

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.

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 / STANDARDS

- 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

SYSTEM INFORMATION

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 B-edge 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 bonded to concrete or metal with Sikadur® epoxy adhesives. The R-edge on the other side is hot air welded to the Sikaplan® WP membranes.

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 adhesives:

- Sikadur Combiflex® CF Adhesive Normal
- Sikadur Combiflex® CF Adhesive Rapid
- Sikadur®-31 CF Normal
- Sikadur®-31 CF Rapid
- Sikadur®-31 CF Slow

Hot melt bitumen:

- Sika® Cimento Asfaltico

TECHNICAL INFORMATION

Chemical Resistance

Resistant to many chemicals. Refer to the individual Product Data Sheets.

Service Temperature

-10 °C min. / +40 °C max.

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Sika® Dilatec® System
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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.

FURTHER DOCUMENTS

- Sika® Application Manual: Sika® Dilatec® System
- Relevant Product Data Sheets

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

ECOLOGY, HEALTH AND SAFETY

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 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 hot-melt bitumen (Sika® Cimento Asfaltico) in a sandwich between 2 layers of sheet membrane.

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

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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