

Sikaplan® 18D

Flexible PVC waterproof membrane for roofs

Construction

Description	Sikaplan 18D is designed to install all details of the roof perimeter and the projections. It supplements the Sikaplan 12G roofing membranes.
Fixing Method	By hot air welding on installed Sikaplan G roofing membranes.
Material	Polyvinylchloride plastified (PVC-P), reinforced.
Colour	Light Grey
Properties	<ul style="list-style-type: none"> ▪ Excellent resistance against weathering ▪ Excellent resistance against: <ul style="list-style-type: none"> -ageing -hail -sparkling fire and radiant heat ▪ Resistant against common environmental influences ▪ High resistance against UV, VI, IR-rays ▪ High stability to dimensional changes ▪ High resistance against mechanical influences ▪ High tensile strength and elongation ▪ Excellent flexibility in cold conditions ▪ High water vapour permeability ▪ Excellent welding capabilities ▪ Poor resistance against bitumen

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%	Deviation from normal thickness: +2% lowest single value -1%
Uniaxial tension test	Min. 10%	Longitudinal 15% transversal 15%
Low temperature folding	No cracks at -20°C	Passed
Heat distortion	< 0.50% no blisters	Longitudinal 0.30% transversal 0.30% Passed
Water vapour permeability	No requirement	18.000
Ozone resistance	All 3 samples must show scale 0	Passed
Heat ageing	Weight decrease <2% Decrease of uniaxial tension <30% Ozone resistance: class 0	-0.60% (decrease) ± 10% class 0
Hail resistance	Approached damaging speed ≥ 17 m/s	Rigid backing 18 m/s Flexible back > 30 m/s
Artificial weathering	Change of mass ΔM <3%. 5000h, class 0	Change of mass ΔM - 0.70% class 0
Root resistance	No root perforation ingrown root must die off	Passed
Fire class	Fire class 4, smoke class 1	Fire class 4, smoke class 2

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.

Test as per SIA V 280	Requirements as per SIA V 280	Values
Behaviour in warm water	Low temperature folding: No cracks at -20°C Decrease of uniaxial tension <30% Change of mass ≤ 4%	Passed Passed Passed
Mechanical puncture	Resistance tight at a height of 300mm Falling mass 500g	Tight at falling height of 450 mm
Joint strength	Rupture must occur outside of weld, Slipping or peeling of welded parts not allowed	Passed

- Other Properties**
- Poor resistance against tar, bitumen, oil and solvent containing mediums.
 - Cannot be used in direct contact against thermal insulation materials such as – Polystyrene, Polyurethane hardfoam and other plastics.

Surface Type Smooth

Installation Procedure According to the valid installation instruction of manufacture, and local regulations.

Particulars

Auxiliary Products: Trocal S or Sikaplan 15D/18D, unreinforced membranes for detailing works, as well as prefabricated elements for corners and pipe penetrations, and Sika-Trocal PVC-coated metal sheet, type S

Top layer membranes are available in other colours on demand*:

- slate grey approx. RAL 7015
- green approx. RAL 6061
- brick red approx. RAL 8004
- white approx. RAL 9010

*Minimum order quantity required.

Packaging

Thickness	Length	Widths	Packing units	Weights – Rolls	Weights – m ²
1.80mm	20.00m	1.40m	15 rolls (420m ²)	64.40 kg	2.30 kg/m ²

Storage Rolls shall be stored in horizontal position, protected against sunlight, rainfall and snow in a cool dry place.

- Standards**
- 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**
- 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

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.

PLEASE CONSULT OUR TECHNICAL DEPARTMENT FOR FURTHER INFORMATION.

