

## PRODUCT DATA SHEET

# Sika® Drain-850 Geo

Dimpled drainage and protection sheet with integral filtration layer

### PRODUCT DESCRIPTION

Sika® Drain-850 Geo is a high density polyethylene (HDPE), heavy duty drainage and protection sheet with 10 mm high dimples on the bottom layer and a bonded geotextile (PP) filtration layer on the top layer.

### USES

As a protection and drainage sheet for:

- Preformed sheet and liquid applied membrane waterproofing systems
- Sika® White Box concept for waterproofing retaining walls and heavy duty use roofs/podiums

### CHARACTERISTICS / ADVANTAGES

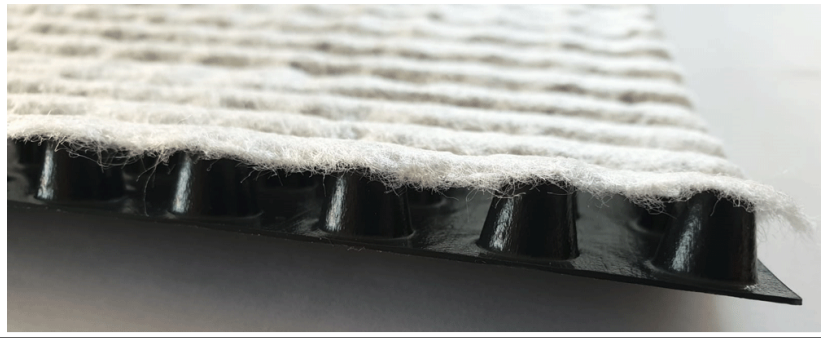
- High drainage capacity
- High mechanical/impact resistance
- Integral filtration layer
- Resistant to natural aggressive substances in ground water and soil
- Suitable for contact with soft water (aggressive to concrete)
- Can be installed on damp and wet substrates
- Forms a drainage channel in the space between the structural elements and the backfilling/soil/substrate to allow water to be drained away

### APPROVALS / STANDARDS

- CE Marking and Declaration of Performance to EN 13252 – Geotextiles and geotextile-related products intended - For use as filtration and separation (F+S+D) in drainage systems

### PRODUCT INFORMATION

<b>Packaging</b>	Roll size	
	Length	~12,50 m
	Width	~2,44 m
Refer to current price list for packaging variations		
<b>Shelf Life</b>	5 years from date of production	
<b>Storage Conditions</b>	Product must be stored in original unopened and undamaged packaging in dry conditions and temperatures between +5 °C and +35 °C. Always refer to packaging.	
<b>Appearance / Colour</b>	Top layer	Bonded filtration geotextile / White
	Bottom layer	HDPE sheet with 10 mm deep dimples / Brown or black



<b>Thickness</b>	10,0 (±1,0) mm (at 2 kPa pressure)	(EN ISO 9863-1)
<b>Weight</b>	120 (±12) g/m <sup>2</sup> (geotextile)	(EN 9864)

## TECHNICAL INFORMATION

<b>Resistance to Static Puncture</b>	1,6 (-0,32) kN (geotextile)	(EN 12236)	
<b>Resistance to dynamic perforation</b>	32 (+6) mm (geotextile, cone drop test)	(EN 13433)	
<b>Compression resistance</b>	400 (± 20 %) kPa		
<b>Tensile Strength</b>	Machine direction	12 (-2) kN/m	(EN 10319)
	Cross machine direction	10 (-2) kN/m	
<b>Elongation</b>	Machine direction	50 (±20) %	(EN 10319)
	Cross machine direction	50 (±20) %	
<b>Ambient Maximum Temperature of Liquids</b>	+32 °C (water)		
<b>Water flow capacity</b>	110 (-33) l/(m <sup>2</sup> ·s)	(EN 11058)	
<b>Drain flow capacity</b>	Horizontal application* (S/R, i= 0,04)	0,60 (-20 %) l/(m·s)	(EN 12958)
	Vertical application* (S/R, i= 1)	3,5 (-20 %) l/(m·s)	

\*Values at at 20 kPa pressure

## 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.

## LIMITATIONS

- Do not expose to permanent weathering and UV-light.
- When used in combination with PVC membranes, a separation (geotextile) must be used between the materials.
- Maximum installation depth: 10 m.

## 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 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

All substrates must be clean and free of all contaminants such as dirt, oil, grease, dust and loose friable particles to allow full capacity water flow.

## APPLICATION METHOD / TOOLS

### Installation procedure

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

### Installation method – General

The waterproofing membrane is installed either by loose laying, or mechanically fastening along the top edge to hold the membrane in place (fix along the top with a nail and washer system every 250mm to prevent sagging or pulling at the nails).

## 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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### Product Data Sheet

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