

Solseal PB-2K

Description:

Solseal PB-2K is a fast-curing, two-component, bitumen-extended polyurethane fluid. It produces a highly elastic membrane with strong adhesion to many types of surfaces and excellent mechanical and chemical resistance properties.

It is based on a pure elastomeric hydrophobic polyurethane resin extended with chemically polymerised virgin bitumen.



Applications:

Recommended for the Waterproofing and Protection of:

- Pile Caps and beams.
- Gypsum and cement boards.
- Polyurethane insulation foams.
- Asphalt membranes.
- EPDM membranes.
- Verandas and balconies (under tiles).
- Flower pots and roof-top gardens.
- Light roofing made of metal or fibrous cement.
- Bathrooms (under tiles).
- Roofs.
- Non-potable water tanks.
- Basements.
- Foundations.
- Bridge platforms.
- "Cut-and-cover" tunnels.
- Irrigation channels.

- **CE Marked.**
- **Excellent adhesion to most surfaces.**
- **Can be used as a joint sealant.**
- **Highly elastic membrane.**
- **Resistant to hydrocarbons.**
- **Many pigment pastes available.**

Minimum Consumption

1.5 litres/m²

Packaging (Litres)

2x5, 2x20, 2x200

Features & Benefits:

- Components easily mixed, 1:1 by volume.
- Fast curing.
- Thick, bubble-free, membrane possible.
- Being a two-component product means that the quantities not mixed can be stored for later use.
- Its low modulus gives it excellent substrate crack-bridging properties.
- Excellent adhesion on almost any surface, with or without the use of special primers.
- No thinning is required, but a solvent may be used.
- Excellent thermal resistance - the product never turns soft.
- Max service temperature 80°C, max shock temperature 200°C.
- Resistance in the cold: The film remains elastic even down to -40°C.
- Excellent mechanical properties - High Elongation, Tensile and Tear Strength, High Abrasion Resistance.
- Good chemical resistance.
- Good water vapor barrier properties.
- Can also be used as a joint sealant.

Limitations:

Not recommended for unsound substrates.

Compliance & Certification:

- CE: ETA-10/0095.
- ASTM C836-95.
- Root resistance - LGAI-06/10/2009.

Solco, Unit 51, Portmanmoor Road Industrial Estate, Ocean Park, Cardiff, CF24 5HB

Application:

Can be successfully applied on:

- Concrete/steel-reinforced concrete or otherwise.
- Fibrous cement,
- Mosaic.
- Cement roof tiles.
- Old (but well adhered) acrylic and asphalt coats.
- Wood.
- Corroded metal.
- Galvanized steel.

Concrete substrate conditions (standard):

- Hardness: R28 = 15MPa.
- Humidity: W < 10%.
- Temperature: +5°C to +35°C.
- Relative humidity: < 85%.

Priming:

Primers can be used for special conditions and substrates.

Procedure:

- Clean the surface using a high-pressure washer, if possible. Remove oil, grease, and wax contaminants.
- Cement laitance, loose particles, mould release agents, cured membranes, etc. must be removed.

Mixing:

- Mix equal volumes of the two components manually or with a low speed (300 rpm) mixer.
- Apply mixed quantities immediately. **Pot Life (of mix):** 30-45 min at 20°C.
- Note: For application by airless spraying, the mix may have to be thinned with a small quantity of polyurethane solvent, especially for low-power applicators.

Crack bridging:

- Apply Solseal PB-2K locally over any cracks larger than 1mm before the main coat.

Application:

- Apply the material with a brush, roller, spatula or airless spraying.
- Clean tools and equipment first with paper towels and then using solvent. Rollers will not be re-usable.

Shelf Life & Storage:

Can be kept for 12 months minimum in the original unopened pails in dry places and at temperatures of +5°C to +25°C. Cap tins air tightly in order to store unused quantities.

Precautions:

- Contains a small quantity of volatile flammable solvents.
- Apply in well-ventilated, no smoking areas, away from naked flames.
- In closed spaces use ventilators and carbon active masks.
- Keep in mind that solvents are heavier than air so they creep on the floor.
- The MSDS (Material Safety Data Sheet) is available on request.

Technical Data:

Property	Test Method	Value
In Liquid Form		
Viscosity (Brookfield) of Comp A: Resin (At 25°C)	ASTM D4287	1,000-1,500 cP
Viscosity (Brookfield) of Comp B: Asphaltic Mix (At 25°C)	ASTM D4287	6,000-11,000 cP
Viscosity (Brookfield) of The Mixture (At 25°C)	ASTM D2196-86	3,500-4,500 cP
Specific Weight of The Mixture (At 20°C)	ASTM D1475 / DIN 53217 / ISO 2811	0.95-1 g/cm ³
Flash Point	ASTM D93 (Closed Cup)	42C
Tack-Free Time (At 25C & 55% RH)		1-2 hrs
Recoat Time		6-24 hrs
Cured Membrane		
Service Temperature		-40C to +80C
Max Temperature Short Time (Shock)		200C
Hardness	ASTM D2240 / DIN 53505 / ISO R868	35 Shore A
Tensile Strength at Break (At 23°C)	ASTM D412 / EN-ISO-527-3	> 2 N/mm ²
Elongation (At 23°C)	ASTM D412 / EN-ISO-527-3	> 2000%
Tensile Set (After 300% Elongation)	ASTM D412	< 1%
Adhesion to Concrete	ASTM D4541	> 2 N/mm ²
Thermal Resistance (200 days at 80°C)	EOTA TR011	PASS
QUV Accelerated Weathering Test*	ASTM G53	PASS (1000 hours)
Chemical resistance (Sodium Hypochlorite NaOCl 5% for 10 days)		UNAFFECTED
Hydrolysis resistance (Potassium Hydroxide 8% for 10 days at 50°C)		UNAFFECTED
H ₂ O Absorption (10 days)		< 0.9%

* (4hr UV At 60°C (UVBLamps) & 4hr COND At 50°C)