

PRODUCT DATA SHEET

Sika® Drain-500 Geo

Drainage and protection sheet for waterproofing membranes with a bonded geotextile felt layer on the dimpled side

DESCRIPTION

Sika® Drain-500 Geo is a drainage and protection sheet produced from high density polyethylene (HDPE) with 8 mm deep dimples and a filtration layer of geotextile (PP) bonded on the dimpled side.

USES

Sika® Drain-500 Geo is used as a drainage and protection sheet for preformed sheet membrane waterproofing systems, waterproofing mortars and coatings, and the Sika® White Box concept for waterproofing basements.

- As a protective film for waterproofing systems and to facilitate the drainage of water in underground works such as gardens, retaining walls, bridge foundations, etc.
- To protect waterproofing systems in tunnels, green roofs, gutters etc.

PRODUCT INFORMATION

Composition	HDPE dimpled sheet and PP geotextile	
Packaging	Roll size	2.4 m × 20.0 m
Shelf life	5 years from the date of production	
Storage conditions	The Product must be stored in the original, undamaged packaging in cool and dry conditions. It must be protected from direct sunlight, rain, snow and ice. Always refer to packaging.	

FEATURES

- High drainage capacity
- Integrated filtration layer
- Good resistance to all natural aggressive substances in groundwater and soil
- Suitable for contact with acidic (soft) water
- Can be installed on damp and wet substrates
- Sika® Drain-500 Geo forms a drainage channel in the space between the structural elements and the back-filling, soil or substrate to allow water to be drained away

CERTIFICATES AND TEST REPORTS

- CE marking and declaration of performance based on EN 13252:2016 Geotextiles and geotextile-related products — Characteristics required for use in drainage systems — Filtration, separation and drainage (F + S + D)

Appearance and colour

Black HDPE sheet with 8 mm deep dimples and with a white PP geotextile bonded on the dimpled side.



Weight	<u>Dimpled sheet</u>	<u>500 g/m² ± 25 g/m²</u>	(ISO 9864)
	<u>Geotextile</u>	<u>100 g/m² ± 10 g/m²</u>	

TECHNICAL INFORMATION

Compression resistance	200 kN/m ² ± 40 kN/m ²	(EN ISO 10319)	
Tensile strength	<u>Longitudinal (MD)</u>	<u>12 kN/m ± 2 kN/m</u>	(EN ISO 10319)
	<u>Transversal (CMD)</u>	<u>10 kN/m ± 2 kN/m</u>	
Elongation at maximum tensile force	<u>Longitudinal (MD)</u>	<u>50 % ± 10 %</u>	(EN ISO 10319)
	<u>Transversal (CMD)</u>	<u>60 % ± 10 %</u>	
Ambient maximum temperature of liquids	<u>Water</u>	<u>+30 °C</u>	
Drain flow capacity	Horizontal application at 20 kPa (S/R, i = 0.04)	0.30 l/(m·s) ± 0.06 l/(m·s)	(ISO 12958-2)
	Vertical application at 20 kPa (S/R, i = 1)	1.90 l/(m·s) ± 0.40 l/(m·s)	

APPLICATION INFORMATION

Ambient air temperature	<u>Minimum</u>	<u>+5 °C</u>
	<u>Maximum</u>	<u>+45 °C</u>

SYSTEM INFORMATION

System structure

- Sikaplan® WP waterproofing membranes
- Sikaplan® WT waterproofing membranes

Ancillary products:

- Sika® Drain Profile – special termination profile based on high density polyethylene (HDPE), dimensions 2.00 m (length) x 7 cm (width)
- Sika® Drain Plugs & Nails – for fixing

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.

IMPORTANT CONSIDERATIONS

- Do not use Sika® Drain-500 Geo in areas where it is exposed to weathering or UV-light
- When used in combination with PVC waterproofing membranes, a separation layer (geotextile) must be used between Sika® Drain-500 Geo and the membrane
- Maximum installation depth: 5 m
- Sika® Drain-500 Geo is placed with the geotextile against the soil

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

The substrate must be sound, clean and dry, homogeneous, free from contaminants such as oils and grease, dust and loose or friable particles.

APPLICATION

Strictly follow installation procedures as defined in Method Statements, application manuals and working instructions which must always be adjusted to the actual site conditions.

1. Loosely lay the Sika® Drain-500 Geo.
2. Sika® Drain-500 Geo is placed with the geotextile against the soil.
3. Fix the membrane sheets, at the top of the structural element, using Sika® Drain Plugs & Nails with a distance of 50cm between them. This fixation must be done 10cm over the waterproofing membrane.
4. To perform the overlap, the geotextile is detached, exposing 12 cm of drainage sheet, where the overlap will be made with the following sheet.
5. Sika® Drain-500 Geo is fixed mechanically in their upper part with the Sika® Drain Profile, in order to avoid any soil to intervene between the membrane sheets.
6. Mechanically spot fasten the Sika® Drain-500 Geo in accordance with the relevant Sika® application manual and installation instructions.

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.

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