

## SYSTEM DATA SHEET

# Sikadur-Combiflex® SG System

### HIGH PERFORMANCE JOINT SEALING SYSTEM

#### DESCRIPTION

The Sikadur-Combiflex® SG System is a versatile, high performance, joint and crack sealing system for construction joints, expansion (movement) joints, connection joints or cracks. The system allows variable and high levels of movement in one or more directions, whilst maintaining a watertight seal.

The Sikadur-Combiflex® SG System consists of a waterproofing tape based on modified flexible Polyolefin (FPO) with advanced adhesion properties and available in 1,0 mm and 2,0 mm thicknesses. For bonding the tape, a range of different special Sikadur® epoxy adhesives for use in different types of applications and conditions are available.

#### USES

Sealing all types of joints and cracks in many different structures and applications including:

- Tunnels and culverts
- Hydroelectric power plants
- Sewage treatment plants
- Basements
- Water retaining structures
- Drinking water reservoirs
- Swimming pools

Sealing of:

- Movement joints
- Construction joints
- Pipe penetrations
- Cracks
- Building components where differential settlement is expected

#### CHARACTERISTICS / ADVANTAGES

- Versatile system suitable for many difficult situations
- Highly flexible - high crack and joint bridging ability
- Advanced adhesion, no activation on site required
- Good chemical resistance
- Easy and simple to install
- Suitable for dry and damp concrete substrates
- Weathering and UV-resistant
- Root penetration resistant
- Performs well within a wide range of temperatures
- Different grades of adhesive available
- Plasticiser-free
- Hot air weldable
- Can be used in contact with potable/drinking water

#### APPROVALS / CERTIFICATES

- Drinking water AS/NZS 4020, Sikadur Combiflex® SG , ams Laboratories, Test report No. 1116525
- Drinking water KTW, Sikadur Combiflex® SG , HY, Certificate No. K-248079-14-Ko
- Hygienic Sikadur Combiflex® SG System, PZH, Certificate HK/W/0734/01/2017
- Root Resistance CEN/TS 14416, Sikadur Combiflex® SG, SKZ, Test report No. 89643/09
- Sanitary Compliance XP P 41-250, Sikadur Combiflex® SG , CARSO, Certificate No. 16 MAT LY 108
- Sealing tapes for joints PN-EN 149-2, PN-EN 1850-2, Sikadur Combiflex® SG System, Instytut Badawczy Dróg i Mostów, Test report No. IBDiM-KOT-2018/0127
- Water Regulations up to 50 °C BS6920-1:2000, Sikadur Combiflex® SG, WRAS, Approval No. 1708503
- Water pressure in joints PN-EN 1849-2, PN-EN 1850-2, Sikadur Combiflex® SG System, STUVA, Test report No. 1640-KEBE-001

# SYSTEMS

## System Structure

Sikadur-Combiflex® SG System consists of a modified flexible Polyolefin (FPO) waterproofing tape and a Sikadur® epoxy adhesive

### Construction joints and cracks

### Movement joints



### Flexible polyolefin tapes

Sikadur Combiflex® SG-10 P

Sikadur Combiflex® SG-20 P

Sikadur Combiflex® SG-10 M

Sikadur Combiflex® SG-20 M

### Compatible Sikadur® adhesives

Sikadur®-31 EF Normal

Sikadur®-31 DW (for contact with drinking water)

Sikadur®-31 EF Normal

Sikadur®-31 DW (for contact with drinking water)

**Note: The system configuration tabulated above must be followed.**

## TECHNICAL INFORMATION

### Elongation at Break

> 650 %

(EN 12311-2)

### Sikadur Combiflex® SG Tape

### Maximum permissible permanent elongation

Sikadur Combiflex® SG-20 P

Sikadur Combiflex® SG-20 M

Sikadur Combiflex® SG-10 P

Sikadur Combiflex® SG-10 M

<25 % of non-adhered tape width

<10 % of non-adhered tape width

For higher joint movement, loop tape into the gap of the joint.

### Chemical Resistance

Sikadur-Combiflex® SG System is resistant to aggressive conditions in natural ground water and soil, as well to lime water, cement water, seawater, salt solutions, domestic sewage, bitumen (according to EN 1548), bitumen emulsion coatings.

Contact Sika Technical Services for additional information.

### Service Temperature

-40 °C min. / +60 °C max.

## APPLICATION INFORMATION

### Consumption

Sikadur®-31 EF per meter length:

Tape width	Tape thickness	Resin consumption*
10 cm	1 mm	~ 0,7 kg/m
15 cm	1 mm	~ 1,0 kg/m
20 cm	1 mm	~ 1,2 kg/m
15 cm	2 mm	~ 1,1 kg/m
20 cm	2 mm	~ 1.4 kg/m
25 cm	2 mm	~ 1,7 kg/m
30 cm	2 mm	~ 2,0 kg/m

\* The consumption can vary depending on site conditions (surface roughness, size of aggregates, e.t.c.)

### Ambient Air Temperature

Refer to the individual Product Data Sheets

### Substrate Temperature

Refer to the individual Product Data Sheets

## PRODUCT INFORMATION

Packaging	Refer to the individual Product Data Sheets
Shelf life	Refer to the individual Product Data Sheets
Storage conditions	Refer to the individual Product Data Sheets

## APPLICATION INSTRUCTIONS

### APPLICATION METHOD / TOOLS

#### Selection of tape size

Selection of the correct tape size (thickness and width) and of a suitable Sikadur® adhesive depends on the required performance.

#### General Installation Procedure

- Concrete or other substrate is prepared either side of the joint / crack by mechanical means, i.e. blast cleaning, grinding etc., followed by vacuuming to remove residual dust etc.
- Sikadur Combiflex® SG tape connections and overlaps must be welded.
- The mixed 2-part Sikadur® adhesive is applied on the sides of the joint / crack by brush, trowel or spatula.
- Sikadur Combiflex® SG tape is then firmly pressed into the adhesive using a roller.
- Sikadur® adhesive is then applied on top of the Sikadur Combiflex® SG tape.
- For the Sikadur Combiflex® SG M type tape, the red middle strip is removed while the adhesive is still wet.

For detailed application information refer to the Sika Method Statement: Sikadur-Combiflex® SG System.

## FURTHER INFORMATION

- Sika Method Statement: Sikadur-Combiflex® SG System
- Relevant Product Data Sheets

## IMPORTANT CONSIDERATIONS

Installation work must only be carried out by Sika® trained and approved contractors, experienced in this type of application.

- Solvents such as Sika Colma Cleaner do not improve the tape welding or adhesion properties.
- If joints are to be subjected to positive water pressure, the tape must be supported in the joint by hard foam or joint sealant.
- If the tape is exposed to negative water pressure it must be supported with a steel plate fixed on one side.
- Sikadur Combiflex® SG Tape must be protected from mechanical damage.
- Sikadur Combiflex® SG Tape cannot be connected to the Sikaplan WT, Sikaplan WP or Hypalon based (e.g. old Sikadur-Combiflex) membranes by hot air welding.

## 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.

## 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.

## ECOLOGY, HEALTH AND SAFETY

### Sikadur Combiflex® SG Tape

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 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 this 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).

### Sikadur® Adhesives

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related 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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