

WATERPROOFING

# Sikadur Combiflex<sup>®</sup> SG System

HIGH PERFORMANCE JOINT AND CRACK SEALING SYSTEM

BUILDING TRUST



# HIGH PERFORMANCE JOINT AND CRACK SEALING SYSTEM

**THE Sikadur Combiflex® SG System** is the second generation of the globally renowned Sikadur Combiflex® range, with improved adhesion and performance characteristics and approvals for use in contact with drinking water. This unique system consists of the weldable Sikadur Combiflex® SG tapes and established Sikadur® adhesives. It is designed for use as a joint and crack waterproofing system in all types of structures, mainly in watertight concrete structures.

The Sikadur Combiflex® SG System is a high performance joint and crack sealing solution for:

- Movement joints
- Construction joints
- Pipe penetrations
- Cracks

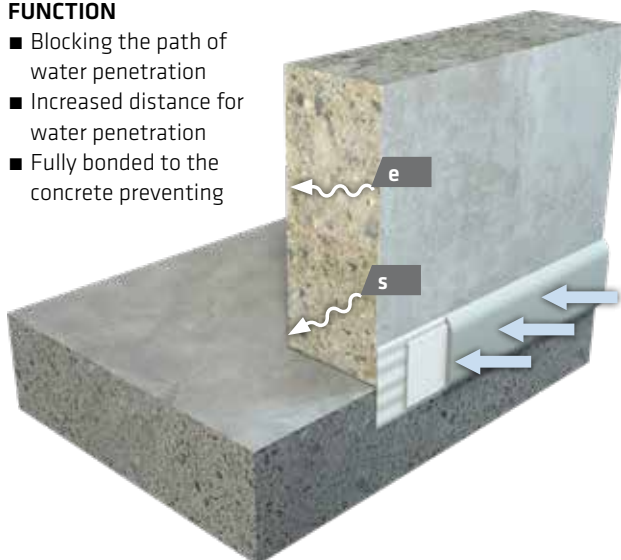
The system allows variable and high levels of movement in one or more directions, whilst maintaining a watertight seal.

## MAIN ADVANTAGES:

- Versatile system suitable for many difficult situations
- Advanced adhesion to many different substrate materials
- Extremely flexible-high joint / crack bridging ability
- Good resistance to many different chemicals
- Can be used in contact with potable/drinking water
- Use for both cold and hot water applications and easy to install
- Suitable for dry and damp concrete surfaces
- Performs well within a wide range of temperatures
- Weathering and UV-resistant
- Available with normal and rapid hardening grades of the adhesive
- Root penetration resistant

## FUNCTION

- Blocking the path of water penetration
- Increased distance for water penetration
- Fully bonded to the concrete preventing

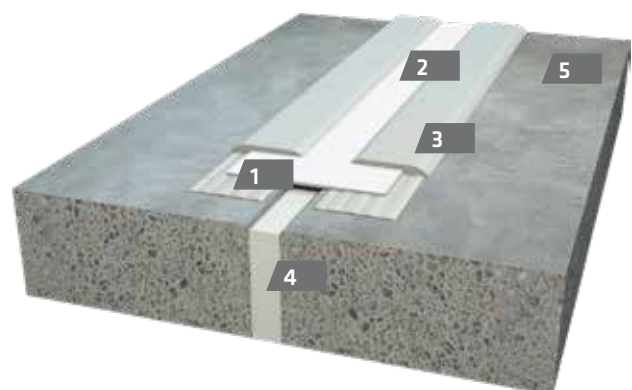


$s \gg e$

e = Water penetration (EN 206)

s = Increase length for water penetration

## Sikadur Combiflex® SG SYSTEM - BUILD-UP



e.g: Movement joint

1 Base layer Sikadur® Adhesive

2 Sikadur Combiflex® SG Tape (sealing tape with clear expansion zone)

3 Top layer Sikadur® Adhesive

4 Joint filler

5 Concrete

# TYPICAL APPLICATIONS

**THE Sikadur Combiflex® SG System** is versatile and suitable for use wherever water and moisture can penetrate into the structure from the outside.

**SEALING ALL TYPES OF JOINTS AND CRACKS IN MANY DIFFERENT STRUCTURES AND APPLICATIONS INCLUDING:**



## **BASEMENTS**

- Water tightness with high durability
- Easy to control / repair
- Independent of concreting works
- High joint movement capacity



## **BRIDGES / TUNNELS**

- De-icing salt resistance
- UV resistant Tunnel Ventilation Ducts
- Airtight
- Accommodates variable joint widths



## **DRINKING (POTABLE) WATER TANKS**

- Approved for use in contact with drinking water
- Long-term water resistance
- Ideal for new and repair works
- Easy to control / repair



## **SWIMMING POOLS**

- Resistance to ozone, chlorine and UV light
- Easy to clean
- Non abrasive to skin



## **STRUCTURAL REPAIRS**

- Watertight crack sealing
- Resistant to water pressure from both faces / sides of the structure



## **SEWAGE TREATMENT PLANTS**

- Resistant to sewage
- Good abrasion resistance
- Independent of concreting work
- High joint movement capacity



## **GROUND WATER PROTECTION**

- Chemically resistant
- High environmental security
- Watertight sealing



## **FACADE JOINTS**

- High joint movement capacity
- Overpaintable (adhesive)
- External weathering resistant
- UV light resistant

# Sikadur Combiflex® SG System FOR BASEMENT



1



Construction joints

2



Movement joints

3



Flush installation

4



Steel support for  
joints with negative  
pressure

5

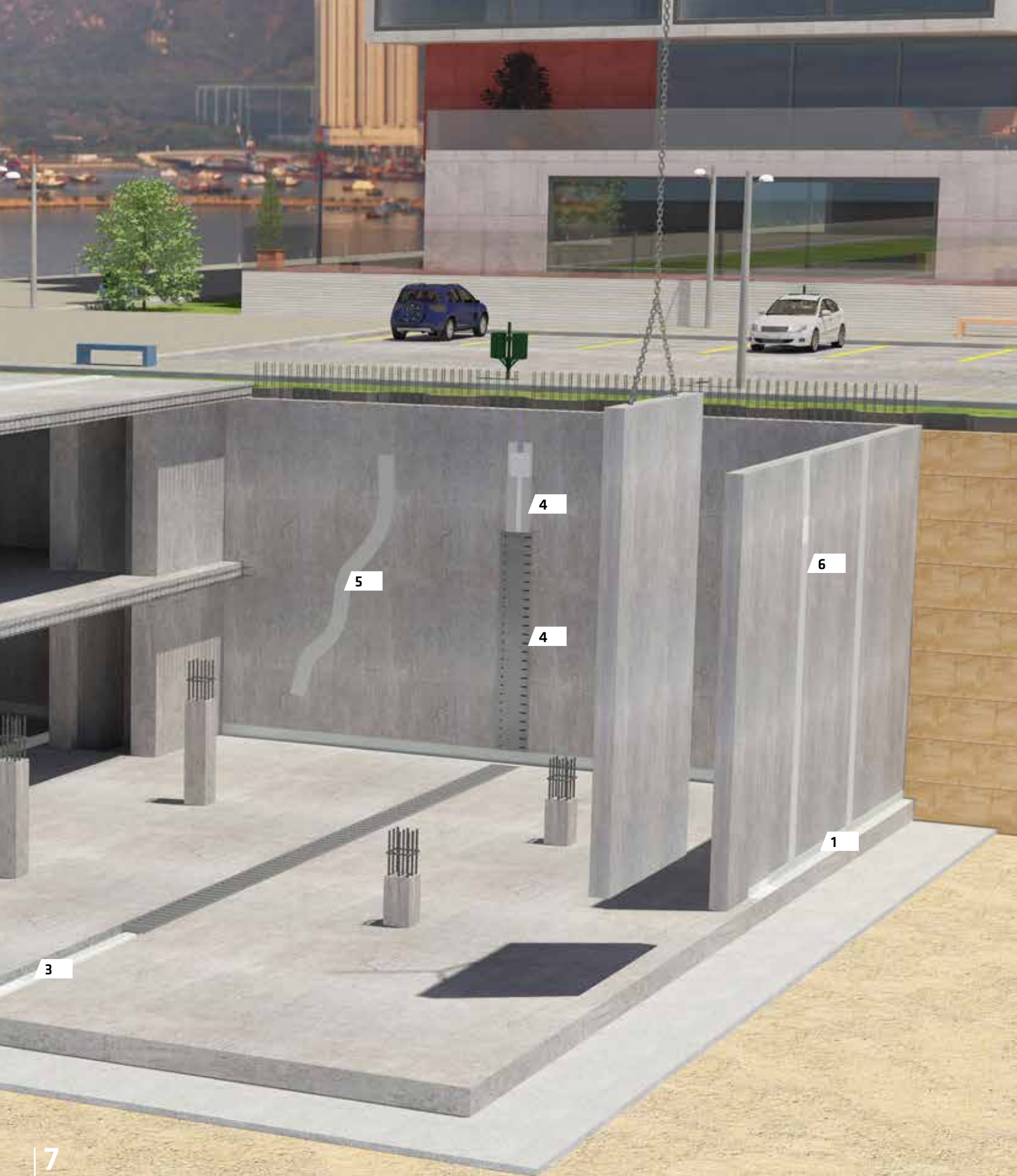


Cracks

6



Connection joints



3

4

5

4

6

1

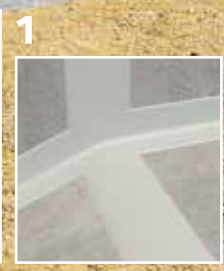
7



Pipe penetration

# Sikadur Combiflex® SG System FOR DRINKING WATER-RESERVOIR





Construction joints



Column detail



Pipe penetration



Connection joints  
concrete-steel



Cracks

# Sikadur Combiflex® SG System - PRODUCT-RANGE

## Sikadur Combiflex® SG TAPE

Sikadur Combiflex® SG Tapes are flexible, preformed waterproofing tapes, based on modified flexible Polyolefin (FPO), with excellent adhesion to the Sikadur® epoxy adhesives.

### Sikadur Combiflex® SG TYP P

Characteristics [mm]	Sikadur Combiflex® SG-10 P	Sikadur Combiflex® SG-20 P
Tape thickness	1	2
Tape width	100, 150, 200, 250, 300, 400, 500, 1000, 2000	150, 200, 250, 300, 400, 500, 1000, 2000
Tape lenght	25	25

### Sikadur Combiflex® SG TYP M

With temporary red middle strip for easier application in movement joints.

Characteristics [mm]	Sikadur-Combiflex® SG-10 M	Sikadur-Combiflex® SG-20 M
Tape thickness	1	2
Tape width	100, 150, 200, 250, 300	150, 200, 250, 300
Tape lenght	25	25





## Sikadur® ADHESIVES

To achieve a watertight and durable connection between Sikadur Combiflex® SG tapes and the substrate, Sikadur® epoxy resin based adhesives are used.

### Sikadur® Combiflex® CF Adhesive



Grey 2-component epoxy resin based

#### CHARACTERISTICS & ADVANTAGES

- Optimum workability and ease of finishing
- Provides a smooth surface finish
- Normal and rapid hardening grades available

#### Packaging

6 kg units (A+B) combined pack or  
20 kg units part A  
10 kg units part B

### Sikadur®-31 DW



Grey 2-component epoxy resin based

#### CHARACTERISTICS & ADVANTAGES

- For installation where approval for contact with potable / drinking water is required
- Normal and rapid hardening grades available
- Various drinking water certificates

#### Packaging

6 kg units (A+B) combined pack  
30 kg units part A  
10 kg units part B



# TYPICAL AREAS OF USE

## CONSTRUCTION JOINTS AND STATIC CRACKS



**Construction joints** are formed by the operational subdivision of structures into sections, such as for the daily completion of concreting stages (also called "day work joints").

## MOVEMENT JOINTS



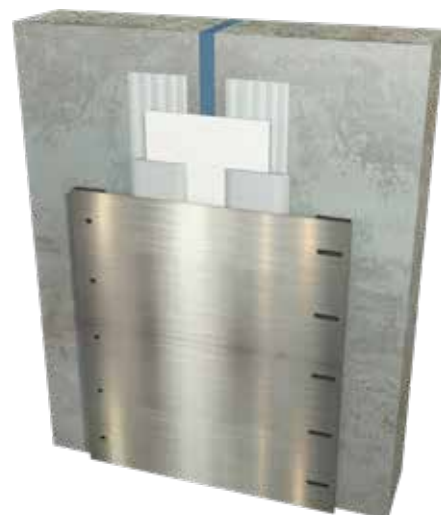
**Movement or expansion joints** separate structural elements and compensate for movements caused by the effects of heat, ground settlement or loads imposed on the structure.

## ANGLED / COVERED INSTALLATION



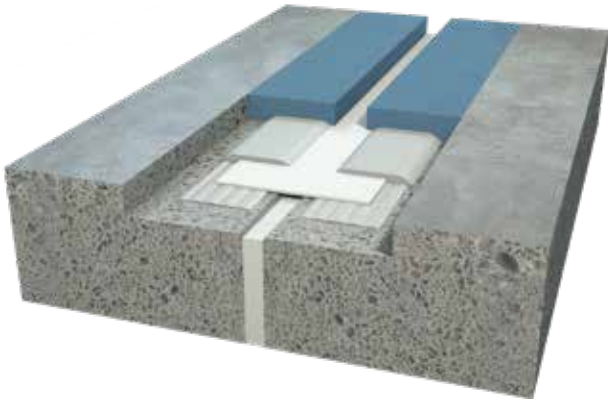
Where there is mechanical impact anticipated, the Sikadur Combiflex® SG Tape should be protected by filling behind the coving and additional surface protection as necessary.

## SUPPORT FOR JOINTS WITH NEGATIVE PRESSURE



E.g. external basement walls. For exposure to negative water pressure from outside, the Sikadur Combiflex® SG Tape must be secured with a steel plate fixed on one side of the joint.

**CONCEALED OR FLUSH INSTALLATION**



Typical for use in floor joint.

**PENETRATION DUCT OR PIPE, COLLARS**



Basement wall with power and water services entry ducts.

**CARRIAGEWAY JOINTS**



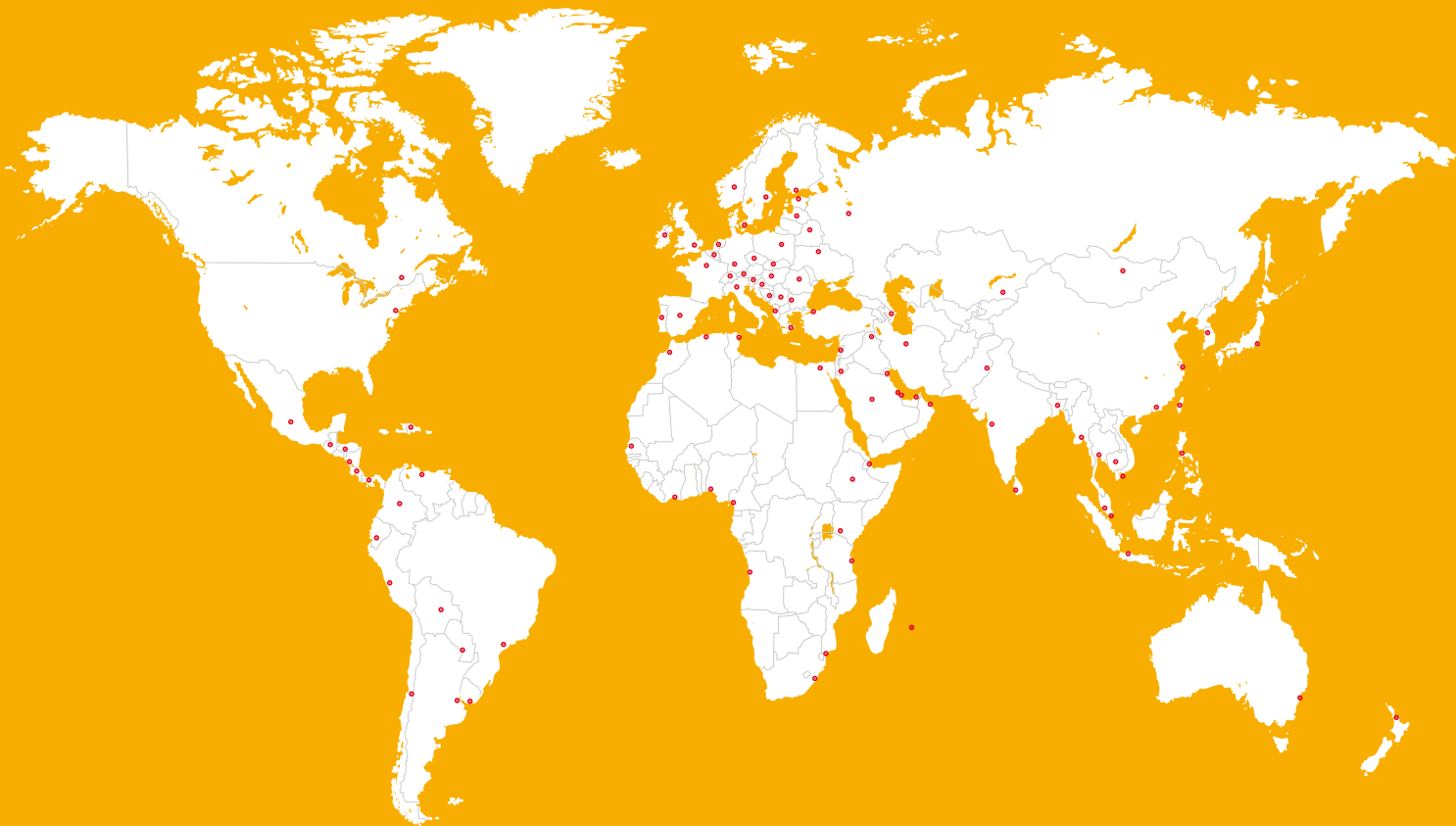
Typical for use on bridge deck joints or on multi-storey car park deck joints.

**CONNECTION JOINTS**



E.g. connections to lift shafts, steel beams etc.

# GLOBAL BUT LOCAL PARTNERSHIP



## FOR MORE WATERPROOFING INFORMATION:



### WE ARE SIKA

Sika is a specialty chemicals company with a leading position in the development and production of systems and products for bonding, sealing, damping, reinforcing and protecting in the building sector and the motor vehicle industry. Sika's product lines feature concrete admixtures, mortars, sealants and adhesives, structural strengthening systems, industrial flooring as well as roofing and waterproofing systems.

Our most current General Sales Conditions shall apply. Please consult the most current local Product Data Sheet prior to any use.



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