

## PRODUCT DATA SHEET

# Sikaplan® WP 1120-15 HL

### SHEET WATERPROOFING MEMBRANE FOR BASEMENTS AND TUNNELS

#### DESCRIPTION

Sikaplan® WP 1120-15HL is a homogenous sheet waterproofing membrane with a yellow signal layer, based on polyvinylchloride (PVC-P).

#### USES

Waterproofing of all kinds of below ground structures against groundwater.

#### CHARACTERISTICS / ADVANTAGES

- High resistance to aging
- High tensile strength and elongation
- Resistant to natural aggressive mediums in ground water and soil
- High resistance to mechanical impact
- High dimensional stability
- High flexibility in cold temperatures
- Heat weldable
- Suitable for installation on weak substrate
- Can be installed on damp and wet substrate

#### APPROVALS / STANDARDS

Tested According to various EN standards

#### PRODUCT INFORMATION

<b>Packaging</b>	Sikaplan® WP 1120-15 HL standard rolls are wrapped individually in a yellow PE-foil. Roll size: 2.00 m (roll width) x 20.00 m (roll length) Unit Weigth: 1.95 Kg/m <sup>2</sup>	
<b>Appearance / Colour</b>	Top layer: yellow Bottom layer: black	
<b>Shelf life</b>	5 years from date of production in unopened, undamaged and original packaging.	
<b>Storage conditions</b>	Rolls must be stored in a horizontal position on pallet and protected from direct sunlight, rain and snow. Do not stack pallets of rolls during transport or storage.	
<b>Visible Defects</b>	Pass	EN1850-2
<b>Effective Thickness</b>	1.5 (-5% / +10%)	EN 1849-2
<b>Straightness</b>	≤ 75 mm/10m	EN1848-2
<b>Mass per unit area</b>	1.95 (-5/+10%) kg/m <sup>2</sup>	EN1849-2

<b>Tensile Strength</b>	Longitudinal (MD)	17.0 (±2.0) N/mm <sup>2</sup>	EN 12311-2
	Transversal (CMD)	16.0 (±2.0) N/mm <sup>2</sup>	
<b>Elongation</b>	Machine Direction	≥ 300%	EN 12311-2
	Cross Machine Direction	≥ 300 %	
<b>Resistance to Impact</b>	≥ 450 mm		EN 12691
<b>Resistance to Static Load</b>	≥ 20 kg		EN 12730 (Method B 24 h / 20 kg)
<b>Water Vapour Transmission</b>	18'000 μ (+/- 5000)		EN 1931
<b>Watertightness</b>	Pass		EN 1928 B
<b>Foldability at Low Temperature</b>	-25 °C		EN 495-5
<b>Resistance to tear (nail shank)</b>	≥ 400 N(nail shank)		EN 12310-1
<b>Dimensional Change after Heat</b>	≤2 %		EN 1107-2
<b>Durability of Watertightness against Ageing</b>	Pass		EN 1296(12 weeks) EN 1928 B (24h/60kPa)
<b>Durability of Watertightness against Chemicals</b>	Pass		EN 1847 (28d,23°C) EN 1928 B (24h/60kPa)
<b>Reaction to Fire</b>	Class E		EN 13501-1
<b>Exposure to Bitumen</b>	No performance determined		EN 1548 (28d/70°C) EN 1928 A

## SYSTEM INFORMATION

<b>System Structure</b>	Ancillary products: - Sikaplan® WP laminated metal for pieces - Sikaplan® WP Disk for pieces - Sika® Waterbar, Type AR and DR for fixing pieces and waterproofing concrete joints
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## APPLICATION INFORMATION

<b>Ambient Air Temperature</b>	+5 °C min./ +35 °C max.
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## APPLICATION INSTRUCTIONS

### SUBSTRATE QUALITY

#### In-situ concrete:

Clean, sound and dry, homogeneous, free from oil and grease, dust and loose or friable particles.

#### Shotcrete:

If the substrate is rough, a fine gunite layer on the substrate with a min. thickness of 50 mm and cleaned without loosen aggregates, stones, nails wires, etc..

If steel existed, such as girders, reinforcement mesh, anchor, etc., a min. 50 mm gunite layer is a must as a cover.

Substrate should be smooth and solid.

### APPLICATION METHOD / TOOLS

#### Installation method:

Loose laid and mechanically fastened, or loose laid and ballasted in accordance with the separate Sika

Method Statement for sheet membrane installations. All membrane overlaps must be welded i.e. using hand welding guns and pressure rollers or automatic heat welding machines, with individually adjustable and electronically controlled welding temperatures. Welding parameters, such as speed and temperature must be established with trials on site, prior to any welding works.

## FURTHER DOCUMENTS

#### Notes on Application /Limitations:

Installation works shall only be carried out by Sika trained contractors, experienced in the lining of tunnels and underground structures.

The membrane is not resisted to permanent contact with material including bitumen, and plastic other than PVC; on these it requires a separation layer of Geo-textile (300 g/m<sup>2</sup>)

The Sikaplan® WP 1120-15 HL is not UV stabilized and

must not be installed on structures where it is permanently exposed to UV-light and weathering.

## 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.

## LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product data.

## ECOLOGY, HEALTH AND SAFETY

## 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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