6 months

PRODUCT PROPERTIES

A:B MIX RATIO (by weight)	1:1
A:B MIX RATIO (by volume)	1:1
Gel Time*	9-10 sec
Touch Time*	16-20

*Data at Temperature of the components 23 °C, if it is higher the time may decrease, if the temperature is lower the curing times may increase.

MECHANICAL PROPERTIES OF THE MEMBRANE

ENSAY O	NORM	RESULTS
Membrane density		1.10 ± 0.05 kg/l
Solids content		100%
Elongation at break	UNE-EN ISO 53510	370%
Dureza Shore (A)	UNE-EN ISO 868	65
Dureza Shore (D)	UNE EN ISO 868	20
Tensile strength	UNE-EN ISO 53510	25 MPa
Tear	UNE-EN ISO 53516	15 N/mm
Abrasion resistance	UNE-EN ISO 53527	865
Water Vapor Transmission	UNE-EN 1931:2001	μ= 2496
Adhesion		2.1 MPa on concrete
Fire Performance Test		Self-extinguishing

METHOD OF APPLICATION

The system is applied with a high-pressure spraying equipment (14-20 MPa / 2000-3000 psi), with a fixed volumetric ratio of 1:1 and provided with a heating system in the hoses, which keeps the temperature stable during spraying. It is important that the temperature in the gun is 65 to 70°C.

The system should be designed only on clean, dry surfaces free of particles from other sources.

The product has optimal adhesion on rough surfaces.

It is recommended to apply a coat of primer before spraying the **POLYUREA PS-008** system, to ensure adhesion. The application of primer-free polyureas on satin surfaces can present adhesion problems.

Due to its aromatic nature, it is recommended for indoor applications; if the use is outdoors, a protective layer of aliphatic polyurethane **PAVIFER-400 Flex** should always be applied once the membrane is at room temperature.

It can be applied in conditions of high ambient humidity. Do not apply if the wind speed exceeds 20 km/h.

For roof maintenance, the minimum application thickness must be 1.4 mm (consumption of 1.7 kg/m²). For maintenance of machinery and equipment, and pedestrian traffic, the minimum application thickness must be 2.6 mm (consumption of 2.9 kg/m²). Do not exceed 1 mm thickness per pass.

SUPPORT TREATMENT

For different substrates, the following primers are recommended:

- For concrete, **PAVIFER-305 is recommended**
- For ceramic tiles, **PAVIFER-303** or **PS PRIMER is recommended**
- For galvanized steel, the **ZINC-RICH EPOXY PRIMER is recommended.**
- For polyurethane foams, PS PRIMER is recommended.

Cementitious substrates:

New concrete must be cured for at least 28 days and must have a pull-out strength ≥ 1.5 N/mm². Cementitious or mineral substrates should be mechanically prepared using abrasive cleaning or scarification equipment to remove the surface grout layer and to achieve an open-textured surface. Any loose particles and weak concrete should be removed, and defects such as cokers and gravel nests should be left completely exposed. Support repairs, joint filling, gravel nests, and surface leveling must be carried out with the appropriate products.

Any sharp elements should be removed, e.g. with sanding. Degassing is a natural phenomenon of concrete that can produce bubbles in the following layers that are applied. Moisture content, air trapped in the concrete, and surface finish should be carefully checked before beginning any application work. Installing the membrane when the temperature is down or stable can reduce outgassing. Therefore, it is generally beneficial to apply the embedded layer in the afternoon or evening. Print the media and always use a reinforced system.

Brick:

Mortar joints should be sturdy and preferably a cleaning will be carried out.

Slate, tile, etc.:

Make sure all pieces of slate/tile are sturdy and firmly attached, replace broken or missing pieces. The vitrified tiles must be sanded before priming and then treated with **POLYUREA PS-008**

Bituminous membrane:

Make sure bituminous membranes are firmly bonded or mechanically attached to the substrate. Bituminous membranes should not have any degraded area. Always print and use a fully reinforced system.

Bituminous coatings:

Bituminous liners should not be sticky or loose-bit, mastic volatile liners, or old asphalt liners. Print and use a fully ruggedized system.

Metals:

Metals must be strong. Exposed surfaces should be prepared to a shiny metal surface. Use localized reinforcements over joints and fasteners.

Wooden supports:

Wooden supports and wood panels must be in good condition, firmly adhered or mechanically fixed.

Paints & Coatings:

Make sure the existing material is sturdy and firmly attached. Remove any oxidized layers and use localized reinforcements over the joints.

SUBSTRATE PREPARATION (primer)

These figures are theoretical and do not include any additional material, surface porosity losses, surface irregularity, variations in leveling and losses, etc.

Support	Primer n	Consumption
Cementitious (wet) substrates	PAVIFER-305 diluted with 5% water	≈ 250 g/m ²
Cementitious (dry) substrates	PAVIFER-303 diluted with 5% epoxy solvent	≈ 250 g/m ²
Brick & Stone	PAVIFER-303 diluted with 5% epoxy solvent	≈ 150 g/m ²
Tile, non-vitrified ceramic	PS PRIMER undiluted	≈ 200 g/m ²
Bituminous membrane	PS PRIMER undiluted	≈ 150 g/m ²
Bituminous coatings	PS PRIMER undiluted	≈ 150 g/m ²
Ferrous or galvanized metals, lead, copper, aluminum, brass, or stainless steel	ZINC-RICH EPOXY PRIMER	≈ 200 g/m ²
Wooden supports	PAVIFER-305 Enuled with 5% Water	
Paints	Subject to adhesion and compatibility testing	

EC DECLARATION OF CONFORMITY

It complies with the requirements of **ETE 15/0332**.

Levels of use categories according to ETAG 005:

Outdoor Fire Behavior	Broof (t1, t2, t3 o t4) Froof (t1, t2, t3 o t4) NPD: soporte de XPS
Fire Rating	F
Life:	W2
Climatic zones:	S (Severe)
Usage Loads:	P1 to P2 with a minimum thickness of 1.4 mm (1.7 kg/m ²) P3 with a minimum thickness of 2.6 mm (2.9 kg/m ²)
Slope of the cover:	S1 to S4
Minimum Surface Temperature:	TL2, -10°C
Maximum Surface Temperature:	TH4, +90°C

LEGAL NOTICES

This information and, in particular, the recommendations regarding the application and end use of the product are given in good faith, based on the current knowledge and experience of POLIUREA SISTEMAS of the products when they are correctly stored, handled and applied, in normal situations, within their useful life, in accordance with the recommendations of POLIUREA SISTEMAS

In practice, the possible differences in materials, substrates and actual conditions at the place of application are such that no warranty in terms of merchantability or fitness for particular purposes, nor any obligation whatsoever outside of any legal relationship that may exist, can be inferred from the information herein, nor from any other written advice or advice offered.

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