BUILDING TRUST

PRODUCT DATA SHEET

SikaShield® E57 MG EG 4,2 mm

Torch-On Roofing Membrane Based On SBS Modified, Reinforced with polyester

DESCRIPTION

Bituminous Elastomeric Waterproofing Membrane made of a special grade of bitumen modified with SBS polymers and High-density Polyester which acts as the internal reinforcement, provides high mechanical strength .

USES

- Roofing and Reroofing applications.
- Applications subject to moderate mechanical stress and high movements.
- Waterproofing for wet areas, mechanical rooms and terraces.
- Waterproofing of underground structures .

FEATURES

- Mineral type has an excellent Good U.V resistance. Compatible with all types of bitumenous waterproofing systems.
- Improved chemical resistance to acidic and alkaline solutions.
- Polyester reinforcement provides the membrane with tensile strength, tear resistance and elongation.
- Enhanced thermal resistance under a wide range of temperature fluctuation,
- Suitable for structures subjected to high water pressure.
- Upper surface is covered with an anti-adhesive finish material & lower face is laminated with thermo-fusible Polyethylene film

PRODUCT INFORMATION

Packaging	Roll size: 1.0 m (roll width) x 10 m , 8 m & 7.5 m (roll length).		
Shelf life	24 months from the production date		
Storage conditions	Rolls should be stored in an upright position in a flat properly ventilated and protected against direct sunlight, rainwater, snow and ice etc.		
Appearance and colour	Surface: Slated Membrane Upper surface finish colours: available in Grey, Green, Blue, Red , Black and white		
Length	10 m , 8 m & 7.5 m ± 1 %		(EN 1848-1)
Width	1 m		(EN 1848-1)
Effective thickness	4,2 mm ± 5 %		(EN 1849-1)
Resistance to static puncture	20 kg		(EN 12730:2001)
Resistance to dynamic puncture	1750 mm		(EN 12691)
Tensile strength	Longitudinal Transversal	950 N/50 mm ± 20% 600 N/50 mm ± 20%	(EN 12311-1)

Elongation	Longitudinal	≥ 30 %	(EN 12311-1)
	Transverse	≥ 35%	
Resistance to tear	Longitudinal	650 N	(ASTM D-5147)
	Transverse	500 N	
Joint shear resistance	Longitudinal	700 N/ 5 cm ± 20%	(EN 12317-1)
	Transverse	500 N/ 5 cm ± 20%	
Flexibility at low temperature	-15 °C		(EN 1109)
Flow resistance	100°C		(EN 1110)
Water absorption	Less than 1 %		(ASTM D-5147)
Watertightness	60 kPa Pass		(EN 1928)
Reaction to fire	Class E		(EN 13501-1)

BASIS OF PRODUCT DATA

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.

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

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.
Be careful when unrolling to avoid damaging the membrane.
IMPORTANT
Damage through footwear
Footwear with spikes or sharp protrusions may puncture the membrane.
Use footwear with a flat profile when walking over the membrane.
1. IMPORTANT
Damage through overheating The polyester reinforce?ment melts at +260 °C. If it is damaged through overheating, the membrane becomes unusable. Keep moving the flame while torch
membrane.
1. IMPORTANT
Reduced adhesion through insufficient heating
Make sure to heat the membrane sufficiently.
If it is not sufficiently heated, the adhesion to the sub?strate, between layers or on the overlaps will be reduced.
If the membrane does not adhere to other elements, lift and retorch the unbonded areas.
1. Note: If a seasonal symbol is printed on the roll's label,
it is advisable to use the membrane during the indicated season.
Note: When laying the membrane at high temperatures, the integral adhesive will become 'tacky' and may restrict laying operations.
ALIGNMEN
IMPORTANT
Avoid coinciding joints
To avoid coinciding joints, lay the membranes parallel to one another. When applying on another bituminous membrane, make sure to straddle the overlaps of the previous layer.
1. Unroll the membrane.
2. Align the membrane.
3. Re-roll the membrane before application.
MEMBRANE OVERLAPS
1-Overlap the membranes by a minimum of 90 mm on the sides and 150 mm on each end.
2. At the end overlap, cut off a corner measuring 100 mm per side at an angle of 45°. 3. Weld the overlaps with great care until you see a trickle of melted mixture about 10 mm wide coming out along the line of the overlap.
TORCHING
1-Heat the substrate and the backing film on the underside of the membrane with a gas burner. When the

backing film starts to melt, the membrane is ready to stick.
2. Roll the heated membrane forward and press it firmly against the substrate to bond it.
3. Make sure a bead of melted bitumen is visible along the full length of the overlap sides and ends when laying.

Suitable substrates for torching

- Concrete
- Perlite screed
- Bituminous membranes with a smooth surface
- Coatings (check the compatibility)
- Brick masonry
- Cementitious screeds

DETAILING

Use a sharp knife to cut in all details such as internal and external corners, upstands, vent pipes, drains, support metalwork etc.
Refer to the relevant method statement for further information on 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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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