

PRODUCT DATA SHEET

SikaShield® W162 HDPE ES IN 1,5mm

Wet Applied Polymer Modified Bituminous Waterproofing Membrane

DESCRIPTION

SikaShield® W162 HDPE ES IN 1,5mm is an adhesive bituminous waterproofing membrane wet applied to the concrete surface by the adhesive mortar SikaShield® W1 IN. It has a thickness of 1.5 mm and is flexible upto -25 °C. It is reinforced with composite reinforcement which gives high mechanical properties to the membrane. The top surface has a HDPE film and the underside has a siliconised release liner over the adhesive compound for an easy application.

USES

The Product is used as a waterproofing membrane for:

- Basements and other below ground structures
- Podiums ,Terraces,etc
- Vertical reinforced concrete retaining walls
- Single and strip foundations

Note:
The Product is not suitable for roofs permanently exposed to UV radiation and needs to be protected with screed,etc

CHARACTERISTICS / ADVANTAGES

- Can be applied on wet concrete reducing project lead time
- No-torch application allows for safe installation in confined spaces
- Fully bonded system ensures reliable waterproofing
- Watertight against lateral water migration
- Fast and easy installation
- Flame-free application
- Requires minimal surface preparation
- High impact resistance

PRODUCT INFORMATION

Chemical base	Polymer modified bitumen		
Construction	Top surface	HDPE Film	
	Bottom surface	Siliconised Release Liner	
Reinforcing material	Composite reinforcement		
Packaging	Roll width	1.0 m	(EN 1848-1)
	Roll length	20.0 m,10.0 m	
	Refer to the current price list for available packaging variations.		
Shelf life	12 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. Store in a vertical position. Do not stack pallets of the rolls on top of each other, or under pallets of any other materials during transport or storage. Always		

refer to packaging.

Colour	Top surface	Yellow
	Bottom surface	Greyish White
Effective thickness	1.5 mm ± 0.15 mm	(EN 1849-1)

TECHNICAL INFORMATION

Resistance to impact	Pass	(EN 12691)	
Resistance to static puncture	> 400 N	(ASTM E154)	
Tensile strength	Longitudinal	≥ 6 N/mm ²	(ASTM D412)
	Transverse	≥ 4 N/mm ²	
Elongation	350 % ± 10 %	(ASTM D412)	
Tear strength	≥ 18 N/mm	(ASTM D 624-2000)	
Resistance to tear (nail shank)	250 N (± 50 N) -Nail Tear	(EN 12310-1)	
Joint peel resistance	> 1.2 kN/m (Lap Peel Adhesion)	(ASTM D 1876-2008)	
Joint shear resistance	600 N/5cm (± 100 N)	(EN 12317-1)	
Foldability at low temperature	(At -25° C)	Pass,no cracks observed	(EN 1109)
Water absorption	≈ 0.65	(ASTM D5147-2018)	
Resistance to water penetration	No Leakage, when subjected to @ 7bar hydrostatic pressure	(ASTM D 5385-2020)	

APPLICATION INFORMATION

Ambient air temperature	+10 °C min. / +40 °C max
Relative air humidity	Upto 80 %
Substrate temperature	+10 °C min. / +40 °C max

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

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY

SYSTEM DESIGN

Consider the following when designing the system:

- The supporting structure must be of sufficient structural strength to support all new and existing layers of the system build-up.

- If used as a roof system, the complete system must be designed to withstand and be secured against wind uplift loadings.

SUBSTRATE CONDITION

The membrane is applied directly onto the adhesive SikaShield® W1 IN mortar after releasing the bottom liner. Refer to the PDS of SikaShield® W1 IN for further information

APPLICATION

IMPORTANT

Unrolling at low temperatures

- At very 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.

- ture the membrane.
2. Use footwear with a flat profile when walking over the membrane.

IMPORTANT

Application at less than +10 °C

This is not recommended, however if absolutely unavoidable, when applying the membranes at temperatures lower than that prescribed use heating equipment to ensure that the substrate temperature is within the given temperature range.

ALIGNMENT

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.

WET APPLICATION

Preconditions

- Before the application of the adhesive mortar, the concrete substrate has to be saturated with water.
- The adhesive mortar SikaShield® W1 IN is to be applied onto the substrate @ approx 2-3kg/sqm using a notch trowel.
- Use a water : powder of 0.33–0.37 (Refer to the Product Data Sheet of the product for further details)
- Lay the membrane directly over the wet adhesive mortar.

Installing the Membrane

- At one end of the membrane, peel away part of the release liner from the membrane's underside.
- Bond this end of the membrane to the adhesive and the substrate.
- Continue to peel away the release liner sideways from the rest of the membrane's underside.
- Bond the rest of the membrane to the adhesive and the substrate.

IMPORTANT

- If the ambient temperature is below +10 °C (though not recommended), seal the membrane overlaps by heating them with a gas torch or with hot air. Seal the membrane overlaps to avoid trapping the adhesive under the overlap, which can compromise the adhesion.
- Roll the surface of the applied membrane with a roller from the centre to the edge to remove any air bubbles.
- Push any excess of adhesive towards the opposite direction of the sealed side overlap.
- Allow the adhesive mortar to cure for at least 3-5 days at +30 °C before you start backfilling.
- Backfilling or overlay is to be done within 7 days after completion of application to prevent long term

UV exposure

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.

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.

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Product Data Sheet

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