

**BUILDING TRUST** 

# PRODUCT DATA SHEET SikaSwell® A

# ACRYLIC SWELLABLE JOINT SEALING PROFILE

## **PRODUCT DESCRIPTION**

SikaSwell<sup>®</sup> A is an acrylic sealing profile which swells in contact with water to seal all types of joints and penetrations in concrete. It has a rectangular profile and is available in several sizes.

## USES

To seal:

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

# **CHARACTERISTICS / ADVANTAGES**

- Easy to apply
- Can be applied on different substrates
- Highly economical
- Swells in contact with water
- Can swell into cracks and gaps
- Long-term reliability tested
- Resistant against water and various chemical substances
- No hardening time required
- No welding required
- Adaptable to fit many different detailing tasks
- Different types and dimensions available

## **APPROVALS / STANDARDS**

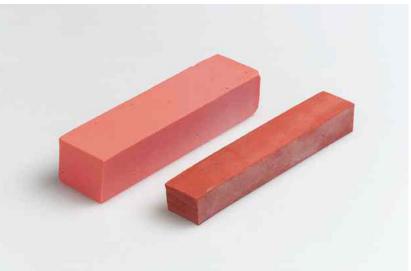
- Functional test to check sealing capacity,WISSBAU, Report No.2012-206
- Agrément Certificate, Sika Hydrophilic Waterstops, BBA, Certificate No.13-4994
- Test Report, Water tightness testing of hydrophilic waterstop, Vattenfall, Report No.1278-10

# **PRODUCT INFORMATION**

Chemical Base	Acrylic polymer		
Packaging	Rolls packed in cardboard boxes		
	SikaSwell® A 2005	Roll of 20 m Box with 1 roll	
	SikaSwell® A 2010	Roll of 10 m Box with 1 roll (or 6 rolls on re- quest)	

Product Data Sheet SikaSwell® A June 2019, Version 01.01 020703300100000010

Rectangular red profiles. Swelled and unswelled profiles shown in image below.



Shelf Life	36 months from the date of production		
Storage Conditions	The product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +35 °C. Always refer to packaging.		
Dimensions	Туре	Width	Height
	SikaSwell <sup>®</sup> A 2005	20 mm	5 mm
	SikaSwell <sup>®</sup> A 2010		10 mm

## **TECHNICAL INFORMATION**

Swelling	Time	Demineralised water   ~100 %   ~150 %   ~200 %   ~220 %	5 % saline solution ~60 % ~100 % ~120 % ~140 %				
	3 days 7 days 14 days 21 days						
				Swelling Pressure	≤ 16 bars after 3	days stored in tap water	
				Service Temperature	0 °C min. / +50 °C max.		

## SYSTEM INFORMATION

System StructureThe following system products must be used:• SikaSwell® A• SikaSwell® S-2 Sealant			
APPLICATION INFORMATION			

Substrate Moisture Content	Dry or matt damp. Do not apply in construction joints when standing wa- ter is existing.
Ambient Air Temperature	+5 °C min. For installation below +5 °C ambient temperature, special measures are re- quired 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

## **APPLICATION INSTRUCTIONS**

## SUBSTRATE QUALITY

**BUILDING TRUST** 

Product Data Sheet SikaSwell® A June 2019, Version 01.01 020703300100000010



The substrate must be sound, clean, dry or matt damp, 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**

During concreting, compact well around SikaSwell<sup>®</sup> A profiles to provide a dense concrete without any honeycombing or voids.

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.

## **APPLICATION METHOD / TOOLS**

#### SikaSwell® S-2 Sealant application

Apply SikaSwell<sup>®</sup> 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<sup>®</sup> S-2 Product Data Sheet

#### SikaSwell<sup>®</sup> A application

Cut the SikaSwell<sup>®</sup> A-Profile to the required length. Press the SikaSwell<sup>®</sup> A-Profile into the freshly applied SikaSwell S-2 until a small quantity is extruded from both sides of the profile to achieve a full surface bond. The profiles must be placed within max. 30 minutes. Connections and corners must be butt jointed and fixed. Allow SikaSwell<sup>®</sup> S-2 to harden for 2–3 hours before placing concrete. Protect the SikaSwell<sup>®</sup> A profiles against water (e.g. rain) until the concrete is placed.

## LIMITATIONS

- Ensure a full and continuous contact between the SikaSwell<sup>®</sup> A profiles and the substrate is achieved.
- The SikaSwell<sup>®</sup> A profiles require a reinforced concrete cover of at least 75mm with the product placed within the steel reinforcing. Otherwise a minimum cover 150mm is required.
- SikaSwell<sup>®</sup> A profiles expand in contact with water. This does not occur immediately, but slowly after several hours. It is advisable not to leave SikaSwell<sup>®</sup> A profiles in the open air or exposed to rain water (max. 24 hours as long as water can drain away)
- Do not use profiles for movement joints.
- If the water level suddenly increases the watertightness of joints will only be achieved after SikaSwell<sup>®</sup> A profiles have swollen.
- In a totally dry state, SikaSwell<sup>®</sup> A profiles shrink to their original dimensions then expands again in contact with water.
- Above 2,5 bar water pressure it is recommended to install an additional back-up system such as SikaFuko<sup>®</sup>-System.
- If profiles are to be fixed around small diameter pipes use additional mechanical fixing with tie wire or a sleeve.

# VALUE BASE

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 the exact product data and uses.

## ECOLOGY, HEALTH AND SAFETY

## REGULATION (EC) NO 1907/2006 - REACH

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).

## 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.

Product Data Sheet SikaSwell® A June 2019, Version 01.01 020703300100000010



**BUILDING TRUST** 

#### SIKA IRELAND LIMITED

Ballymun Industrial Estate Ballymun Dublin 11, Ireland Tel: +353 1 862 0709 Web: www.sika.ie Twitter: @Sikalreland



Product Data Sheet SikaSwell® A June 2019, Version 01.01 020703300100000010 SikaSwellA-en-IE-(06-2019)-1-1.pdf



BUILDING TRUST