

## PRODUCT DATA SHEET

# SikaShield® W172 HDPE 1,6 mm

Bituminous wet applied waterproofing membrane

### PRODUCT DESCRIPTION

SikaShield® W172 HDPE 1,6 mm is an adhesive bituminous waterproofing membrane. It is wet applied to the concrete surface with the adhesive mortar SikaShield® W1. It has a thickness of 1.6 mm and is flexible at -25 °C. The top surface is coated with a cross-laminated HDPE film, which gives the membrane high puncture resistance. The underside has a removable liner over the adhesive compound for easy application.

### USES

The Product is used as a waterproofing membrane for:

- Basements and other below ground structures
- Vertical reinforced concrete walls
- Single and strip foundations

The Product is used as a:

- Single layer under heavy protection

Please note:

- The Product is not suitable for roofs permanently exposed to UV radiation.

### PRODUCT INFORMATION

Chemical Base	Composition	Polymer modified bitumen
<b>Packaging</b>	Roll width	1.05 m (EN 1848-1)
	Roll length	15.0 m
Refer to the current price list for available packaging variations.		
<b>Shelf Life</b>	12 months from date of production	
<b>Storage Conditions</b>	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.	

### CHARACTERISTICS / ADVANTAGES

- No-torch application allows for safe installation in confined spaces
- Reduced project time span due to fast and easy application
- Fully bonded
- High impact resistance
- Requires minimal surface preparation
- Can be applied on wet concrete
- Fast and easy installation
- Watertight against lateral water migration

### APPROVALS / STANDARDS

- CE marking and declaration of performance based on EN 13969:2004/A1:2006 Flexible sheets for waterproofing — Bitumen damp proof sheets including bitumen basement tanking sheets — Definitions and characteristics

<b>Appearance / Colour</b>	Top surface	HDPE (High Density Polyethylene)
	Bottom surface	Removable foil

<b>Effective Thickness</b>	Effective thickness	1.6 mm ± 0.2 mm	(EN 1849-1)
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## TECHNICAL INFORMATION

<b>Maximum tensile force</b>	Longitudinal (MD)	500 N/50 mm ± 100 N/50 mm	(EN 12311-1)
	Transversal (CMD)	300 N/50 mm ± 60 N/50 mm	

<b>Elongation at maximum tensile force</b>	Longitudinal (MD)	90 % ± 15 %	(EN 12311-1)
	Transversal (CMD)	180 % ± 15 %	

<b>Joint Shear Resistance</b>	Longitudinal	350 N/50 mm ± 70 N/50 mm	(EN 12317-1)
	Transversal	250 N/50 mm ± 50 N/50 mm	

<b>Flexibility at low temperature</b>	≤ -25 °C	(EN 1109)
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<b>Flow resistance</b>	≥ 100 °C	(EN 1110)
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<b>Water Tightness</b>	Method B: 24 hours at 60 kPa	Pass	(EN 1928)
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<b>Reaction to Fire</b>	Class E	(EN 13501-1)
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## APPLICATION INFORMATION

<b>Ambient Air Temperature</b>	Minimum	+5 °C
	Maximum	+50 °C

<b>Relative Air Humidity</b>	Maximum	80 %
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<b>Substrate Temperature</b>	Minimum	+5 °C
	Maximum	+50 °C

## VALUE BASE

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

## FURTHER DOCUMENTS

- Method Statement - SikaShield® Wet Applied

## ECOLOGY, HEALTH AND SAFETY

REGULATION (EC) NO 1907/2006 - REACH: 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 this 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

When designing the waterproofing system, make sure that the supporting structure has sufficient structural strength to support all new and existing layers of the system build-up.

#### 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.

#### 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.

### 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 been saturated with water. The adhesive mortar SikaShield® W1 has been applied onto the substrate and is still wet.

1. Lay the membrane directly over the wet adhesive mortar.
2. At one end of the membrane, peel away part of the release liner from the membrane's underside.
3. Bond this end of the membrane to the adhesive and the substrate.
4. Continue to peel away the release liner sideways from the rest of the membrane's underside.
5. Bond the rest of the membrane to the adhesive and the substrate.
6. **IMPORTANT** If the ambient temperature is below +10 °C, 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.
7. Roll the surface of the applied membrane with a roller from the centre to the edge to remove any air bubbles.
8. Push any excess of adhesive towards the opposite direction of the sealed side overlap.
9. Allow the adhesive mortar to cure for at least 24 hours at +25 °C before you start backfilling.

## DETAILING

1. 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

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and uses.

## 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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