

Sikaplan® 14.6

Flexible PVC waterproof membrane for tunnels

Construction

Description	Sikaplan 14.6 can be used to waterproof underground structures, particularly tunnels. Provided the underground structure is protected from weathering, the membrane can be used in most tunnel environments.
Fixing Method	<ul style="list-style-type: none"> ▪ Loosely laid and ballasted ▪ Linearly fixed (i.e. for tunnel membranes)
Material	Polyvinylchloride plastified (PVC-P), reinforced membrane.
Colour	Top Layer (signal layer): Yellow, Bottom Layer: Dark Grey
Properties	<ul style="list-style-type: none"> ▪ Resistant against UV light during installation works ▪ High resistance against ageing ▪ Resistant against all aggressive natural mediums in groundwater and soil ▪ High water vapour transmissivity ▪ High resistance against mechanical impact ▪ High tensile strength and elongation ▪ High dimensional stability ▪ High flexibility in cold conditions ▪ Heat and solvent weldable ▪ Root resistant

Physical Properties as per SIA V 280, Edition 1996:

Test as per SIA V 280	Requirements as per SIA V 280	Values
Thickness	Deviation from normal thickness: -5% / +10% Lowest single value + / - 10%	Deviation from normal thickness: lowest single value: passed
Uniaxial tension test	Min. 200%	Longitudinal 300% Transversal 300%
Low temperature folding	No cracks at -20°C	passed
Heat distortion	< 0.2.00% no blisters	passed
Slit pressure resistance	5 bar over 1 h watertight	passed
Heat ageing	Weight decrease <2% Decrease of uniaxial tension <30% Ozone resistance: scale 0	passed
Compression strength	7 N/mm ² over 48 h tight	passed
Fire class	Fire class 4 Smoke class 1	passed
Behaviour in warm water	Low temperature folding No cracks at -20°C Decrease of uniaxial tension <30% Change of mass <4%	passed
Root resistance	No root perforation Ingrown root must die off	passed
Mechanical puncture	Resistance tight at a height of 750mm Falling mass 500g	passed
Joint strength	Rupture must occur outside of weld, slipping or peeling of welded parts not allowed	passed

Notice: The information, especially the suggestions with regard to the processing and usage of our product is based on the information and experience available to us under normal circumstances at time of printing. Product users should refer to the latest editions which can be ordered from us. Our general business conditions apply.

Other Properties	<ul style="list-style-type: none"> ▪ Not applicable for long term weathering exposure ▪ Not resistant in direct contact with bitumen, oil and solvent containing mediums. ▪ Not resistant in direct contact with plastics of other materials groups 												
Surface Type	Smooth												
Installation Procedure	According to the valid installation instruction of manufacture, and local regulations.												
Particulars	Accessories: fixing roundelles Sika Trocal PVC-coated PVC-coated metal sheets type S and Sika-Trocal PVC-solvent type S												
Packaging	<table border="1"> <thead> <tr> <th>Thickness</th> <th>Length</th> <th>Widths</th> <th>Packing units</th> <th>Weights – Rolls</th> <th>Weights – m²</th> </tr> </thead> <tbody> <tr> <td>2.00mm</td> <td>20.00m</td> <td>2.20m</td> <td>n/a</td> <td>114.40 kg</td> <td>2.60 kg/m²</td> </tr> </tbody> </table>	Thickness	Length	Widths	Packing units	Weights – Rolls	Weights – m ²	2.00mm	20.00m	2.20m	n/a	114.40 kg	2.60 kg/m ²
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2.00mm	20.00m	2.20m	n/a	114.40 kg	2.60 kg/m ²								
Storage	Rolls shall be stored in horizontal position, protected against sunlight, rainfall and snow in a cool dry place.												
Standards	<ul style="list-style-type: none"> ▪ Fire behaviour as per SIA 183/2 ▪ Planning and installation of flat roofs as per SIA 271 ▪ Quality management system as per DIN EN ISO 9001 ▪ Quality control by external independent laboratories ▪ Official quality certificates and agreements 												
Important Notes	<ul style="list-style-type: none"> ▪ The following ancillary products are also available: Sikaplan Corners, Sikaplan Metal, Sika Adhesives, Sika Contact Adhesives. ▪ Please contact Sika Technical Department for further information. 												
Important Notification	<p>The information, and, in particular, the recommendations relating to the application and end-use of Sika's 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 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 proprietary rights of third parties must be observed. All orders are accepted subject of our terms and conditions of sale. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request.</p> <p>PLEASE CONSULT OUR TECHNICAL DEPARTMENT FOR FURTHER INFORMATION.</p>												

