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# PRODUCT DATA SHEET Sikadur-Combiflex<sup>®</sup> TF Profile

Waterbar / profile for joint sealing with Sikadur-Combiflex® TF system

### DESCRIPTION

Thermoplastic elastomer (TPE) based, preformed sealing profile / waterbar. Used for joint sealing of white box constructions with in-site or precast concrete elements.

#### USES

Waterbar / profile for watertight sealing of:

- Expansion and construction joints in both, in-site and precast concrete constructions
- Connection joints for new to existing structures
- To repair and seal existing / leaking joints
- Use in watertight concrete and White Boxes
- Tested combination with the SikaProof<sup>®</sup> fully bonded membrane system

## **CHARACTERISTICS / ADVANTAGES**

- Profiles available in different sizes and geometries
- Combination of profiles an tapes in the Sikadur-Combiflex<sup>®</sup> TF System
- Durable and secure bonding with the Sikadur-Combiflex<sup>®</sup> CF adhesive
- Highly flexible material
- Homogeneous weldability
- no primers required

## **PRODUCT INFORMATION**

Composition

Thermoplastic elastomer (TPE)

# **APPROVALS / STANDARDS**

- MPA NRW: German Approval Certificate for the Sikadur-Combiflex®TF system in construction joints under hydrostatic pressure
- MPA NRW: German Approval Certificate for the Sikadur-Combiflex®TF system in expansion joints under hydrostatic pressure
- MPA NRW: Testing for use in the presence of agricultural slurry, manure and municipal wastewater
- Wissbau Essen: Application / Functional Test of the Sikadur-Combiflex®TF system under positive an negative hydrostatic pressure
- Wissbau Essen: Application / Functional Test of the Sikadur-Combiflex®TF system in combination with SikaProof® fully bonded membran system
- Institute Dr. Kemski: Testing of impermeablity against Radon

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Packaging	Profile	Width	Length of Roll / Bar
	DFT 330/3	330 mm	Roll of 25 m
	DFT 330/3 KF	<u>330 mm</u>	Roll of 25 m
	DFT 330/3 KI	330 mm (angled)	Roll of 25 m
	DFT 330/3 KA	330 mm (angled)	Roll of 25 m
	LFT 330	330 mm	Roll of 25 m
	LFT 240	240 mm	Roll of 25 m
	FAT 130/3 K	30 mm (cover plate)	/ Bar of 3 m
	180 mm adhesive part		
Appearance / Colour	Colour: grey		
	Profile Type Shape / Geometrie		
	DFT 330/3	TT	ΙΠΙΙ
	DFT 330/3 KF		
	DFT 330/3 KI		
	DFT 330/3 KA		
	LFT 330		
	LFT 240		
	FAT 130/3 K		III
Shelf Life	Product does not e	xpire if correctly stored.	
Storage Conditions	Rolls/Bars must be stored in a cool, dry place, away from sunlight, rain, snow, ice and any possible sources of damage and / or contamination. Do not stack pallets on top of each other.		
Thickness	4 mm		
TECHNICAL INFORMA	TION		
Elongation	> 400 %		(DIN 53504
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Durability

(SIA 280-8)

Thermal aging, 70 days at +70 °C	
Elongation change (ma- chine direction)	-5.0 % rel.
Elongation change (cross direction)	-10.0 % rel.

#### SYSTEM INFORMATION

System Structure	Sikadur-Combiflex® TF Profile are a Part of the Sikadur-Combiflex® TF sys- tem. The System is based on: • Sikadur-Combiflex® TF Tapes • Sikadur-Combiflex® TF Profiles • Sikadur-Combiflex® CF adhesive
Compatibility	Sikadur-Combiflex <sup>®</sup> TF Profiles and the Sikadur-Combiflex <sup>®</sup> TF System can be combined with the SikaProof <sup>®</sup> fully bonded membrane system. The combination ist tested in external functional testings by Wissbau Essen.

#### **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.

## FURTHER INFORMATION

- Shore hardness: ~80 Shore A (ISO 868)
- Tear strength: > 6 N/mm<sup>2</sup> (DIN 53504)
- Tear propagation resistance: > 600 N/cm (DIN 53362)
- Bitumen compatibility: pass (DIN 16726/5.19)
- Folding in cold conditions: no cracks till -30 °C (SIA 280-3)
- UV-resistance: no cracks, mass change -0.6 % (SIA 280-10)
- Ozone resistance: class 0 (SIA 280-7)
- Resistance to root penetration: pass (SIA V280)

## IMPORTANT CONSIDERATIONS

Note:

- The Sikadur-Combiflex® TF System should only applied by Sika trained Specialists.
- All Informations of the Sikadur-Combiflex® TF System Method Statement have to be observed.

## ECOLOGY, HEALTH AND SAFETY

#### Sikadur<sup>®</sup> Adhesives

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**

All of the data relevant to the design and installation of the Sikadur-Combiflex® TF Profiles can be found in

the Sikadur-Combiflex® TF System installation procedures / Method Statement.

For design, installation and limitations of all cast-in profile sections, the German Standard DIN V 18197 have to be comply. For design, installation and limitations of all bonded profile sections, the german approval have to be comply.

The installation conditions required and their limitations are primarily determined by the system adhesive – Sikadur-Combiflex® CF adhesive. Detailed information on this is provided on the respective Product Data Sheet.

#### SUBSTRATE QUALITY

The substrate must be structurally sound, with a mechanically prepared, cement laitence free, open-textured surface that is clean, and free from any possible contaminants or standing water.

After suitable mechanical preparation (e.g. by blast cleaning) the substrate must have a minimum pull-off strength of 1,5 N/mm<sup>2</sup>.

For effective watertight sealing the rest of the substrate / surface area must also be impermeable to water ingress, otherwise the Sikadur-Combiflex® TF System must be combined and integrated with a suitable surface sealing solution. (please refer to Sika Technical Services Department for specific advice and suitable solutions for your project)

Before bonding the system on substrates other than concrete, it's suitability should be confirmed by testing / trial applications.

#### **APPLICATION METHOD / TOOLS**

Detailed information on application can be found in the Sikadur-Combiflex<sup>®</sup> TF System installation procedure / Method Statement.

#### Welding

Preformed pieces and waterstopping system and part systems must be factory produced.

Joints formed on site must only be welded butt joints. Butt joints should only welded with a special welding



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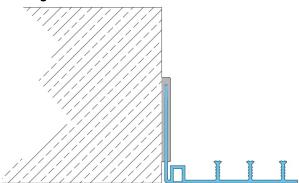
#### Machine.

#### **Butt jointing**

- Cut the ends of the profile to the right angle and length, including an extra length allowance of about 1 cm per joint.
- 2. Fix the profile to the welding machine using the clamping rails fitted correctly. The ends of the profile must be installed with about 1 cm projecting on the welding mirror side.
- Move the ends of the profile together using the lever at the side, check their position is congruent for fixing and readjust if necessary.
- Take the welding rod, heated to 300–320 °C, to the welding position.
- 5. Fuse the profile ends on the welding rod under slight pressure, using the lever at the side.
- 6. As soon as the profile ends are fully fused, move the welding rod down and bring the ends together under slight pressure.
- 7. The welded joint must cool free from exposure and stress for at least 10 minutes.

Remove the projecting welding bead with a blade and check the sealing and therefore watertightness of the joint with a spark tester.

#### Bonding the adhesive Profiles:



- 1. The substrate must be prepared as required (see above).
- Press the specified bond section of the sealing profile fully into the base coat of the Sikadur-Combiflex® CF system adhesive. Additional temporary mechanical support with perforated fixing plates are necessary for bonding the profiles.
- 3. The membrane profile is then also given a top cover coat of the adhesive in the bond section, to prevent it being peeled away from the base.

Dependent on the installation and the exposure / load situation, an additional support or protection structure may be necessary. A detailed description of this requirement and the possibilities is given in the Sikadur-Combiflex® TF system description and Method Statement.

#### Preparations for concreting

The Sikadur-Combiflex<sup>®</sup> TF Profile should be installed securely in position and according to the project spe-

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Product Data Sheet Sikadur-Combiflex® TF Profile October 2022, Version 01.01 02070315800000006 cifications. Dependent on the installation situation, a maximum spacing distance of  $\leq$  25 cm is generally recommended for the fixing points. External waterstops should not be installed with stop anchors facing downwards.

Before concrete placement the Sikadur-Combiflex® TF Profile should be clean and free of any dirt or possible contaminants, and checked for any possible damage. When placing and compacting the concrete, make sure that the profile is fully embedded in the concrete matrix without voids.

For detailed descriptions look at the Method Statement and DIN V 18197.

Dependent on the type of installation and loading / traffic situation, an additional support or protection system / build-up may be necessary.

### LOCAL RESTRICTIONS

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

## **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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