

PRODUCT DATA SHEET

SikaSwell® P Profiles

Swellable mono type joint sealing profiles

DESCRIPTION

Sealing profiles which swell in contact with water to seal all types of joints and penetrations in concrete.

USES

To seal:

- Construction joints
- Pipe and steel work penetrations through walls and floor slabs
- Construction joints in precast concrete
- Construction joints in tunnel segments
- Construction joints in cable ducts, etc.
- Around all types of penetrations through concrete

CHARACTERISTICS / ADVANTAGES

- Easy to apply
- Swells in contact with water
- Coated with protective layer to avoid premature swelling
- Water resistant
- No hardening time required
- Can be applied on different substrates
- Adaptable to fit many different detailing tasks
- Different types and dimensions available

APPROVALS / STANDARDS

- Water Tightness SikaSwell® P-2003, STUVA, Test report No. FSO-KE46

PRODUCT INFORMATION

Chemical Base	Red outer layer: Combination of hydrophilic swelling resins and rubber		
Packaging	SikaSwell® P 2003	7 × 20 m = 140 m	Box with 7 rolls
	SikaSwell® P 2005	7 × 20 m = 140 m	Box with 7 rolls
	SikaSwell® P 2010	1 × 10 m = 10 m, 5 × 10 m = 50 m	Box with 1 or 5 rolls

Refer to current price list for packaging variations.

Appearance / Colour

Mono Types:

- Plain section swelling profiles
- Highly swellable red profiles



Shelf Life	48 months from date of production		
Storage Conditions	The product must be stored in original, unopened and undamaged packaging in dry conditions at temperatures between +5 °C and +35 °C. Always refer to packaging.		
Dimensions	Type	Width mm	Thickness mm
	2003	20	3
	2005	20	5
	2010	20	10
	Other profiles available on request		

TECHNICAL INFORMATION

Shore A Hardness	45 ± 5	(DIN 53505)
Tensile Strength	> 1,3 N/mm ²	(DIN 53504)
Elongation	> 300 %	(DIN 53504)
Change of Volume	Volume change in Standard Water (according to ISO 1817)	
	Storage Time (Days)	Volume Change (%)
	1	> 100
	3	> 200
	7	> 300
	Volume change in Sea Water (according to ISO 1817)	
	Storage Time (Days)	Volume Change (%)
	1	> 10
	3	> 20
	7	> 25
Swelling Pressure	≤ 15 bar after 7 days stored in tap water	

SYSTEM INFORMATION

System Structure

The following system products must be used:

- SikaSwell® P Profiles
- SikaSwell® S-2 Sealant

APPLICATION INFORMATION

Substrate Moisture Content	Dry or matt damp. Do not apply in construction joints when standing water is existing.
Ambient Air Temperature	+5 °C min. For installation below +5 °C ambient temperature, special measures are required in accordance with relevant national regulations and Sika guidelines
Substrate Temperature	+5 °C min. For installation below +5 °C substrate temperature, special measures are required in accordance with relevant national regulations and Sika guidelines

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.

LIMITATIONS

- SikaSwell® P Profiles profiles expand in contact with water. This does not occur immediately, but slowly after several hours. It is advisable not to leave the profiles in the open air or exposed to rain water. Limit exposure to a maximum of 24 hours making sure any water can drain away.
- Do not use profiles for movement joints.
- The watertightness of joints will only be achieved after SikaSwell® P Profiles profiles have swollen.
- In a totally dry state, the profiles shrink to their original dimensions then expand again when in contact with water.
- Do not use SikaSwell®-P Profiles for sealing against water pressures higher than 2 bar.
- Fix profiles around small diameter pipes using additional mechanical fixings using tie wires or a sleeve.

ECOLOGY HEALTH AND SAFETY

REGULATION (EC) NO 1907/2006 - REACH

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 this 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)

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY

The substrate must be sound, clean, dry or matt-damp and free from all surface contaminants

SUBSTRATE PREPARATION

Existing concrete

All loose particles, release agents, laitance, paint, rust and other poorly adhering materials must be removed by suitable hand or mechanical preparation.

Freshly cast concrete

Note: Surfaces which are excessively rough can be susceptible to leaking. It is recommended to smoothen the freshly cast concrete with a batten where the sealing profile is to be placed.

During concreting, compact well around SikaSwell® P Profiles profiles to provide a dense concrete without any honeycombing or voids.

APPLICATION METHOD / TOOLS

IMPORTANT

The profiles must be placed within a maximum of 30 minutes.

IMPORTANT

Connections and corners must be butt jointed and fixed.

IMPORTANT

Allow SikaSwell® S-2 to harden for 2–3 hours before placing concrete.

IMPORTANT

Allow SikaSwell® S-2 to harden for a minimum 24 hours before placing concrete.

IMPORTANT

Protect the SikaSwell® P Profiles profiles against water (e.g. rain) until the concrete is placed.

IMPORTANT

Make sure full and continuous contact is made between the SikaSwell® P Profiles and the SikaSwell S-2 coated substrate.

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IMPORTANT

The SikaSwell® P Profiles profiles require a reinforced concrete / concrete cover of at least 8 cm.

IMPORTANT

Minimum cover to profiles on both sides must be 10 cm (reinforced concrete) or 15 cm (non reinforced concrete).

SikaSwell® S-2 Sealant application

- Apply SikaSwell® S-2 in a narrow bed (size of triangular section ~5 mm) onto the prepared substrate.
- Extrude sufficient quantity to level the roughness of the substrate. Refer to the SikaSwell® S-2 Product Data Sheet

SikaSwell® P Profiles application

1. Cut the SikaSwell® P Profiles to the required length.
2. Place profiles in the centre of the concrete section.
3. Press the SikaSwell® P Profiles into the freshly applied SikaSwell S-2 until a small quantity is extruded from both sides of the profile.

CLEANING OF TOOLS

Clean all tools and application equipment with Sika® Colma-Cleaner immediately after use. Hardened material (adhesive) can only be mechanically removed.

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.

Sika Pakistan (Pvt.) Limited

141-CCA Phase IV, DHA

Lahore Punjab 54792

Pakistan

phone: +92 42 3569 4266 - 67

fax: +92 42 3569 4268

<http://pak.sika.com/>

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