

SikaSwell®-A profiles

Swellable joint sealing profiles

Construction

Product Description

Acrylic sealing profiles which swell in contact with water.

Uses

To seal:

- Construction joints
- Pipe and steel work penetrations through walls and floor slabs
- Construction joints in precast concrete
- 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
- Suitable for water and salt water up to 5% salt content
- Can swell into cracks and gaps
- Long-term reliability tested
- Resistant against Sea water and various chemical substances
- No hardening time required
- No welding required
- Adaptable to fit many different detailing tasks
- Different types and dimensions available

Tests

Approval / Standards

MPA NRW: P-22-MPANRW-3918 - German approval for construction joints (18.11.04)

WISSBAU: 2002-094 – Function test for the application in construction joints (20.06.04)

MPA NRW: Testing of material and swelling properties (31.07.03)

FH Aachen: Mechanical long time stability (11.09.93)






Product Data

Form

Appearance / Colours red, water swellable, acrylic profiles

Packaging Rolls packed in cardboard boxes, quantity depending on type of profile, consult the following table.

Types

Type	Width (mm)	Thickness (mm)	Cross section (schematically view)	Description	m / box
2005	20	5		Water swellable profile	6x20 = 120 m 1x20 = 20 m
2010	20	10			6x10 = 60 m 1x10 = 10 m
2015	20	15			6x7 = 42 m 1x7 = 7m
2520	25	20			6x5 = 30 m

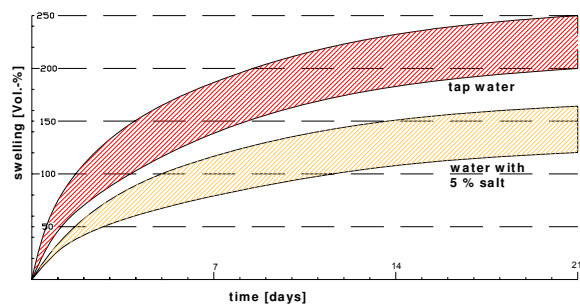
Storage

Storage Conditions / Shelf Life 12 months from date of production if stored in unopened, undamaged and sealed original packaging in dry conditions at temperatures between +5°C and +35°C. Protect from UV light.

Technical Data

Chemical Base Acrylic polymer

Change of Volume



Swelling Pressure ≤ 16 bar after 3 days stored in tap water

System Information

Application Details

Substrate Quality The substrate must be sound, clean, dry, 'mat damp', free from all surface contaminants.

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

Surfaces which are excessively rough tend to leak later on. We recommend smoothing of freshly placed concrete with a batten where the sealing profile is to be placed.

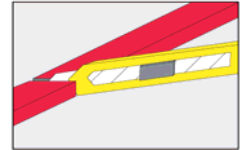
Application Instructions

Application Method / Tools

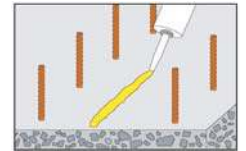
Clean the surface. All loose particles can negatively affect the bonding to the surface.



Cut the SikaSwell A-Profile to the required length.

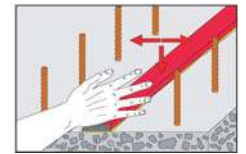


Apply the Sikabond AT-Universal to the clean surface.

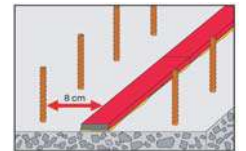


Press the SikaSwell A-Profile into the applied Sikabond AT-Universal.

It is important to get a full bonding to the surface.



The SikaSwell A-Profiles need a concrete cover of at least 8 cm.

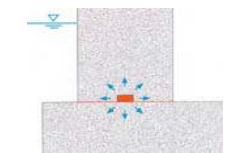


Protect the SikaSwell A-Profiles against water (e.g. rain) until the concrete is placed.



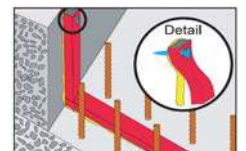
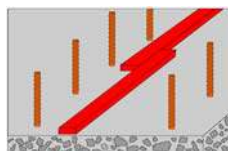
General:

It is important that a full and continuous contact between the SikaSwell®-P Profiles and the substrate is achieved.



During concreting, compact well around SikaSwell®-A Profiles to provide a dense concrete without and honeycombs or voids.

Fixing details:



Notes on Application / Limitations

SikaSwell®-A Profiles expand in contact with water. This does not happen immediately, but slowly after several hours. Nevertheless it is advisable not to leave SikaSwell®-A Profiles any length of time in the open air or exposed to rain water (max. 24 hours as long as water can drain away).

Do not use SikaSwell®-A Profiles for movement joints!

If the water level suddenly increases the watertightness of joints will only be achieved when SikaSwell®-A Profiles have swollen.

In a totally dry state SikaSwell®-A Profiles shrink to their original dimensions, but expand again in contact with water.

Do not use SikaSwell®-A Profiles for sealing against water pressures higher than 2 bar because of the limited sealing distance.

If SikaSwell®-A 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 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.

Health and Safety Information

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 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.

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