

SYSTEM DATA SHEET

Sikadur-Combiflex® SG System

High-performance joint and crack sealing system

PRODUCT DESCRIPTION

Sikadur-Combiflex® SG System is a versatile, high-performance joint and crack sealing system for construction joints, movement or expansion joints, connection joints and cracks. The system allows variable and high levels of movement in one or more directions while maintaining a watertight seal. It consists of a waterproofing tape which is based on modified, flexible polyolefin (FPO). The system has advanced adhesion properties and is available in 1 mm and 2 mm thicknesses. Various Sikadur® epoxy adhesives, specially designed for different applications and conditions, are used to bond the tape.

WHERE TO USE

Sikadur-Combiflex® SG System is used for sealing:

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

Sikadur-Combiflex® SG System is used for sealing joints and cracks in many different structures and applications, such as:

- Tunnels
- Culverts
- Hydroelectric power plants

- Sewage treatment plants
- Basements and other below-ground structures
- Water-retaining structures
- Drinking water reservoirs
- Swimming pools

CHARACTERISTICS / ADVANTAGES

- Versatile system suitable for many complex applications
- Very good crack-bridging ability
- No activation on site required
- Good resistance to specific chemicals
- Easy to install
- Good resistance to ageing
- Very good resistance to permanent UV exposure
- Good resistance to root penetration
- Wide service temperature range
- Different grades of adhesive available
- Does not contain plasticisers
- Hot air weldable
- Approved for contact with drinking water

APPROVALS / CERTIFICATES

- NSF-ANSI 61 approved for contact with Potable Water (when used as a jointing system, using Sikadur®-31 Hi-Mod Gel)*
- Water Regulations NSF/ANSI 61, Sikaflex®-1a, UL, Report No. FDNP.MH17464

**Special order only*

SYSTEMS

System Structure

Sikadur-Combiflex® SG System consists of a modified flexible polyolefin (FPO) waterproofing tape which is affixed with a Sikadur® epoxy adhesive. Select components solely from the listed tape and adhesive options.

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®-30 Sikadur®-31 Hi-Mod Gel

TECHNICAL INFORMATION

Chemical Resistance

Sikadur-Combiflex® SG System is resistant to aggressive conditions in natural groundwater and soil, as well as lime water, cement water, seawater, salt solutions, domestic sewage, bitumen (according to EN 1548) and bitumen emulsion coatings. Contact Sika Technical Services for additional information.

Service Temperature

Maximum	+40 °C
Minimum	-30 °C

Elongation at maximum tensile force

≥ 650 %	(EN 12311-2)
Sikadur Combiflex® SG Tape	Maximum permissible permanent elongation
Sikadur-Combiflex® SG-20 M Sikadur-Combiflex® SG-20 P	< 25 % of non-adhered tape width
Sikadur-Combiflex® SG-10 M Sikadur-Combiflex® SG-10 P	< 10 % of non-adhered tape width

APPLICATION INFORMATION

Ambient Air Temperature

Maximum	+40 °C
Minimum	+5 °C

Substrate Temperature

Maximum	+30 °C
Minimum	+5 °C

Refer to the Product Data Sheet of the appropriate Sikadur® epoxy adhesives.

BASIS OF PRODUCT DATA

Product properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, preparation, application, curing and test methods.

FURTHER INFORMATION

- Individual Product Data Sheets for the Sikadur-Combiflex® SG tapes
- Sikadur-Combiflex® SG System - Method statement

LIMITATIONS

- Positive and negative pressure may cause the exposed section of the Sikadur Combiflex® SG Tape to stretch, thereby reducing its movement capability. When exposed to positive water pressure, Sikadur Combiflex® SG Tape must be supported by applying either a hard foam or a joint sealant into the joint. When exposed to negative water pressure, Sikadur Combiflex® SG Tape must be supported with a steel plate fixed on one side.
- If subjected to mechanical damage, the exposed section of the tape may tear, resulting in reduced movement capability and loss of water tightness. The exposed section of the tape must be protected from mechanical damage.
- Incorrect joining techniques: Sikadur Combiflex® SG Tape cannot be connected to the Sikaplan® WT, Sikaplan® WP or Hypalon based membranes by hot air welding. Treating the Sikadur Combiflex® SG Tape with a solvent prior to joining will not improve either the welding or adhesion properties.

ENVIRONMENT, HEALTH & SAFETY

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

APPLICATION

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

Note that the correct tape size (thickness and width) and a suitable Sikadur® adhesive must be selected depending on the required performance. Refer to the individual Product Datasheets for further information.

General Installation Procedures

1. Weld Sikadur-Combiflex® SG tape connections and overlaps
2. Mix the 2-part Sikadur® adhesive and apply on the sides of the joint or crack by brush, trowel or spatula
3. Firmly press Sikadur-Combiflex® SG tape into the adhesive using a roller
4. Apply Sikadur® adhesive on top of the Sikadur Combiflex® SG tape
5. For Sikadur-Combiflex® SG M type tapes remove the red middle strip while the adhesive is still wet

For detailed application instructions reference must be made to the following document: Sikadur-Combiflex® SG System - Method statement

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

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 recommendations, or from any other advice offered. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. 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 or may be downloaded from our website at: www.sika.ca

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