BUILDING TRUST

PRODUCT DATA SHEET

SikaShield® P44 MG HP 4,5 kg/m²

Plastomeric bituminous membrane surfaced with mineral granules and flexible at -10 °C

PRODUCT DESCRIPTION

SikaShield® P44 MG HP 4,5 kg/m² is an APP modified bituminous roof waterproofing membrane with a weight of 4.5 kg/m². It is reinforced with a non-woven polyester fabric dimensionally stabilised with glass fibre and is flexible at -10 °C. The top surface is coated with mineral granules, which allows the permanent exposure to UV radiation. The underside of the product has a burn-off film for easy torch-application.

USES

The Product is used as a waterproofing membrane for:
- Flat and sloping roofs
- New construction and refurbishment projects
- Exposed cap sheet in a multi-layer system

CHARACTERISTICS / ADVANTAGES

- Decorative mineral granules
- Fully bonded
- Very good mechanical properties (tensile, tear, shear)
- Flexible in cold temperatures

APPROVALS / STANDARDS

CE marking and declaration of performance based on EN 13707:2004+A2:2009 Flexible sheets for waterproofing — Reinforced bitumen sheets for roof waterproofing — Definitions and characteristics

PRODUCT INFORMATION

Chemical Base	Composition	APP modified bitumen	
	Reinforcing material	non-woven polyester fabric dimensioanlly stabilised with glass fibre	
Packaging	Roll width	1.0 m	(EN 1848-1)
	Roll length	8.0 m	
	Refer to current price list for packaging variations.		
Shelf Life	24 months from date of production		
Storage Conditions	The Product must be stored in original unopened and undamaged packaging in dry conditions and temperatures between +5 °C and +35 °C. Protect the Product from direct weather exposure and sunlight. Store in a vertical position. Pallets may be stacked on top of the rolls if all following conditions are met: ▪ The rolls have a wooden board on top, separating them from the pallet above. ▪ The weight of the pallet above is equal to or less than the weight of the rolls. Always refer to packaging.		

Appearance / Colour	Top surface Bottom surface Top layer colour	Mineral Granules Polyethylene film Refer to current price list for color variations	
Mass per unit area	Mass per unit area	4.5 kg/m² ± 0.45 kg/m²	(EN 1849-1)

TECHNICAL INFORMATION

Maximum tensile force	Longitudinal (MD) Transversal (CMD)	700 N/50 mm ± 140 N/50 mm 500 N/50 mm ± 100 N/50 mm	(EN 12311-1)
Elongation at maximum tensile force	Longitudinal (MD) Transversal (CMD)	40 ± 15 [%] 40 ± 15 [%]	(EN 12311-1)
Resistance to Tearing (nail shank)	Longitudinal (MD) Transversal (CMD)	160 N ± 48 N 200 N ± 60 N	(EN 12310-1)
Joint Shear Resistance	Longitudinal Transversal	600 N/50 mm ± 120 N/50 mm 400 N/50 mm ± 80 N/50 mm	(EN 12317-1)
Flexibility at low temperature	≤ -10 °C		(EN 1109)
Water Tightness	Method B: 24 hours at 60 kPa	Pass	(EN 1928)
Reaction to Fire	Class E		(EN 13501-1)

APPLICATION INFORMATION

Ambient Air Temperature	Minimum Maximum	+5 °C +40 °C
Relative Air Humidity	Maximum	80 %
Substrate Temperature	Minimum Maximum	+5 °C +40 °C

VALUE BASE

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

FURTHER DOCUMENTS

- Guidelines and good practice for torch-applied membranes
- SikaShield® Bituminous Membranes Installation Guide

ECOLOGY, HEALTH AND SAFETY

This product is an article as defined in article 3 of regulation (EC) No 1907/2006 (REACH). It contains no substances which are intended to be released from the article under normal or reasonably foreseeable conditions of use. A safety data sheet following article 31 of the same regulation is not needed to bring the product to the market, to transport or to use it. For safe use follow the instructions given in the product data sheet. Based on our current knowledge, this product does not contain SVHC (substances of very high concern) as listed in Annex XIV of the REACH regulation or on the candidate list published by the European Chemicals Agency in concentrations above 0,1 % (w/w).

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY

SYSTEM DESIGN
Consider the following when designing the roof system:

- The supporting structure must be of sufficient structural strength to support all new and existing layers of the roof build-up.
- The complete roof system must be designed to withstand and be secured against wind uplift loadings.
- The wind uplift resistance of the adhered roofing assembly is limited by the adhesion strength of the Product to the substrate.

SUBSTRATE CONDITION
The substrate surface must be uniform, firm, smooth and free of any sharp protrusion or burrs, clean, dry, free of grease, laitance, oil, dust and loosely adhering particles.

APPLICATION

IMPORTANT

Unrolling at low temperatures

At low temperatures, the membrane becomes less flexible.

1. Be careful when unrolling to avoid damaging the membrane.

IMPORTANT

Damage through footwear

Footwear with spikes or sharp protrusions may puncture the membrane.

1. Use footwear with a flat profile when walking over the membrane.

IMPORTANT

Damage through overheating

The polyester reinforcement melts at +260 °C. If it is damaged through overheating, the membrane becomes unusable.

1. Keep moving the flame while torching to avoid overheating the membrane.

IMPORTANT

Reduced adhesion through insufficient heating

Make sure to heat the membrane sufficiently. If it is not sufficiently heated, the adhesion to the substrate, between layers or on the overlaps will be reduced.

1. If the membrane does not adhere to other elements, lift and retorch the unbonded areas.

Seasonal symbol

Note: If a seasonal symbol is printed on the roll's label, it is advisable to use the membrane during the indicated season.

Tackiness at high temperatures

Note: When laying the membrane at high temperatures, the integral adhesive will become 'tacky' and may restrict laying operations.

MAINTENANCE

Check the functionality of the auxiliary works, flashings, drainage outlets, overflow pipes etc. Remove any leaves, moss and other vegetation, which could cause ponding on the roof and overload the drainage system. To maintain the function of the roof waterproofing membrane during its lifespan, it is advisable to arrange periodically for inspection of the membrane and detailing.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

SIKA LIMITED
Watchmead
Welwyn Garden City
Hertfordshire, AL7 1BQ
Tel: 01707 394444
Web: www.sika.co.uk
Twitter: @SikaLimited