

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 / CERTIFICATES

Tested According to various EN standards

PRODUCT INFORMATION

Packaging	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 ²
Shelf life	5 years from date of production in unopened, undamaged and original packaging.
Storage conditions	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.
Appearance and colour	Top layer: yellow Bottom layer: black
Visible defects	Pass EN1850-2

Effective thickness	1.5 (-5% / +10%)	EN 1849-2
Straightness	≤ 75 mm/10m	EN1848-2
Mass per area	1.95 (-5/+10%) kg/m ²	EN1849-2
Resistance to impact	≥ 450 mm	EN 12691
Resistance to static loading	≥ 20 kg	EN 12730 (Method B 24 h / 20 kg)
Tensile strength		EN 12311-2
	<u>Longitudinal (MD)</u>	<u>17.0 (±2.0) N/mm²</u>
	<u>Transversal (CMD)</u>	<u>16.0 (±2.0) N/mm²</u>
Elongation		EN 12311-2
	<u>Machine Direction</u>	<u>≥ 300%</u>
	<u>Cross Machine Direction</u>	<u>≥ 300 %</u>
Resistance to tear	≥ 400 N(nail shank)	EN 12310-1
Foldability at low temperature	-25 °C	EN 495-5
Watertightness	Pass	EN 1928 B
Water-vapour transmission rate	18'000 μ (+/- 5000)	EN 1931
Exposure to bitumen	No performance determined	EN 1548 (28d/70°C) EN 1928 A
Durability of watertightness against chemicals	Pass	EN 1847 (28d,23°C) EN 1928 B (24h/60kPa)
Dimensional change after heat	≤2 %	EN 1107-2
Durability of watertightness against ageing	Pass	EN 1296(12 weeks) EN 1928 B (24h/60kPa)
Reaction to fire	Class E	EN 13501-1

SYSTEM INFORMATION

System structure	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
------------------	--

APPLICATION INFORMATION

Ambient air temperature	+5 °C min./ +35 °C max.
-------------------------	-------------------------

BASIS OF PRODUCT DATA

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

FURTHER INFORMATION

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/m²)

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.

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

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.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

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.



PRODUCT DATA SHEET
Sikaplan® WP 1120-15 HL
March 2022, Version 02.02
020720101000000018

SikaplanWP1120-15HL-en-MN-(03-2022)-2-2.pdf