

PRODUCT DATA SHEET

Edition 12.2018/v1
CSC Master Format™ 07 13 00
SHEET WATERPROOFING

Sikaplan® WP-1100-30 HL

SHEET WATERPROOFING FOR BASEMENTS AND TUNNELS

Description	Sikaplan® WP-1100-30 HL is a 3 mm thick, homogeneous, polyvinylchloride (PVC-P) sheet waterproofing membrane with a 0.60 mm thick signal layer.	
Where to Use	<ul style="list-style-type: none"> Waterproofing of all kinds of below ground structures against groundwater. 	
Advantages	<ul style="list-style-type: none"> Resistant to ageing. Optimized tensile strength and elongation. UV-stable (350 MJ/m² acc. to EN 12224). Resistant to root penetration. Resistant to permanent water temperature of max. 35 °C. Dimensional stable. Without DEHP (DOP) plasticiser, based on virgin material. Flexible in cold temperatures. Heat weldable. Can be installed on wet substrates. Suitable for contact with acidic soft water (low pH aggressive to concrete surfaces). 	
Approvals / Standards	Product Declaration EN 13967 – Flexible sheets for waterproofing – Plastic and rubber basement tanking sheets. CE-Certificate No. 1213-CPD-029	
	Technical Data	
	Packaging	Roll size: 2.20 m (roll width) x 20 m (roll length). Unit weight: 3.90 kg/m ²
	Colour	Signal layer- yellow / bottom layer- black
	Appearance	Rolled sheet membrane (homogeneous) Surface: smooth Thickness: 3 mm (incl. signal layer 0.60 mm)
	Shelf Life	Rolls must be stored in their original package, in horizontal position and under cool and dry conditions. They must be protected from direct sunlight, rain, snow and ice, etc. The product does not expire during correct storage. Do not stack pallets of rolls during transport or storage.
	Properties	
	Visible defects	Pass EN 1850 - 2
	Straightness	≤ 75 mm / 10 m EN 1848 - 2
	Mass per unit area	3.90 kg/m ² (-5 / + 10 %) EN 1849 - 2
	Thickness	3 mm (-5 / + 10 %) EN 1849 - 2
	Water tightness to liquid water	Pass EN 1928 B (24 hours / 60 kPa)
	Resistance to impact	≥ 1200 mm EN 12691 : 2005
	Durability of water tightness against aging	Pass EN 1296 (12 weeks); EN 1928 B (24 h / 60 kPa)
	Durability of water tightness against chemicals	Pass EN 1847 (28 days / 23 °C); EN 1928 B (24 h / 60 kPa)
	Accelerated ageing in an alkaline environment, tensile strength	Pass Appendix C (24 weeks / 90 °C); EN 12311 - 2
	Bitumen compatibility	No performance determined EN 1548 (28 days / 70 °C); EN 1928 A
	Resistance to tear (nail shank)	≥ 780 N EN 12310 - 1
	Joint strength	≥ 1680 N / 50 mm EN 12317 - 2
	Tensile strength, machine direction	≥ 15 N / mm ² EN 12311 - 2
	Tensile strength, cross direction	≥ 14 N / mm ² EN 12311 - 2
	Elongation, machine direction	≥ 300 % EN 12311 - 2
	Elongation, cross direction	≥ 300 % EN 12311 - 2
	Water vapour transmission	18 000 μ (+ / - 5000) EN 1931 (23 °C / 75 % r. h.)
	Resistance to static load	≥ 20 kg EN 12730 (Method B, 24 hours / 20 kg)
	Reaction to fire	Class E EN 13501 - 1
	<i>Product properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, preparation, application, curing and test methods.</i>	

SYSTEM INFORMATION

System Structure

Ancillary Products:

- Sikaplan® WP Fixation Plate PVC
- Sikaplan® WP Disc 80/10 mm
- Sika® Waterbar, Type AR and Type DR

Substrate Preparation **In-situ concrete:**
Clean, sound and dry, homogeneous, free from oils and grease, dust and loose or friable particles.
Shotcrete:
The profile of the shotcrete surface must not exceed a ratio of length to depth of 5 : 1 and its minimum radius must be 200 mm. The shotcrete surface must not contain or expose crushed aggregates which could perforate the membrane. Where necessary to achieve the desired profile/surface, apply a fine shotcrete layer on the surface with a minimum thickness of 50 mm and using aggregate diameter not exceeding 4 mm. Steel (girders, reinforcement mesh, anchors etc.) must also be covered with a minimum 50 mm of shotcrete. The surface of the shotcrete must be cleaned (no loose stones, nails, wires, etc.).

Application Method **Installation method:**
Loose laid and mechanically fastened, or loose laid and ballasted in accordance with the separate Sika Method Statement for sheet waterproofing membrane installations.
Tools:
All membrane overlaps must be welded by using hand welding guns and pressure rollers or automatic heat welding machines, with individually adjustable and electronically controlled welding temperatures (such as the manual Leister Triac PID / automatic: Leister Twinny S / semi-automatic: Leister Triac Drive).

Welding parameters, such as speed and temperature must be established with trials on site, prior to any welding works.

- Limitations**
- Sikaplan® WP 1100-30HL shall only be used by Sika approved contractors.
 - **Important : The membrane is not resistant to permanent contact with certain materials including bitumen, and plastics other than PVC;** on these it requires a separation layer of geotextile (> 300 g/m²).
 - Sikaplan® WP-1100 – 30HL is not suitable as sheet waterproofing membrane for basements, when exposed permanently to non-flowing seawater at temperature exceeding 35 °C and when exposed to polluted, or waste waters.
 - Ambient maximum temperature of liquids: 35 °C (non-flowing seawater).
 - Substrate temperature: 0 °C min. / 35 °C max.
 - Ambient air temperature: 5 °C min. / 35 °C max.
 - Ensure proper ventilation (air extraction and ventilation) when thermo-welding is taking place inside an enclosed structure.
 - The membrane is not UV stabilised and therefore can not be installed on structures permanently exposed to UV light and weathering.
 - The watertightness of the structure shall be tested and approved after completion of the membrane installation works according to the requirements of the client’s specification.

Health and Safety Information This product is an article within the meaning of Article 3.3 of Regulation (EC) No. 1907/2006. A safety data sheet following EC- Regulation 1907/2006, article 31 is not needed to bring the product to the market to transport or use it. The product does not damage the environment when used as specified.

KEEP OUT OF REACH OF CHILDREN
FOR INDUSTRIAL USE ONLY

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, within their shelflife. 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 recommendations, or from any other advice offered. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. 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 or may be downloaded from our website at: www.sika.ca

SIKA CANADA INC.

Head Office
601, avenue Delmar
Pointe-Claire, Quebec
H9R 4A9

Other locations
Toronto
Edmonton
Vancouver

1-800-933-SIKA
www.sika.ca

Certified ISO 9001 (CERT-0102780)
Certified ISO 14001 (CERT-0102791)

