

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, movement (expansion) 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
- Good resistance to ageing
- Resistant to UV exposure
- Resistant to root penetration
- 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 / STANDARDS

- Root Resistance CEN/TS 14416, Sikadur Combiflex® SG, SKZ, Test report No. 89643/09
- 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

SYSTEM INFORMATION

System Structure

Note: The system products must only be selected from the tape and adhesive options listed.

Construction joints and cracks



Movement joints



System structure

- Modified flexible Polyolefin (FPO) waterproofing tapes
- Sikadur® epoxy adhesives

Flexible polyolefin tapes

- Sikadur Combiflex® SG-10 P
- Sikadur Combiflex® SG-20 P

Flexible polyolefin tapes with red middle strip

- Sikadur Combiflex® SG-10 M
- Sikadur Combiflex® SG-20 M

Sikadur® epoxy adhesives

- Sikadur Combiflex® CF Adhesive Normal
- Sikadur Combiflex® CF Adhesive Rapid
- Sikadur®-31 CF Normal
- Sikadur®-31 CF Rapid
- Sikadur®-31 CF Slow
- Sikadur®-31 DW (for contact with drinking water)

TECHNICAL INFORMATION

Elongation at Break

> 650 %

(EN 12311-2)

Sikadur Combiflex® SG Tape

Maximum permissible permanent elongation

Sikadur Combiflex® SG-20 P

< 25 % of non-adhered tape width

Sikadur Combiflex® SG-20 M

Sikadur Combiflex® SG-10 P

< 10 % of non-adhered tape width

Sikadur Combiflex® SG-10 M

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

-10 °C min. / +40 °C max.

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APPLICATION INFORMATION

Ambient Air Temperature	+5 °C min. / +40 °C max.
Substrate Temperature	+5 °C min. / +30 °C max. Refer to the Product Data Sheet of the appropriate Sikadur adhesive.

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

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.

LIMITATIONS

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.

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 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).

Sikadur® Adhesives

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

APPLICATION INSTRUCTIONS

APPLICATION METHOD / TOOLS

Strictly follow installation procedures as defined in method statements, application manuals and working instructions which must always be adjusted to the actual site conditions.

Selection of tape size

Select the correct tape size (thickness and width) and a suitable Sikadur® adhesive depending on the required performance.

General installation procedure

1. Prepare concrete or other substrate either side of the joint / crack by mechanical means, i.e. blast cleaning, grinding etc.
2. Remove residual dust etc. by vacuuming.
3. Weld Sikadur-Combiflex® SG tape connections and overlaps.
4. Mix the 2-part Sikadur® adhesive and apply on the sides of the joint / crack by brush, trowel or spatula.
5. Firmly press Sikadur-Combiflex® SG tape into the adhesive using a roller.
6. Apply Sikadur® adhesive on top of the Sikadur Combiflex® SG tape.
7. Only for Sikadur-Combiflex® SG M type tape: Remove the red middle strip while the adhesive is still wet.

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

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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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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