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# SYSTEM DATA SHEET SikaProof<sup>®</sup> P-1201 System

## FULLY BONDED, POST-APPLIED FPO SHEET MEMBRANE WATERPROOFING SYSTEM FOR BASE-MENT AND BELOW GROUND STRUCTURES

## DESCRIPTION

SikaProof® P-1201 System is a fully bonded composite sheet membrane waterproofing system for reinforced concrete structures. It consists of an embossed flexible polyolefin (FPO) based membrane SikaProof® P-1200 and a 2 component PU adhesive Sarnacol®-2152. SikaProof® P-1201 System is cold-applied and post-applied onto the hardened reinforced concrete structure, without use of heat or open-flames.

### USES

Damp-proofing, waterproofing and concrete protection for basements and other below ground structures against ground water ingress. Suitable for use on:

- vertical reinforced concrete walls
- horizontal reinforced concrete slabs, protrusions, decks and podiums
- extensions and reconstruction works
- prefabricated structures

# **CHARACTERISTICS / ADVANTAGES**

- Fully bonded onto the hardened concrete structure
- No lateral water underflow between the reinforced concrete structure and the membrane system
- Highly flexible with crack-bridging abilities
- High watertightness tested according various standards
- Easy to install with fully adhered joints (no welding required)
- Cold applied (no heat or open flames required)
- Temporary resistant to weathering and UV-light during construction
- Resistant to aging
- Resistant to aggressive mediums and gases in natural ground water and soil
- Can be combined with other approved Sika Waterproofing / Joint Sealing Systems

# **APPROVALS / STANDARDS**

• Function test, Wissbau, according German standards, test report No. 2016-397

## **PRODUCT INFORMATION**

| Packaging          | Please refer to the individual Product Data Sheet |  |
|--------------------|---|--|
| Shelf Life         | Please refer to the individual Product Data Sheet |  |
| Storage Conditions | Please refer to the individual Product Data Sheet |  |
| SYSTEM INFORMATION |   |  |

| System Structure | SikaProof <sup>®</sup> P-1201 System  |                               |
|------------------|---|-------------------------------|
|                  | Waterproofing Membrane  | SikaProof <sup>®</sup> P-1200 |
|                  | Adhesive  | Sarnacol <sup>®</sup> -2152   |
|                  | See current Method Statement of the SikaProof® P-1201 System for com-<br>patible accessories and complementary products used to create the relev-<br>ant details and connections. |                               |

**SYSTEM DATA SHEET** SikaProof® P-1201 System May 2019, Version 01.01 02070490000000003

## **TECHNICAL INFORMATION**

| Resistance to Root Penetration                                  | Pass  | (CEN/TS 14416  |  |
|---|---|--|--|
| Tensile Adhesion Strength                                       | ≥ 1.5 N/mm <sup>2</sup> (EN   |  |  |
| Adhesion in Peel  | ≥ 80 N/50 mm, to hardened structural concrete (EN 13  |  |  |
| Joint Peel Resistance   | ≥ 50 N/50 mm  | (EN 12316-2  |  |
| Reaction to Fire  | Class E   | (EN 13501-1  |  |
| Accelerated Ageing in Alkaline Enviror<br>ment Tensile Strength | I- Pass   | (EN 1847) (28 d / +23 °C<br>(EN 1928, Method B) (24 h / 60 kPa |  |
| Resistance to lateral water migration                           | Pass, up to 7 bar (area)  | (ASTM D 5385 modified  |  |
| Service Temperature   | -10 °C min. / +35 °C max.   |  |  |
| APPLICATION INFORMATIO  | N   |  |  |
| Ambient Air Temperature   | +5 °C min. / +50 °C max.  |  |  |
| Consumption   | Typical consumption of Sarnacol®-22<br>For wall application with shuttering<br>(smooth, even)<br>For horizontal slab application with<br>rough uneven surface | minimum 1.0 kg per m <sup>2</sup>                              |  |
| Substrate Temperature   | Surface to be bonded: Minimum +5 °C<br>Apply appropriate measures if below  |  |  |
| Substrate Moisture Content                                      | Dry, ≤ 4 % moisture content, no rising moisture   |  |  |
| Pot Life  | Temperature   | Pot Life   |  |
|   | +20 °C<br>+30 °C  | 30 min<br>15 min   |  |
| Open Time   | Temperature   | Open Time  |  |
|   | +20 °C  | 100 min  |  |
|   | +30 °C  | 50 min   |  |
|   |   |  |  |

# **APPLICATION INSTRUCTIONS**

#### SUBSTRATE QUALITY

Reinforced concrete structure must be:

- Hardened and of sufficient compressive strength, minimum 25 N/mm<sup>2</sup>
- With a minimum pull-off strength of 1.5 N/mm<sup>2</sup>
- Dry, sound, clean and free of any contaminations (e.g. dust, oil, grease, release agent, etc.)
- Free from surface defects (e.g. blowholes, voids, honeycombing, cracks, protrusions, etc.)

#### SUBSTRATE PREPARATION

The concrete or other suitable cementitious substrate must meet the defined substrate quality. If the substrate does not fulfil the requirements, the surface must be pre-treated prior to the application, in order to prevent any subsequent damage to the membrane sheets.

For more detailed information and guidance please refer to the current Method Statement for the

**SYSTEM DATA SHEET** SikaProof® P-1201 System May 2019, Version 01.01 02070490000000003 SikaProof® P-1201 System.

#### **APPLICATION METHOD / TOOLS**

The installation method of SikaProof<sup>®</sup> P-1201 System is state of the art for adhered membrane systems, by simple and easy bonding of the membrane sheets onto a previously applied adhesive bed. The following working steps are to be complied with:

- Substrate preparation and cleaning, to fulfil requirements on substrate quality.
- Mix the 2-C Sarnacol<sup>®</sup>-2152 adhesive according to the Product Data Sheet.
- Apply the adhesive with a notched trowel onto the substrate full surface (no primer required).
- Prepare and apply the SikaProof<sup>®</sup> P-1200 membrane accordingly.
- Roll in and press the membrane properly into the still fresh adhesive bed.
- Ensure a minimum adhesive layer thickness of 1 mm is maintained after pressing.
- Overlap and adhere the membrane sheets, with a minimum bonded overlap of 90 mm.



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• Treat all details and connections according to the Method Statement.

For more detailed information and guidance please refer to the current Method Statement for the SikaProof® P-1201 system.

# IMPORTANT CONSIDERATIONS

SikaProof<sup>®</sup> P-1201 System must only be installed by Sika trained and approved contractors.

- The SikaProof<sup>®</sup> P-1201 System Method Statement, with its technical guidelines and information, must be complied with.
- Do not install SikaProof<sup>®</sup> P-1201 System during continuous or prolonged rain, snowfall or sand storm.
- The substrate quality and condition must be fulfilled or appropriate treatment or measures must be applied.
- An adequate concrete quality (mix design and workmanship) is required to achieve optimum full bond of the SikaProof<sup>®</sup> P-1201 System membrane system to the hardened structural concrete.
- Additional Sika<sup>®</sup> Joint Sealing Solutions (minimum SikaSwell<sup>®</sup>) must be used for connections, around penetrations and in construction and expansion joints.
- Protect the membrane system immediately after completion of installation works to prevent any damages.
- SikaProof<sup>®</sup> P-1201 System is not resistant to permanent UV exposure and weathering. It must always be protected against UV exposure within a defined period of time depending on the climate conditions and the geographic region. For further information please refer to the current Method Statement of SikaProof<sup>®</sup> P-1201 System.
- SikaProof<sup>®</sup> P-1201 System must not be installed on structures permanently exposed to UV light and weathering.
- SikaProof<sup>®</sup> P-1201 System is not designed for use on structures with direct impact of traffic.

For more detailed information and guidance please refer to the current Method Statement for the SikaProof® P-1201 System.

#### Recommended standard use:

Sika recommends using the SikaProof® P-1201 System for damp proofing or waterproofing of below ground constructions up to a certain demand. Refer to section 4 "Project Design" of the current Method Statement SikaProof® P-1201 System for selecting the most suitable type of SikaProof® membrane system. Contact Sika technical service for additional information and assistance on the selection and specification of the appropriate solution for the specific project.

# **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.

## 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.

## 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 Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

## **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.



**SYSTEM DATA SHEET** SikaProof® P-1201 System May 2019, Version 01.01 02070490000000003 SikaProofP-1201System-en-MY-(05-2019)-1-1.pdf



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