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# PRODUCT DATA SHEET Sikaplan<sup>®</sup> WP Tape-200

Termination, fixing and sealing tape for use with the Sikaplan® WP Membrane System

## DESCRIPTION

Sikaplan<sup>®</sup> WP Tape-200 is a PVC based waterproof sealing tape with modified properties for terminations and fixings of Sikaplan<sup>®</sup> WP membranes.

## USES

Sikaplan<sup>®</sup> WP Tape-200 may only be used by experienced professionals.

As a waterproofing sealing tape that is heat weldable to Sikaplan<sup>®</sup> WP waterproofing membranes - Series 1100, 2101 and 2110, based on PVC.

The Sikaplan<sup>®</sup> WP Tape-200 is used to connect the Sikaplan<sup>®</sup> WP membranes to the substrate and itself at edges and terminations, thereby maintaining a high quality watertight seal. It is specialy designed for waterproofing in cross-sections of tunnels with special high performance, secure terminations of the Sikplan<sup>®</sup> WP Membrane System.

# **CHARACTERISTICS / ADVANTAGES**

- Very good bonding attributes
- Long-term water resistance
- Optimized workability, thermally weldable
- Optimized flexibility, plus tensile strength and multiaxial-elongation
- Flexible even in cold temperatures
- Prevents lateral water underflow

# **APPROVALS / STANDARDS**

- Hydrostatic Pressure Resistance Test over 245 Days Sikaplan<sup>®</sup> WP Tape-200, MFPA, Test report No. B 16.14.047.06
- Hydrostatic Pressure Resistance Test over 55 Days Sikaplan<sup>®</sup> WP Tape-200, MFPA, Test report No. B 16.14.047.05

Thickness	2.00 mm (-5%/+10%)	(EN 1849-2		
		bottom base layer - black		
	Colour	signal layer - white		
	Thickness	2 mm including 0.6mm signal layer		
Appearance / Colour	Sikaplan <sup>®</sup> WP Tape-200, hon	nogenous, supplied in rolls		
Storage conditions	tions at temperatures betwe from direct sunlight, rain, sn	Rolls must be stored in their original packaging and in cool and dry condi- tions at temperatures between +5°C and 35°C. They must be protected from direct sunlight, rain, snow and ice, etc. Do not stack pallets of rolls during transport or storage.		
		20 months from date of production		
Shelf life	20 months from data of proc	duction		
Packaging	Roll size	200mm (width) × 20m (length)		
Chemical base	Polyvinylchloride (PVC-P)			

# PRODUCT INFORMATION

# SYSTEM INFORMATION

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System Structure	The Sikaplan® WP Tape-200 system consists of a modified PVC tape and Sikadur®-731 or Sikadur®-31 CF or Sikadur-Combiflex® epoxy adhesives. One grade of the tape is available: • Sikaplan® WP Tape-200 (width: 200mm) Suitable adhesives are: Sikadur®-731 or Sikadur®-31 CF including types: • Sikadur®-731 • Sikadur®-31 CF (LP) • Sikadur®-31 CF (N) • Sikadur®-31 CF (R) or the suitable Sikadur-Combiflex® adhesives types: • Sikadur®-Combiflex® adhesive (N) • SikadurCombiflex® adhesive (R) Note: This system configuration as described must always be fully com- plied with and must not be changed. Ancillary Products: • Sikaplan® WP Membrane Systems • Sarna Seam Cleaner
Compatibility	Sikaplan <sup>®</sup> WP Tape-200 is compatible with Sikaplan <sup>®</sup> WP 1100 Series, Sika-
	plan <sup>®</sup> WP 2101 Series and Sikaplan <sup>®</sup> WP 2110 Series

# **TECHNICAL INFORMATION**

Tensile Strength	> 14 N/mm²	(EN ISO 527)
Modulus of Elasticity in Tension	≤ 20 N/mm²	(EN ISO 527)
Elongation	≥ 300% (machine / cross direction)	(EN ISO 527)
Tear Strength	≥ 42 kN/m (V = 50mm/min)	(ISO 34 Method B)
Service temperature	-10°C min. / +35°C max.	
Reaction to Fire	Class E	(EN ISO 11925-2 / EN 13501-1)

 Ambient Air Temperature
 +5°C min. / +55°C max.

 For installation below +5° ambient temperature, special measures are required in accordance with relevant national regulations and Sika guidelines.

# **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.

# IMPORTANT CONSIDERATION

Installation works must only be carried out by Sika<sup>®</sup> trained contractors, experienced in the waterproof lining of tunnels and below ground structures. Particular protective precautions must be taken for installation in wet conditions, at temperatures below +5°C, and when the relative air humidity (RH) is more than 80%. The effectiveness of the measures must be proven. Fresh air ventilation must always be ensured, especially when working (welding) in closed rooms, and in accordance with all local regulations. The Sikaplan<sup>®</sup> WP Tape-200 is not UV stabilized and cannot be installed on structures permanently exposed to UV light and weathering. Cleaning of Sikaplan<sup>®</sup> WP Tape-200 must only be done with clean cloths soaked with Sarna Seam Cleaner. Adhesion properties of Sikaplan<sup>®</sup> WP Tape-200 are tested with Sikadur<sup>\*</sup>-31 CF and Sikadur-Combiflex<sup>\*</sup> adhesives. Do not use any other Epoxy adhesives. Masking tapes and any other adhesive tapes must not be used on the black side of Sikaplan<sup>®</sup> WP Tape-200. All of these advice notes must be followed and considered, otherwise adhesion properties may be negatively affected.

Please also refer to the Sikaplan® WP Tape-200 Method Statement.

# ECOLOGY, HEALTH AND SAFETY

This product is an article as defined in article 3 of regulation (EC) No 1907/2006 (REACH). It contains no substances which are intended to be released from the article under normal or reasonably foreseeable conditions of use. A safety data sheet following article 31 of

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the same regulation is not needed to bring the product to the market, to transport or to use it. For safe use follow the instructions given in the product data sheet. Based on our current knowledge, this product does not contain SVHC (substances of very high concern) as listed in Annex XIV of the REACH regulation or on the candidate list published by the European Chemicals Agency in concentrations above 0,1 % (w/w).

# **APPLICATION INSTRUCTIONS**

### SUBSTRATE QUALITY

The substrate must be mechanically prepared e.g. by blast-cleaning, to be free from any cement laitance, damaged concrete, old surface treatments or coatings, then all loose or friable particles must be removed to achieve a contaminant free, open textured surface. The substrate must be dry or maximum mat damp. The substrate temperature must be min 3 Kelvin above dew point conditions and condensation on the freshly applied material must be avoided.

### Application of adhesive

Please refer to the relevant Product Data Sheet for the specific adhesive that is to be used.

### **APPLICATION METHOD / TOOLS**

### Application of the Tape

Clean the surface of the black base layer side of the Sikaplan<sup>®</sup> WP Tape-200 with Sarna Seam Cleaner. Use clean cloths soaked with the Sarna Seam Cleaner and wipe the Sikaplan<sup>®</sup> WP Tape-200 thoroughly turning the cloths. Do not use other solvent materials for cleaning as they may have negative effects on the subsequent bonding and welding properties. Check the integrity of the tape to ensure that there is no damage from storage or transport (e.g.scoring or scratches). Remove damaged sections if necessary. Apply the mixed Sikadur<sup>\*</sup> -31 CF adhesive onto the prepared substrate, using a suitable trowel. The layer thickness of the adhesive should be a minimum of 2 mm. The adhesive should be applied to the surface generously.

Apply the Sikaplan<sup>®</sup> WP Tape-200 within the open time of the adhesive. Press the tape firmly, without trapping air, into the adhesive using a suitable roller. The tape must be fully embedded into the adhesive and the adhesive should be squeezed out on both sides of the tape.

A top layer of adhesive along the edge of the tape is not necessary. The Sikadur<sup>®</sup> -31 CF shall be smoothened with a brush on the edge to the Sikaplan<sup>®</sup> WP Tape-200.

For vertical or overhead application, the Sikaplan<sup>®</sup> WP Tape-200 must be supported until the adhesive has hardened to prevent it peeling away from the adhesive and to ensure a good bond.

**Connecting the ends of Sikaplan® WP Tape-200** The tape ends are connected by hot air thermal welding. The weld areas must be prepared by roughening the black surface of the Sikaplan® WP Tape-200 with scotch brite pads or fine sand-paper. Roughen the tapes only in the weld area, otherwise their adhesive bond could be affected negatively. Sikadur® -31 CF must be put onto the prepared weld area to prevent water channels before pushing it into the fresh prepared Sikadur® -31 CF concrete surface. Sikaplan® WP Tape-200 end overlaps have to be min. 40 - 50 mm. Welding parameters, such as speed and temperature must be established through trials on site, prior to the commencement of any welding works.

Basic settings: 420-480°C Hand welding in the overlap areas is carried out in three steps.

- 1. Spot weld the overlap
- 2. Pre-welding: weld the rear overlap area so that a 20 mm flap (using a 20 mm nozzle) remains for the final welding
- 3. Final weld: weld the remaining flap. Guide the roller at a distance of 20 mm parallel to the air outlet of the welding nozzle. Roll the pressure roller fully across the seam.

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# Connecting the Sikaplan® WP Tape-200 and Sikaplan® WP membrane

The Sikaplan<sup>®</sup> WP Tape-200 and Sikaplan<sup>®</sup> WP membrane must be clean and dry, ready for hot- air welding.

The weld area of the Sikaplan® WP Tape-200 (white surface of Sikaplan® WP Tape-200) must not be prepared by roughening or other surface preparation. Sarna Seam Cleaner can be used for cleaning the Sikaplan® WP Tape-200 white surface in case of dirt. Welding parameters must follow up the standard steps as described in the Sikaplan® WP PVC-P Sheet Waterproofing Membranes Application Manual, or the Method Statement for Sikaplan® WP Tape-200. Welding parameters, such as speed and temperature must be established through trials on site, prior to the commencement of any welding works.

# 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.

# 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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