SikaSwell®-A profiles
Swellable joint sealing profiles

Product Description
Acrylic sealing profiles which swell in contact with water.

Uses
To seal:
- Construction joints in watertight concrete construction
- 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
- Swells in contact with both potable and salt water
- Can swell into cracks and gaps
- Long-term reliability tested
- Resistant against water and various chemical substances
- No welding required
- Adaptable to fit many different detailing tasks
- Different types and dimensions available

Tests
Approved / Standards
- MPA NRW: P-22-MPANRW-7678 - German approval for construction joints (18.11.09)
- WISSBAU: 2012-206-1, Test of the swelling pressure, (10.20.12)
- FH Aachen: Mechanical long time stability (06.12.2012)
- BBA British Board of Agrément, Approval Inspection Certificate – Technical approval for Construction Agrément Certificate 13/4994, 02.05.2013
- BBA British Board of Agrément, Test Report 48219 Material Properties, 09.01.2013
- Vattenfall Test Report, BBA Approval, Watertightness testing of hydrophilic waterstop, 23.05.2012
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

<table>
<thead>
<tr>
<th>Type</th>
<th>Width (mm)</th>
<th>Thickness (mm)</th>
<th>Cross section (schematically view)</th>
<th>Description</th>
<th>m / box</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>20</td>
<td>5</td>
<td></td>
<td>Water swellable profile</td>
<td>1x20 = 20 m</td>
</tr>
<tr>
<td>2010</td>
<td>20</td>
<td>10</td>
<td></td>
<td>Water swellable profile</td>
<td>1x10 = 10 m</td>
</tr>
</tbody>
</table>

Storage

Storage Conditions / Shelf Life 36 months from date of production if stored in unopened, undamaged and sealed original packaging in dry conditions at temperatures between +5°C and +25°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

Fixing methods:

SikaSwell®-A Profiles can be fixed with SikaSwell® S-2. SikaSwell® S-2 must be extruded in sufficient quantity to level the roughness of the substrate.

Apply SikaSwell® S-2 in a narrow bed (size of triangular section ~ 10 mm) to the substrate. The profiles must be placed within 30 minutes and pressed well into the still fresh SikaSwell® S-2 sealant until small quantities of SikaSwell® S-2 ooze out from both side of the profiles.

Allow SikaSwell® S-2 to harden for 2 - 3 hours before placing concrete. Please consult the product data sheet of SikaSwell® S-2.

General:

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

Place SikaSwell®- Profiles in the centre of the concrete section. Minimum cover to profiles on both sides must be 75 mm (reinforced concrete) or 150 mm (non reinforced concrete).

Connections and corners must be butt jointed and fixed with SikaSwell® S-2.

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

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.

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.