



# WATERPROOFING

## Sika<sup>®</sup> Dilatec<sup>®</sup> System

MULTIFUNCTIONAL SEALING SYSTEM

BUILDING TRUST



# MULTIFUNCTIONAL SEALING SYSTEM

The Sika® Dilatec® System is a multifunctional, flexible tape sealing solution for the terminations and connections of waterproofing membranes, as well as for sealing joints. This unique system consists of weldable Sika® Dilatec® tapes produced in PVC, with fabric strips on one or both edges for optimal adhesion when bonded with Sikadur® epoxy adhesives or hot melt bitumen. The different types of Sika® Dilatec® tapes are used for many different sealing applications in basements, tunnels (especially cut and cover tunnels), and with bridge deck waterproofing systems. It is used to ensure watertight connections, terminations and joints between different waterproofing technologies and systems such as Sikaplan® WP (PVC) and SikaBit® (Bituminous) waterproofing membranes on concrete structures.

## MAIN ADVANTAGES

- Multifunctional solution for joint sealing
- Good adhesion properties
- No activation on site required
- Highly flexible and joint bridging capability
- Good chemical resistance
- Root penetration resistant
- Hot air weldable
- Adaptable to many different jointing situations

## MULTIFUNCTIONAL SOLUTION

The various type of tapes terminate, connect and seal in multiple waterproofing solutions.

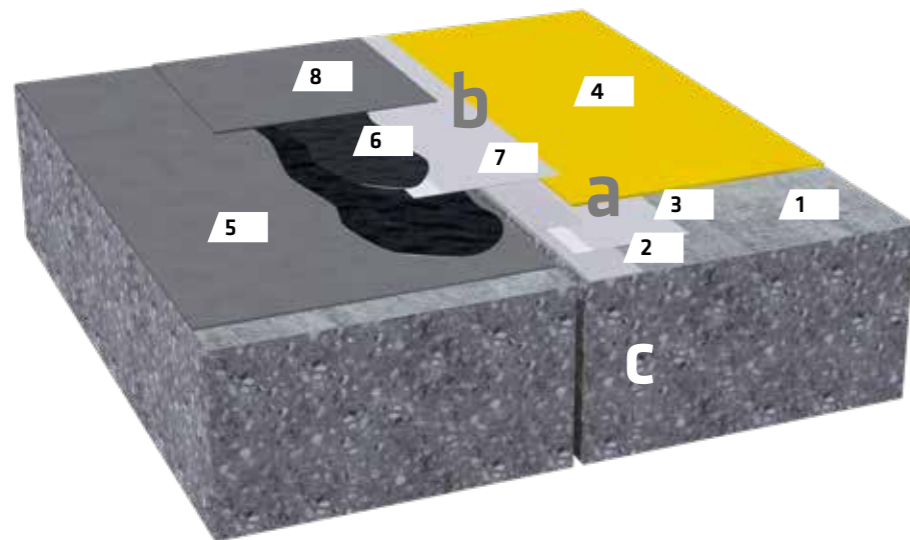
### TAPE TYPES:

- E-edge adhered with Sikadur® adhesive
- B-edge adhered with hot-melt bitumen
- R-edge welded to Sikaplan® WP (PVC) membrane

### MULTIFUNCTIONALITY:

- a) Terminations**
  - For loose laid Sikaplan® WP (PVC) membrane system
  - To create compartmentalized systems (post-applied)
- b) Connections between different technologies and systems, such as**
  - Sikaplan® WP (PVC) membranes
  - SikaBit® bituminous membranes
- c) Joint Sealing**
  - Construction Joints in waterproofed concrete structures
  - Connection Joints

## Sika® Dilatec® System – SYSTEM BUILD-UP



### MULTIFUNCTIONAL SYSTEM:

- a) Terminations**
  - 1 Concrete
  - 2 Sikadur® adhesive
  - 3 Sika® Dilatec® ER-350
  - 4 Sikaplan® WP membrane
- b) Connections**
  - 5 SikaBit® bituminous membrane
  - 6 Hot-melt bitumen
  - 7 Sika® Dilatec BR-500
  - 8 SikaBit® bituminous membrane
- c) Sealing of construction joints**

# TYPICAL APPLICATIONS

## BRIDGE DECKS



- Provide multifunctional solutions to seal, connect and terminate waterproofing
- Used with PVC and bituminous membranes plus hot-melt bitumen
- Enhanced adhesion to various different substrates e.g. mineral, metals, etc.

## BASEMENTS



- Provides a complete sealing system
- Weldable with Sikaplan® WP (PVC) membranes
- Specifically used to create the Sikaplan® WP (PVC) compartment system in post-applied areas

## CUT AND COVER TUNNELS

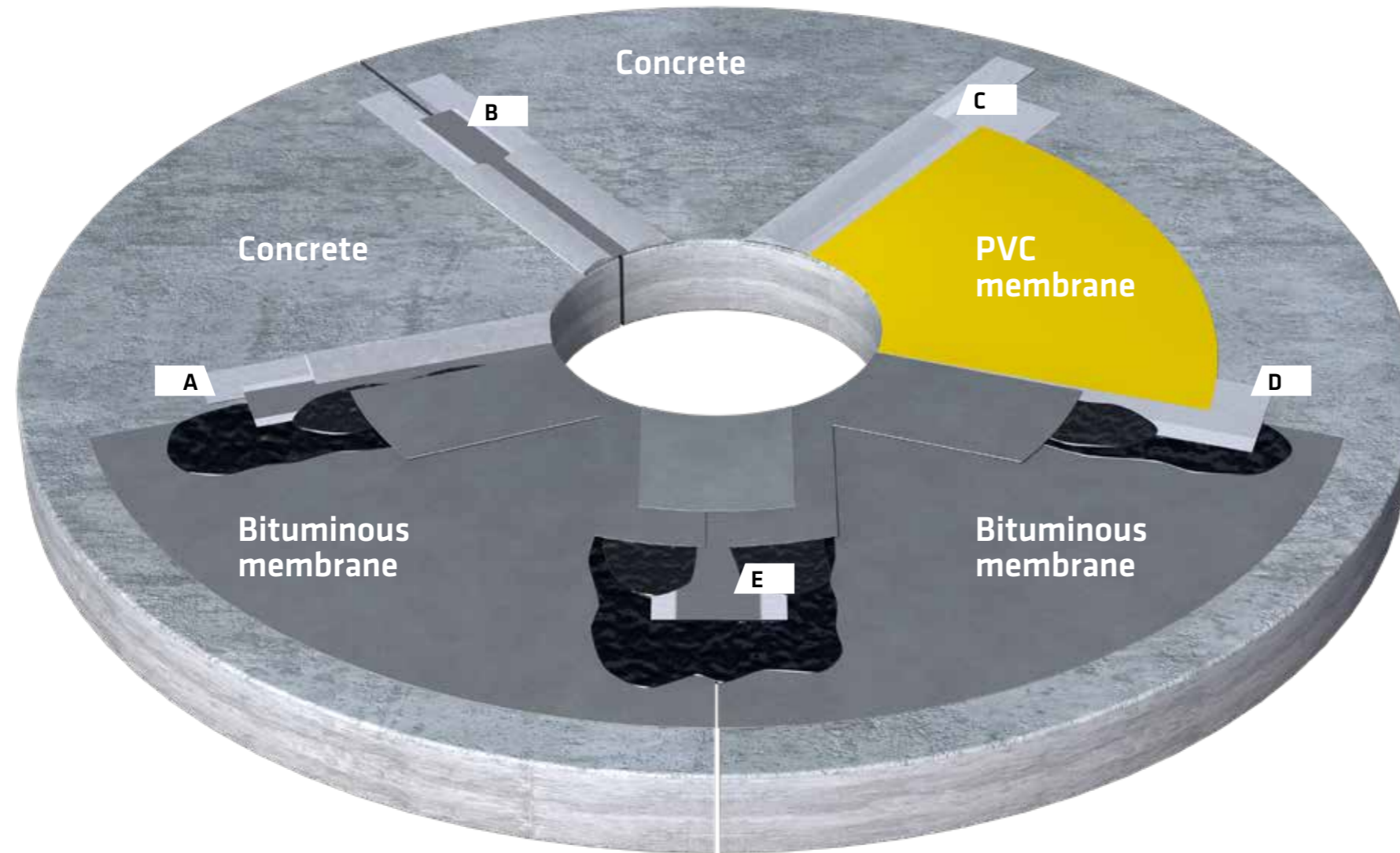


- Provides a unique sealing system to connect different technologies
- Used to connect Sikaplan® WP (PVC) membrane system with SikaBit® bituminous membranes
- High durability and resistance



# Sika® Dilatec® SYSTEMS

## PRODUCT RANGE



- MULTIFUNCTIONAL JOINT SEALING SYSTEM FOR:**
- **E-edge** - Adhered with Sikadur® Adhesive
  - **B-edge** - Adhered with hot-melt bitumen between two bituminous waterproofing membranes (SikaBit®)
  - **R-edge** - Welded by hot-air to Sikaplan® WP (PVC) membranes

## Sikadur® EPOXY ADHESIVES

- Sikadur Combiflex® CF Adhesive**
- Provides a smooth surface finish
  - Normal and rapid types



- Sikadur®-31 CF**
- For use where a higher layer thickness is required (e.g. substrate profile)
  - Normal, slow and rapid types



## Sika® Dilatec® TAPES

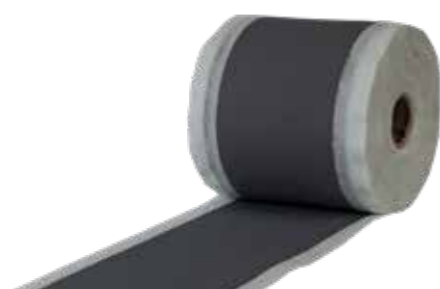
- A Sika® Dilatec® BE-300**  
Termination and connection tape for bituminous waterproofing membranes installed onto concrete and metal surfaces.

- B Sika® Dilatec® E-220**  
Joint sealing tape onto concrete and metal surfaces, also used to create the Sikaplan® WP membrane compartments system.

- C Sika® Dilatec® ER-350**  
Termination and connection tape for Sikaplan® WP membranes onto concrete and metal surfaces.

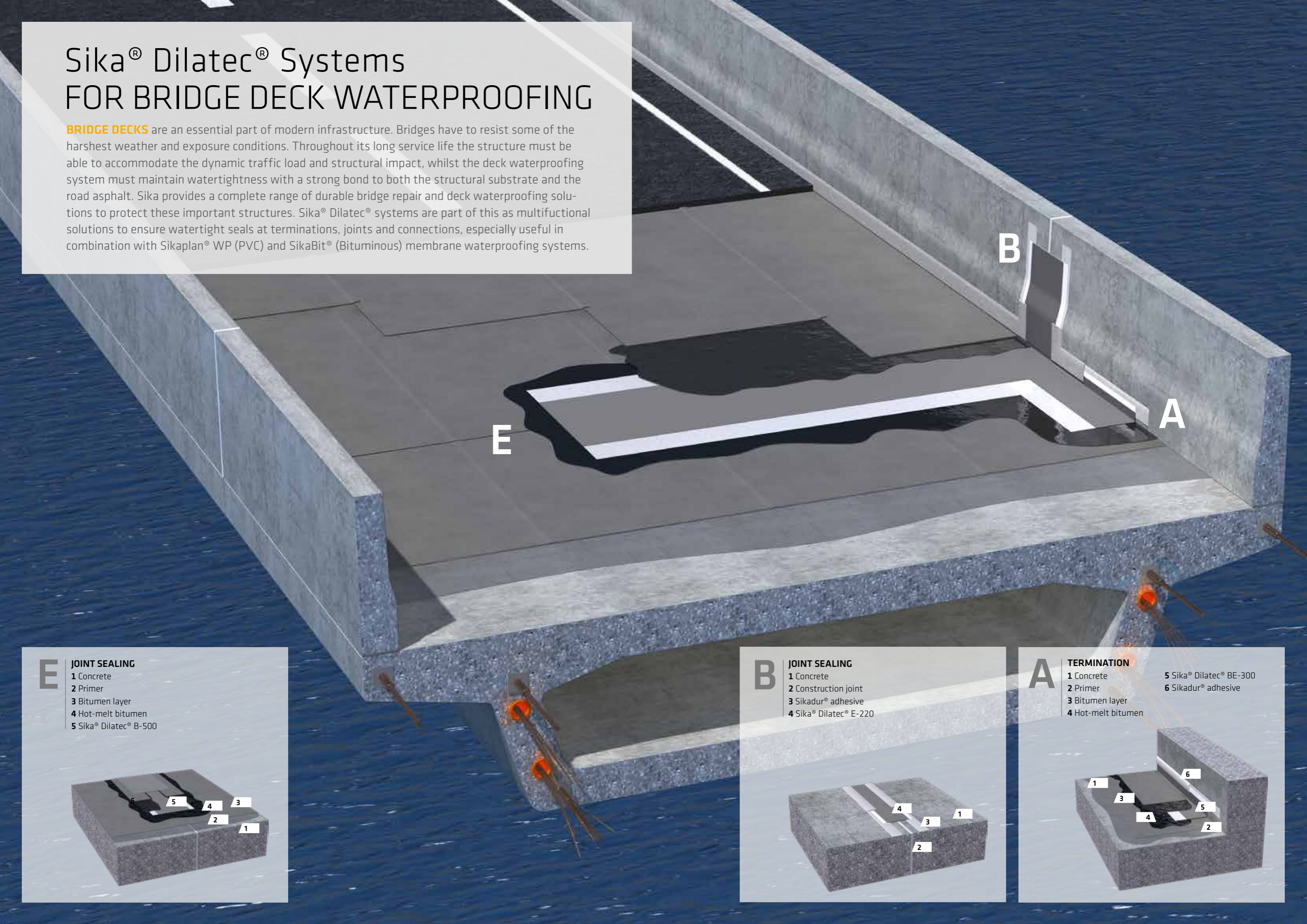
- D Sika® Dilatec® BR-500**  
Termination and connection tape between bituminous waterproofing membrane and Sikaplan® WP membrane.

- E Sika® Dilatec® B-500**  
Joint sealing tape for bituminous waterproofing membranes.

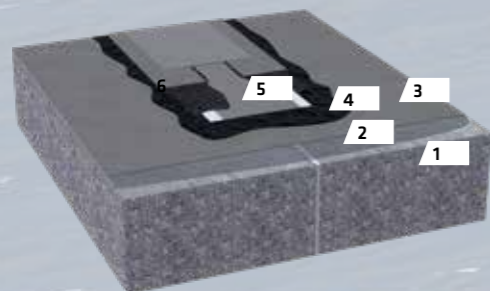


# Sika® Dilatec® Systems FOR BRIDGE DECK WATERPROOFING

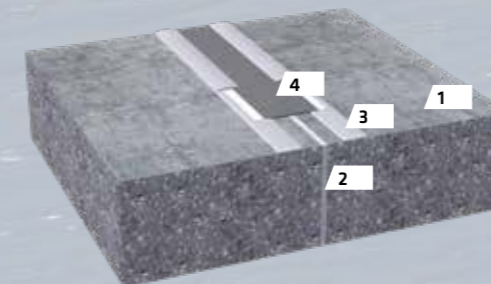
**BRIDGE DECKS** are an essential part of modern infrastructure. Bridges have to resist some of the harshest weather and exposure conditions. Throughout its long service life the structure must be able to accommodate the dynamic traffic load and structural impact, whilst the deck waterproofing system must maintain watertightness with a strong bond to both the structural substrate and the road asphalt. Sika provides a complete range of durable bridge repair and deck waterproofing solutions to protect these important structures. Sika® Dilatec® systems are part of this as multifunctional solutions to ensure watertight seals at terminations, joints and connections, especially useful in combination with Sikaplan® WP (PVC) and SikaBit® (Bituminous) membrane waterproofing systems.



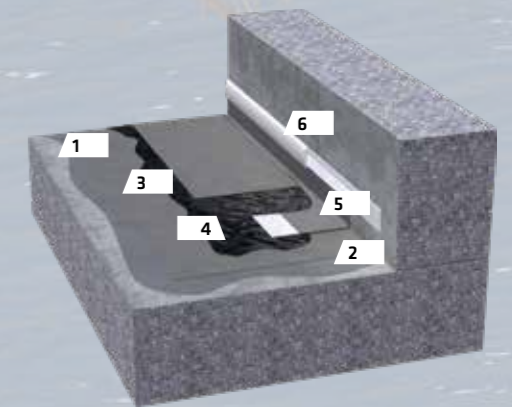
- E** **JOINT SEALING**
- 1 Concrete
  - 2 Primer
  - 3 Bitumen layer
  - 4 Hot-melt bitumen
  - 5 Sika® Dilatec® B-500



- B** **JOINT SEALING**
- 1 Concrete
  - 2 Construction joint
  - 3 Sikadur® adhesive
  - 4 Sika® Dilatec® E-220

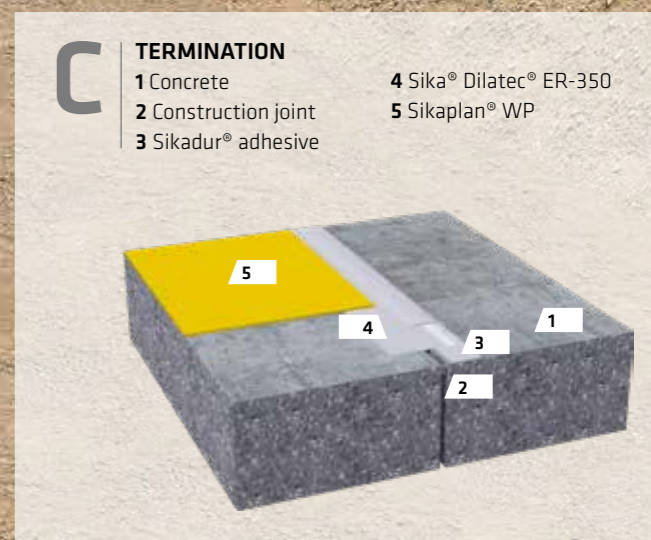
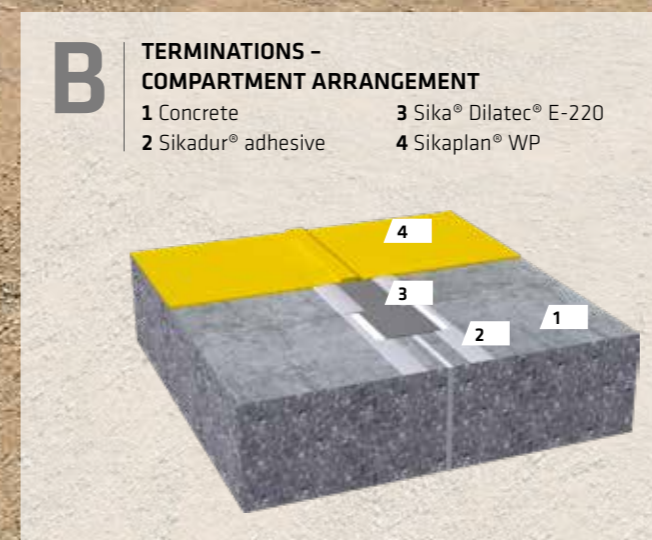
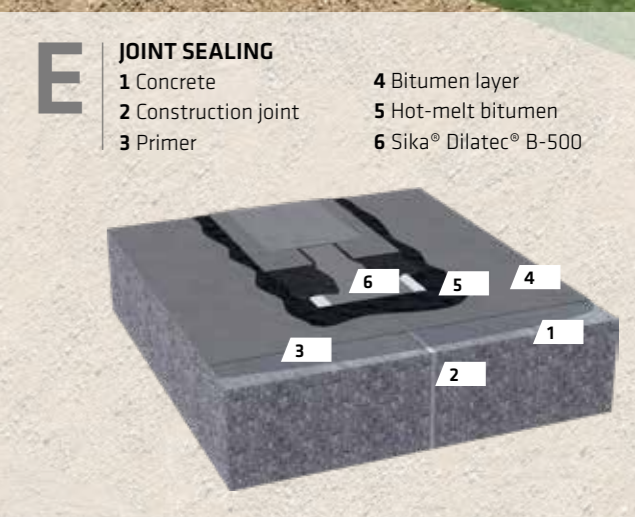
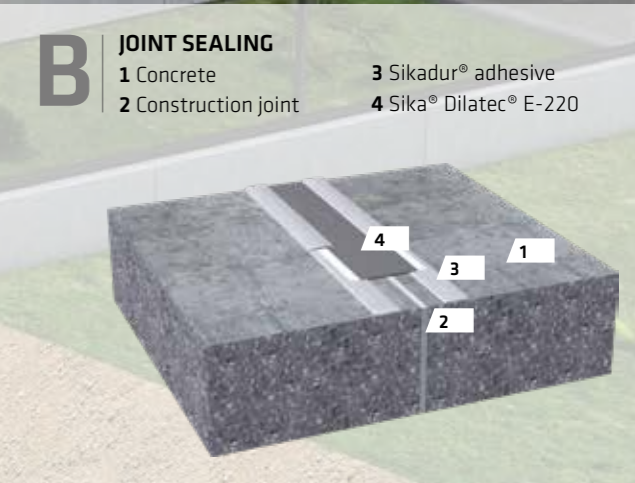
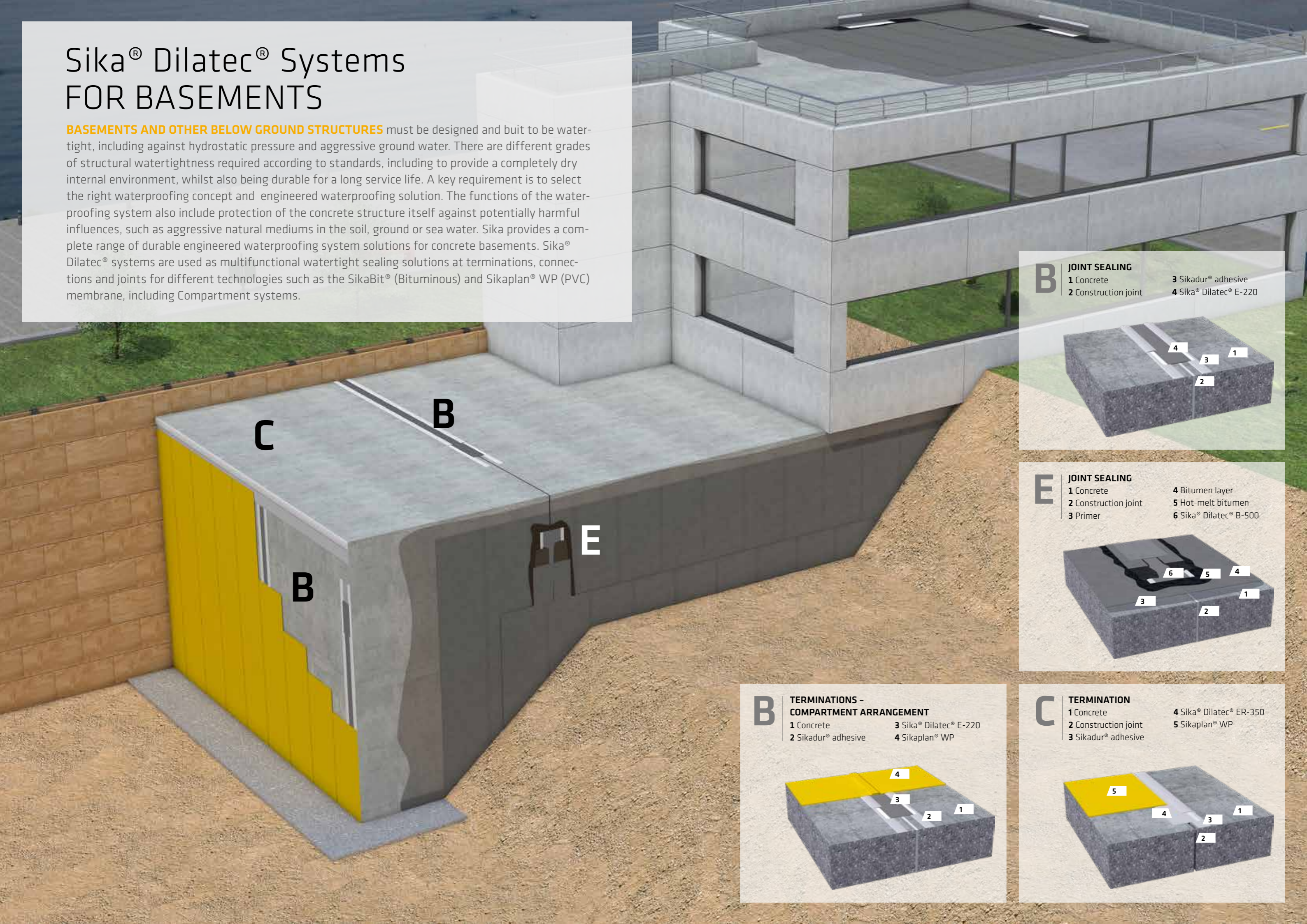


- A** **TERMINATION**
- 1 Concrete
  - 2 Primer
  - 3 Bitumen layer
  - 4 Hot-melt bitumen
  - 5 Sika® Dilatec® BE-300
  - 6 Sikadur® adhesive



# Sika® Dilatec® Systems FOR BASEMENTS

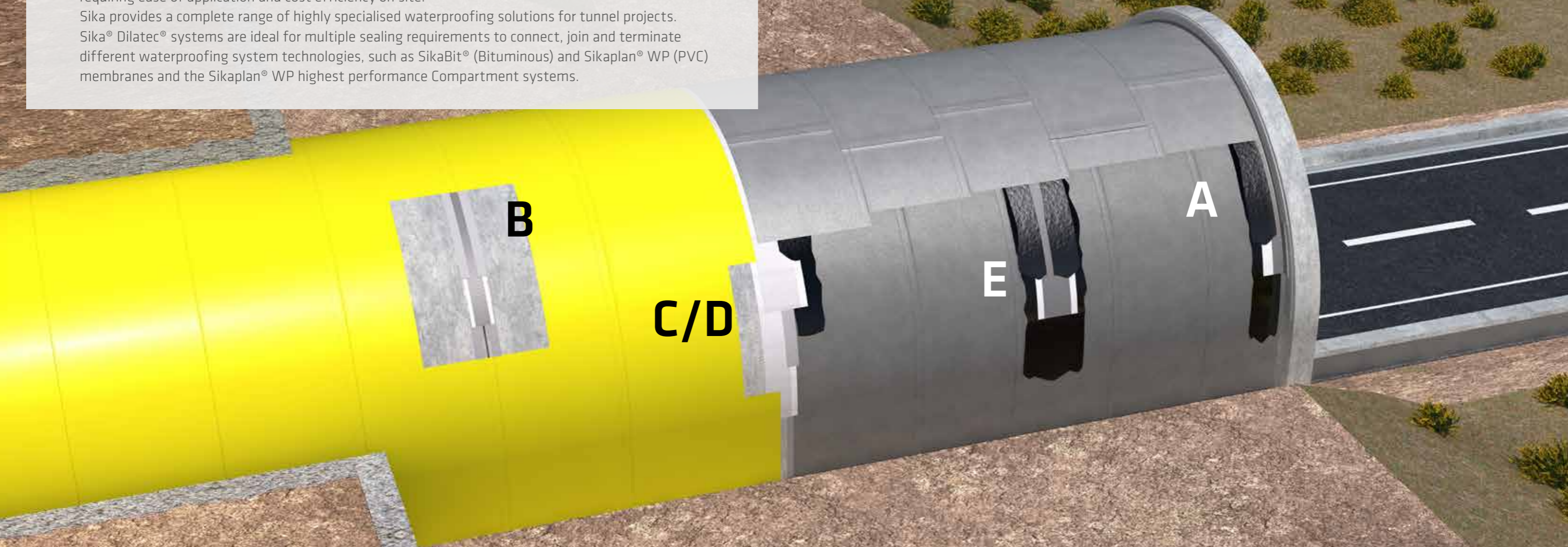
**BASEMENTS AND OTHER BELOW GROUND STRUCTURES** must be designed and built to be watertight, including against hydrostatic pressure and aggressive ground water. There are different grades of structural watertightness required according to standards, including to provide a completely dry internal environment, whilst also being durable for a long service life. A key requirement is to select the right waterproofing concept and engineered waterproofing solution. The functions of the waterproofing system also include protection of the concrete structure itself against potentially harmful influences, such as aggressive natural mediums in the soil, ground or sea water. Sika provides a complete range of durable engineered waterproofing system solutions for concrete basements. Sika® Dilatec® systems are used as multifunctional watertight sealing solutions at terminations, connections and joints for different technologies such as the SikaBit® (Bituminous) and Sikaplan® WP (PVC) membrane, including Compartment systems.



# Sika® Dilatec® Systems FOR CUT AND COVER TUNNELS

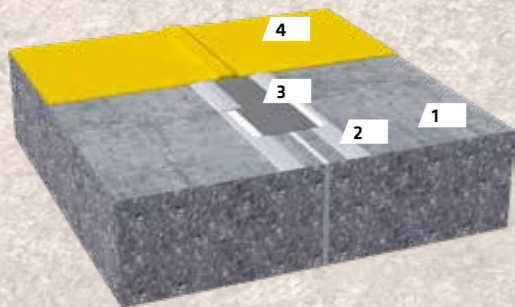
**WATERPROOFING SYSTEMS FOR TUNNEL STRUCTURES** are faced with very stringent requirements. This is not only regarding their performance and durability in these aggressive exposure conditions, but they also have to be installed during demanding construction processes and sequences, requiring ease of application and cost efficiency on site.

Sika provides a complete range of highly specialised waterproofing solutions for tunnel projects. Sika® Dilatec® systems are ideal for multiple sealing requirements to connect, join and terminate different waterproofing system technologies, such as SikaBit® (Bituminous) and Sikaplan® WP (PVC) membranes and the Sikaplan® WP highest performance Compartment systems.



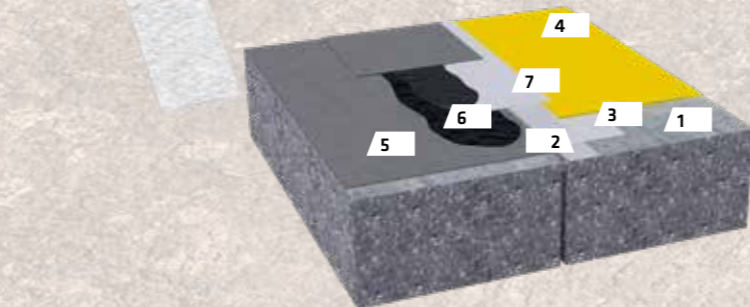
## **B** COMPARTMENT ARRANGEMENT

- 1 Concrete
- 2 Sikadur® adhesive
- 3 Sika® Dilatec® E-220
- 4 Sikaplan® WP



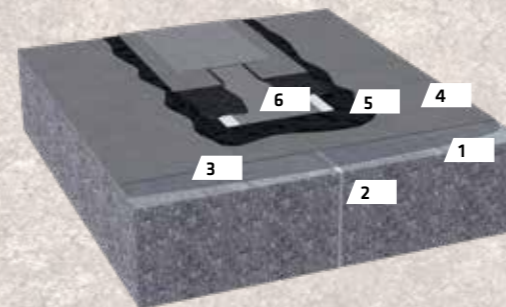
## **C/D** TRANSITION

- |                         |                         |
|-------------------------|-------------------------|
| 1 Concrete              | 6 Hot-melt bitumen      |
| 2 Sikadur® adhesive     | 7 Sika® Dilatec® BR-500 |
| 3 Sika® Dilatec® ER-350 |                         |
| 4 Sikaplan® WP          |                         |
| 5 Bitumen layer         |                         |



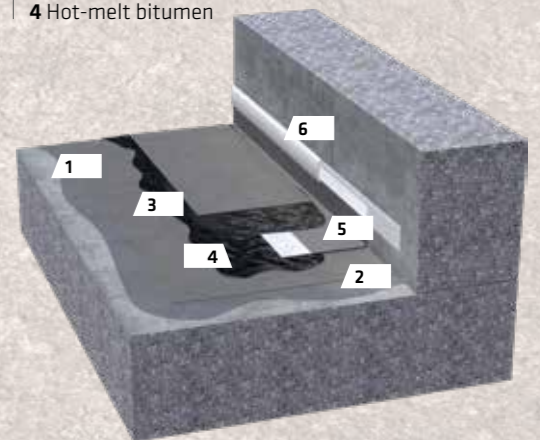
## **E** JOINT SEALING

- 1 Concrete
- 2 Construction joint
- 3 Primer
- 4 Bitumen layer
- 5 Hot-melt bitumen
- 6 Sika® Dilatec® B-500

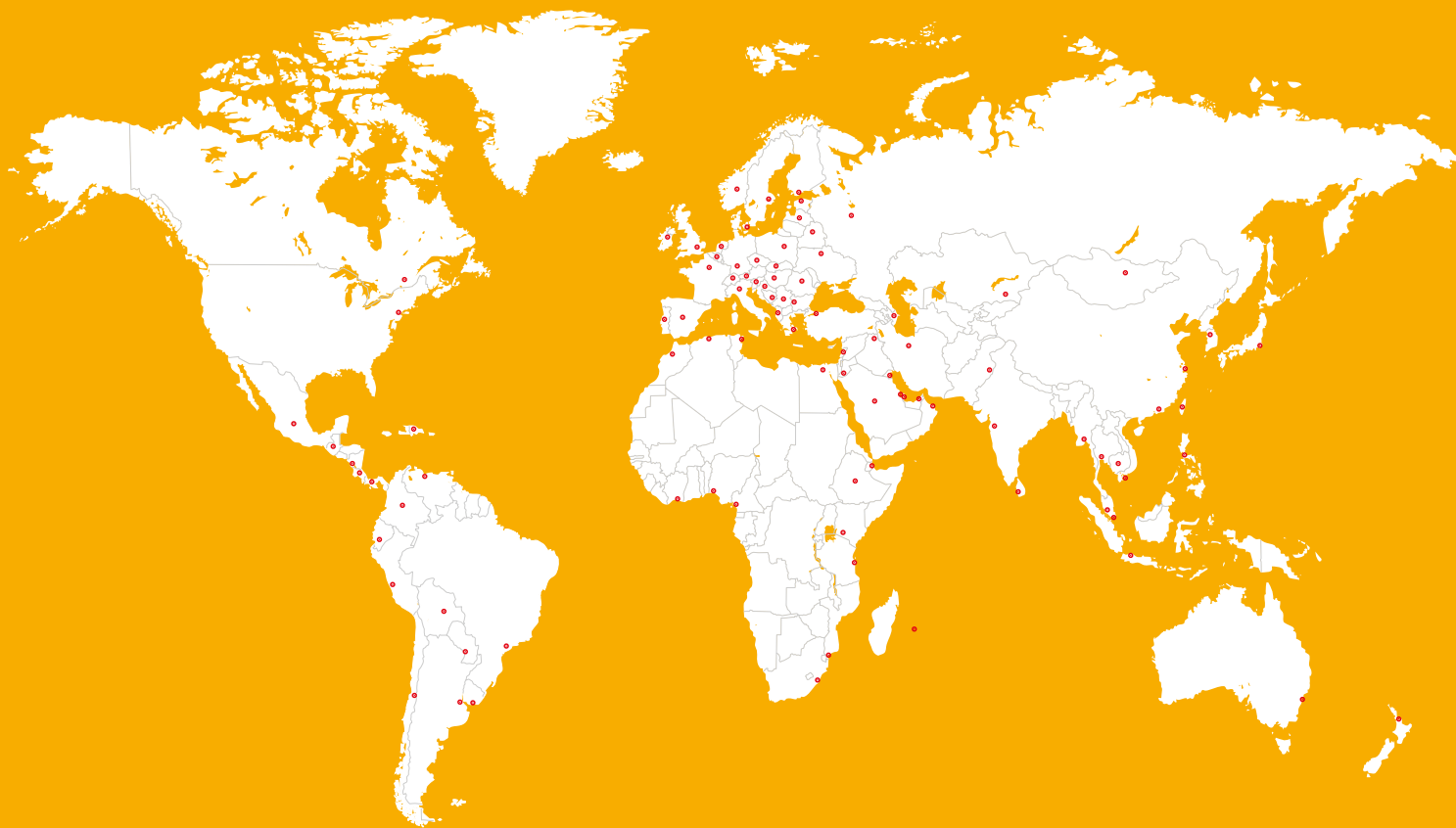


## **A** TERMINATIONS

- |                    |                         |
|--------------------|-------------------------|
| 1 Concrete         | 5 Sika® Dilatec® BE-300 |
| 2 Primer           | 6 Sikadur® adhesive     |
| 3 Bitumen layer    |                         |
| 4 Hot-melt bitumen |                         |



# 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.



**SIKA SERVICES AG**  
Tueffenwies 16  
CH-8048 Zurich  
Switzerland

**Contact**  
Phone +41 58 436 40 40  
[www.sika.com](http://www.sika.com)

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