

# MonoSeal

## Description and application

MonoSeal is a liquid, hand-applicable waterproofing membrane based on pure polyurea with 3GTX technology. It cures to form a seamless, durable and weather resistant waterproofing solution with an elongation of 1530% with excellent thermal stability.

If desired, MonoSeal can be littered in the second layer with fully dried quartz sand to achieve an anti-slip finish. This can then be finished with a UV-resistant topcoating. It is also possible to apply an anti-slip coating directly on the membrane.

## Available certificates

- **Brand EN 13501-5<sup>B</sup>Roof<sup>(t1)</sup> – Warrington Fire Gent**
- **Brand EN 13501-5<sup>B</sup>Roof<sup>(t4)</sup> – Warrington Fire Gent**

## Article number and packaging

23026-10	10 kg set
23026-20	20 kg set

## Properties

- Cold applied with a roller, brush, trowel or squeegee, ideal for applications where open fire is prohibited
- No reinforcement fleece needed because of 3GTX Technology
- Seamless waterproofing technology, no risk for leaking joints
- Can be applied on almost any surface, sometimes combined with a primer
- No aging based on UV light
- Good chemical resistance
- Does not contain plasticizers, therefore permanently elastic
- Crack bridging with an elongation of 1530%
- Vapour permeable (breathable)
- Walkable with high and low temperatures
- Excellent thermal stability
- Not sensitive to temperature and moisture

Elongation	1530% (DIN 53504)
Tensile strength	4 MPa (DIN 53504)
Shore hardness	A65 ± 5 (DIN 53505, ASTM D2240)
Wear resistance	0,3 g 1000 cycles, 1000 g load, CS18
MU value	1000 (very vapor-open)

## Properties liquid product

Colour	Approx. RAL 7024 <i>Other colours are available on project basis and on request.</i>
Density	1,26 kg/l mixed product
Volume solids	>98%
VOC quality	40 g/l
Shelf life	At least 12 months after the date of production, if stored cool in unopened packaging between 15 – 25 °C. Drums should always be placed on pallets to avoid direct contact with the floor.

## Application information

Method	Trowel, squeegee, roller or brush
Usage	1,5 – 2,5 kg/m <sup>2</sup> /layer <i>Situation dependent</i>
Mixing ratio	620 gram A : 380 gram B
Potlife**	Approx. 35 minutes
Application temp.	Surface -10 and +50 °C Product +15 and +25 °C
Water resistant*	With light rain: directly after application With heavy rain: 2 -4 hours
Walkable*	2 - 4 hours
Recoat time*	12 - 48 hours
Chemical resistant*	After 7 x 24 hours
Mechanical resistant*	After 3 x 24 hours
Dilution	Preferably not. Maximum 5% only to be added once base and hardener have been mixed. Adding thinner will affect the final physical properties.
Cleaning agent	Roca Cleaner R5518 (equipment)

The times and values given are approximate and are affected by fluctuating surface and environmental conditions such as (product)temperature, relative humidity and layer thickness. Values are giving at 2 mm.

**Be aware:** At low temperatures extra care is required when storing and mixing MonoSeal, before mixing and processing ensure that the product is stored at temperature no less than 15 °C. It is important to allow the product to acclimatise several days before processing in a room with a temperature of at least 15 °C and max. 25 °C so all products reach the correct temperature, low temperatures result in high viscosity (thicker liquid) and will lead to poor mixing and failure in application delivery.

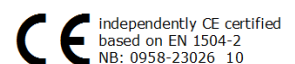
## Mixing instructions

2-component products must always be mechanically mixed, preferably with a continuously adjustable mixing machine/drill on low

\* At 20 °C and 65% RH surface.  
\*\* At 1 kg and 20 °C product.



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speed (300 – 400 RPM) or another suitable mixer/whisk. Use a clean mixing spindle which matches the size of the container. Mixing too fast and too long should be avoided in order to minimise air entrapment.

First mix component B (harder) until it is a homogenous mixture. Add component B (harder) (completely drained or scraped) to component A and mix at least 2-3 minutes until it is a homogenous mixture. To exclude unmixed materials (bottom/sides) are processed, transfer the mixture to a clean mixing bucket/tub and mix again.

If a 2-component product is applied directly from the base can (mixing can), do not empty the can completely by placing the can upside down and dripping. There are still unmixed parts on the walls of the can, which then end up in the work and can cause uncured spots.

The curing process occurs more quickly at higher temperatures and slower at lower temperatures. The potlife is partly dependent on the starting product temperature. **Be aware:** it's preferable that the mixing process receives extra care when dealing with cold temperatures.

#### Notes during application

2-component products may only be applied when the relative humidity is less than 85%. The minimum surface temperature is -10 °C and the temperature of the surface to be treated and the uncured product must be 3 °C above the dew point. See the dew point table.

#### Surface and circumstances

##### In general

Aromatic products are not fully colour/UV-proof and will slightly decolourise when exposed to UV light. If this is not desired, adding a aliphatic topcoating as finish layer based on the elasticity of this product is advised.

##### Bituminous surfaces

Surface must be clean, dry and free of algae, grease and other substances that can disrupt the bond. Loose parts must be secured in advance.

Always pay extra attention to seams and overlaps. Preferably use MonoSeal Detail for this.

##### Synthetic roofing membranes

The adhesion on synthetic roofing membranes differs per brand. An exception to this is TPO roofing. Due to the composition, no reliable

adhesion can be obtained thereon. If desired, an adhesion test can be performed for you.

Always pay extra attention to seams and overlaps. Preferably use MonoSeal Detail for this.

##### Metal surfaces

The surface must be clean, dry and free of grease. Surface needs to be sanded, made free of all dust and treated with a suitable primer. Consult the primer selection table

##### Mineral surfaces

The surface must be healthy, with a minimum compression strength of 25 MPa and a minimum adhesion strength of 1,5 MPa for normal used flooring. The load-bearing capacity of the synthetic floor depends on the compressive strength of the subfloor.

Mineral flooring must be at least 28 days old.

Moisture content surface

- cement-bound : < 4% CM (parts by weights)
- plaster-bound : < 0,5% CM (parts by weights)

Mineral surfaces need to be clean, permanently dry and free of any substances that can reduce the adhesion. Loose components must be removed.

Closed and monolithic floors must be sanded and any dust must be removed. Remove cement skin and concrete residues by grinding or sanding.

Clean contaminated and greasy surfaces (oil and grease), preferably with a steam cleaner, using a suitable cleaning agent. If this does not result in a clean, load-bearing surface, blasting should be performed.

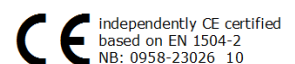
Surfaces with loose toplayers (e.g. bomb ice) can be removed, for example by blasting and making the surface dust-free. Repair if necessary.

Repairs and equalizations must be carried out professionally with the appropriate products, also with regard to the finishing layer. Any expansion joints in the surface may not be concealed, but must retain their function. In some cases it may be desirable to apply a dilation profile.

\* At 20 °C and 65% RH surface.  
\*\* At 1 kg and 20 °C product.



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Treat the surface with a suitable primer. The type of primer depends on the surface. In certain situations it may be desirable to provide the surface with a screed layer afterwards.

## Already existing and treated layers

Make old 2-component layers grease-free and roughen by blasting or sanding. Apply a suitable primer. Make sure that this does not affect the existing layer. Check old coating layers for possible detachment. If in doubt, always set up a test area and consult your supplier.

## System examples

### Balconies, terraces, walkways (concrete)

- Surface preparation
- MonoPrime P-RW 0,15 – 0,30 kg/m<sup>2</sup>/layer
- MonoSeal 2,00 – 2,20 kg/m<sup>2</sup>/layer
- MonoSeal 0,50 – 1 kg/m<sup>2</sup>/layer
  - Litter the wet layer with fire dried sand
- ProFast Floor Coating 0,25 – 0,50 kg/m<sup>2</sup>/layer

### Flat roofing (bitumen)

- Surface preparation
- MonoSeal 1 – 1,5 kg/m<sup>2</sup>/layer
- MonoSeal 1 – 1,5 kg/m<sup>2</sup>/layer

It is preferable to apply two layers.

### Details, vertical parts, overlaps and joints (bitumen)

- Surface preparation
- MonoSeal Detail

## Important

Projects and applications can vary greatly. Always contact your supplier if you have doubts about a certain application, choice of material or surface treatment.

All the technical information given in this technical information sheet is based on laboratory tests. Information can change, depending on the conditions.

## Legal notification

The information and, in particular, the recommendations concerning the application and final use of Prokol products is issued in good faith based on Prokol's current knowledge and experience of products that are correctly stored, handled and applied under normal conditions.

In practice, the differences in materials, surfaces and local conditions are such that no guarantee can be given concerning the marketability or suitability for a certain objective, nor can any

liability arise from any legal relationship based on this information, nor from any written recommendations or other advice that is given. The property rights of third parties must be respected.

Prokol guarantees that its products are free from manufacturing faults. Multi-component products are a finished product once the components have been mixed and processed. When mixed and processed correctly, the product will achieve the specifications given. Prokol can only guarantee the product when surfaces are processed and pre-treated correctly.

All orders are accepted under the current sales and delivery conditions. Users must always refer to the most recent product safety information sheet and product information sheet for the product concerned.

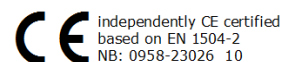
Copies of the most recent editions are provided upon request and are available at [www.prokol.com](http://www.prokol.com).

The publication of this product information sheet makes all previous product information sheets for this product invalid.

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