

# SYSTEM DATA SHEET

# Sika® Dilatec® System

# PVC multifunctional joint sealing system

#### DESCRIPTION

The Sika® Dilatec® System is a combination of various types of waterproofing tapes based on polyvinyl chloride (PVC) and substrate bonding materials consisting of epoxy adhesives and / or hot melt bitumen depending on the application. The system provides a flexible waterproofing connection between PVC and bitumen membranes and different substrates. The appropriate tape is selected based on the application, membrane type and substrate combinations.

Suitable for use in hot and tropical climatic conditions.

#### **USES**

Sealing of different structures and applications including:

- Basements
- Bridges
- Cut and cover tunnels

#### Sealing of:

- Construction joints
- Connection joints
- Connection between different membrane types
- Terminations
- Creating compartmentalised Sikaplan System

# **CHARACTERISTICS / ADVANTAGES**

- Multifunctional solution for joint sealing
- Good adhesion properties
- Bonding options to a range of membranes and substrates
- No activation on site required
- High flexibility joint bridging ability
- Good chemical resistance
- Root penetration resistant
- Resistant to weathering
- Hot air weldable
- Adaptable to many different jointing situations

# **APPROVALS / CERTIFICATES**

- Elongation, Tensile Strength, Foldability, Puncture and Tear Resistance tests, Sika® Dilatec® BR-500, tecnotest ag, Test report No. A4447-01
- Fire Testing EN ISO 11925, Sika® Dilatec® B-500, tecnotest ag, Test report No. A4020-06
- Fire Testing EN ISO 11925, Sika® Dilatec® BE-300, tecnotest ag, Test report No. A4020-09
- Fire Testing EN ISO 11925, Sika® Dilatec® BR-500, tecnotest ag, Test report No. A4020-08
- Fire Testing EN ISO 11925, Sika® Dilatec® E-220, tecnotest ag, Test report No. A4020-07
- Material Properties Sika® Dilatec® ER-350, tecnotest ag, Test report No. A4020-05

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November 2020, Version 01.01
020703900000000004

# **SYSTEMS**

System structure	Sika® Dilatec® System consists of a polyvinyl chloride (PVC) waterproofing tape and a Sikadur® epoxy adhesive or hot bitumen for bonding to substrates.	
	Tape type	Description
	Type BE-300	Connects and terminates bituminous waterproofing membranes on concrete or metal substrates. The Bedge on one side is bonded to the bituminous waterproofing membranes with hot-melt bitumen. The E-edge on the other side of the tape is bonded to concrete or metal with Sikadur® epoxy adhesives.
	Type ER-350	Connects and terminates Sikaplan® WP (PVC) sheet membranes onto concrete or metal substrates. The E- edge on one side of the tape is bon- ded to concrete or metal with Sikadur® epoxy adhesives. The R- edge on the other side is hot air wel- ded to the Sikaplan® WP mem- branes.
	Type BR-500	Connects and terminates bituminous waterproofing membranes and Sikaplan® WP (PVC) sheet membranes. The B-edge on one side is bonded to the bituminous membranes with hot melt bitumen. The R-edge on the other side is hot air welded to the Sikaplan® WP membranes.
	Type E-220	Seals connection and construction joints and can be used to create compartments of the Sikaplan® WP membrane system. Bonded on both sides with Sikadur® epoxy adhesives (E-edges).
	Type B-500	Seals connection and construction joints. Bonded on both sides with hot melt bitumen between two layers of bituminous waterproofing membranes (B-edges).
	Epoxy adhesive: • Sikadur®-31 CF Slow Suitable hot-melt bitumen	
TECHNICAL INFORMATION		
Chemical resistance	Resistant to many chemicals. Refer to the individual Product Data Sheets.	
Service temperature	-10 °C min. / +40 °C max.	
PRODUCT INFORMATION		
Packaging	Refer to the individual Product Data Sheets	

Refer to the individual Product Data Sheets

Refer to the individual Product Data Sheets

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Storage conditions



Shelf life

#### **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 type

Selection of the correct type of tape and therefore its application method is dependent on the specific project details and conditions. Contact Sika Technical Services for additional information.

#### **General Installation Procedure**

- Concrete or other substrates are prepared either side of the joint by mechanical equipment, i.e. blast cleaning, grinding etc., followed by vacuum extraction to remove residual dust etc.
- Sika® Dilatec® tape connections and overlaps must be welded.
- The E-edge (epoxy) is bonded to the substrate with Sikadur® epoxy adhesive.
- The R-edge (PVC) is hot air welded to PVC waterproofing membranes and PVC profiles.
- The B-edge (bitumen) is bonded with suitable hotmelt bitumen in a sandwich between 2 layers of sheet membrane.

For detailed application information refer to the Application Manual: Sika® Dilatec® System.

#### **FURTHER INFORMATION**

- Sika® Application Manual: Sika® Dilatec® 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.
- Sika® Dilatec® Tape must be protected from mechanical damage.
- Sika® Dilatec® Tape can be connected to the Sikaplan WP membranes by hot air welding.

#### **BASIS OF PRODUCT DATA**

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

#### 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.

### **ECOLOGY, HEALTH AND SAFETY**

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).

#### **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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ISO 9001: Sika UAE LLC, Sika Gulf B.S.C. (c), Sika Saudi Arabia Co. Ltd, Sika Qatar LLC Sika Gulf B.S.C. (c), Sika Saudi Arabia Co. Ltd OHSAS: Sika UAE LLC, Sika Gulf B.S.C. (c) All products are supplied under a management system certified to confort to the requirements of the quality, environmental occupational health & safety standards ISO 9001, ISO 14001 and OHSAS 18001.

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