

PRODUCT DATA SHEET

Sikaplan®-1653 Adhered VOC Gas Barrier

A POST APPLIED, MULTI-LAYER, POLYETHYLENE MEMBRANE FOR BELOW GROUND WATER-PROOFING AND GAS PROTECTION

PRODUCT DESCRIPTION

Sikaplan®-1653 Adhered VOC Gas Barrier is a self-adhesive version of Sikaplan®-1651 Loose VOC Gas Barrier; composed of self adhesive with an upper surface finish of Sikaplan®-1651 Loose VOC Gas Barrier and a lower surface finish of siliconised polypropylene release film. Sikaplan®-1653 Adhered VOC Gas Barrier is used for the Gas/Waterproofing/Tanking of underground structures where harmful ground gases are anticipated, as a post-applied fully bonded membrane.

USES

- Suitable for use as ground gas, hydrocarbon protection and waterproofing at ground level or below ground installations.

CHARACTERISTICS / ADVANTAGES

- Quick and easy installation
- Can be a fully welded system
- High resistance to ground gases
- Exceptional Chemical Resistance
- Manufactured to meet the most up-to-date British Standards and guidance
- Long Term Durability (performance guaranteed for the lifetime of the building)

APPROVALS / STANDARDS

CE Mark - EN13967:2012
 NHBC Standards Compliant
 CIRIA C748 Compliant (VOC Barrier)
 BS 8485:2015 Compliant (Methane and Carbon Dioxide Barrier)
 BS 8102:2009 Compliant (Type A Waterproofing)
 BBA Certified

PRODUCT INFORMATION

Packaging	0.9m x 20m roll	
Shelf Life	24-48 months	
Storage Conditions	Must be stored vertically, indoors in protective carton.	
Length	20 m	(EN 1849-2)
Width	1 or 0.3 m	(EN 1849-2)
Thickness	Thickness	1.2 mm (EN 1849-2)
	Weight	1350 G/M ²

TECHNICAL INFORMATION

Resistance to Impact	> 650 mm	(EN 12691-B)
Resistance to Static Load	≥ 20 Kg	(EN 12730-B)
Resistance to Static Puncture	≥ 2.0 kN	(EN 12236)

Tensile Strength	MD	> 550 N / 50 mm	(EN 12311-1)
	CMD	> 400 N / 50 mm	
Elongation	Tensile Elongation (MD)	> 550%	(EN 12310-1)
	Tensile Elongation (CMD)	> 550%	
Tear Strength	MD / CMD	> 300 N	(EN 12310-1)
Reaction to Fire	E Class		(EN 13501-1)
Artificial Ageing	(Resistance to)	PASS	(EN 1296 / EN 1928)
Water Vapour Transimission	0.11-0.18 G/M ² /DAY		(EN 1931)
Water Tightness	(60 kPa)	PASS	(EN 1928)
	(196 kPa - 20m Water Head) (Basement Application)	PASS	(EN 1928)
Permeability to Methane	0.13 ml/m ² /day/atm		(EN ISO 15105-1)

APPLICATION INSTRUCTIONS

INSTALLATION

Sikaplan®-1653 Adhered VOC Gas Barrier should be installed in accordance with the product installation guidelines, and in accordance with BS 8485:2015 and Ciria C748.

Sika® Bituseal S-115 Primer should be used prior to applying Sikaplan®-1653 Adhered VOC Gas Barrier.

JOINTING AND SEALING

Sikaplan®-1653 Adhered VOC Gas Barrier must be heat welded on all laps, with welding carried out by competent personnel with suitable qualifications in accordance with best practice, and guidance contained within BS 8485:2015. Sikaplan®-1653 Adhered VOC Gas Barrier should be overlapped by at least 50mm. Pre-formed corner pieces are available for sealing corners. A separate strip is available for detailing.

FURTHER DOCUMENTS

RESISTANCE TO CHEMICALS

PASS (EN 1847/EN 1928)

Tested to EN ISO 15105-1 for methane, carbon dioxide and radon permability. Tested to EN ISO 15105-2 for various hydrocarbon permabilities.

FOR FULL DURABILITY AND CHEMICAL RESISTANCE INFORMATION, PLEASE CONTACT SIKA WATERPROOFING TECHNICAL

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.

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.

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.

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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