

**Product Data Sheet**  
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 Sika® SwellStop

## Sika® SwellStop

### Bentonite-based and water-swelling joint sealing profiles

**Product Description** Sika® SwellStop is a highly versatile, strip-applied waterstop for non-moving joints in concrete. Formulated to encapsulate hydrophilic materials into a rubber base, SwellStop creates a controlled, moisture-activated, compression seal.

- Uses**
- Designed for construction joints in new, watertight concrete structures
  - Excellent for sealing pipe penetrations through walls and floor slabs
  - Excellent for sealing joints between precast elements
  - Ideal for watertight construction joints between new and existing concrete

- Characteristics / Advantages**
- Easy to apply
  - Can be installed onto different substrates
  - Highly economical and quick to install
  - No hardening time required
  - No welding required
  - Adaptable to fit different detailing
  - Two dimensions available
  - Swells in contact with water
  - Can swell into cracks and gaps
  - Long-term reliability tested

### Product Data

**Form / Colours** Solid / Black

**Packaging** 6 rolls/box

Type	Width	Thickness	Length of roll	Total length per box
Sika® SwellStop	25 mm	19 mm	5.0 m	30 m
Sika® SwellStop II	19 mm	9 mm	7.6 m	45.6 m

**Storage** Store in dry conditions at temperatures not exceeding 30°C. Protect from UV light.

**Shelf life** 2 years from production date if stored properly in unopened, undamaged and sealed original packaging.



## Technical Data

<b>Change of volume</b>	100% at 48 hours; 250% at 28 days (less in salty water) (at 23°C and 50% R.H)
<b>Swelling pressure</b>	160 m after 3 days stored in tap water (at 23°C and 50% R.H)
<b>Penetration, cone at 25°C; 15g; 5 sec.</b>	40 ± 5% (ASTM D217)
<b>Required concrete cover</b>	Sika® SwellStop: 75 mm Sika® SwellStop II: 50 mm
<b>Flash point</b>	290°C
<b>Application temperature</b>	-23°C to +50°C

## Application

<b>Surface preparation</b>	<p>The concrete surface must be sound, clean, dry, and free from all surface contaminants. All loose particles, dirt, dust, release agents, laitance, oils or greases, paint, rust and other poorly adhering materials must be removed by suitable manual or mechanical preparation.</p> <p>The concrete surface should be cured for a minimum of 24 hours prior to Sika® SwellStop application.</p> <p>A keyway may be formed with a slight draft angle at the joint face to accept the Sika® SwellStop, this will reduce the risk of the profile shifting during concrete placement. This may increase the chance of Sika® SwellStop being exposed to pooling water.</p>
<b>Priming</b>	<p>Brush apply a 5 cm wide coat of Sika® SwellStop Primer Adhesive along the joint and allow it to dry for 2 hours before applying Sika® SwellStop.</p>
<b>Application</b>	<p>Sika® SwellStop is installed in and along the joint after the first concrete pour and just before the second pour.</p> <p>Press Sika® SwellStop firmly and continuously in place over and along the primed area.</p> <p>Sika® SwellStop can be mechanically fastened to concrete using concrete nails in vertical or overhead applications. This should be done in addition to using the primer adhesive. Suggested fastener spacing is approximately 30 cm on center.</p> <p>Sika® SwellStop should be spliced by butting the ends together with no separation and no air pockets. Do not overlap the ends of Sika® SwellStop.</p>
<b>Clean up</b>	<p>Uncured adhesive material can be removed from equipment and tools using Sika® Equipment Cleaner. Cured adhesive material can only be removed manually or mechanically. For removal of uncured adhesive material from hands and sensitive surfaces, use Sika® Hand Cleaner towels.</p>
<b>Notes on application/limits</b>	<ul style="list-style-type: none"><li>■ Sika® SwellStop profiles are not suitable for use in movement joints.</li><li>■ Cracking and/or spalling of the concrete can be caused by the expansive pressure of Sika® SwellStop. A minimum 50 - 75 mm of concrete coverage is recommended. Increase this coverage if working with lightweight or low strength concrete (&lt; 25 MPa compressive strength).</li><li>■ Sika® SwellStop requires the presence of moisture to initiate and maintain expansion. The expansion process begins immediately Sika® SwellStop is in contact with water.</li><li>■ Sika® SwellStop Primer Adhesive and Sika® SwellStop profiles should be applied on the same day.</li></ul>

- Inspect Sika® SwellStop for premature swelling, discontinuity and debris contamination immediately prior to the 2<sup>nd</sup> concrete pour. If swelling and/or damage has occurred, remove and replace the material with new.
- If the water level suddenly increases, the water tightness of joints will only be achieved when Sika® SwellStop profiles have swollen.
- Do not remove the separation paper from Sika® SwellStop until immediately prior to the 2<sup>nd</sup> concrete pour.
- Do not use Sika® SwellStop profiles for sealing against water pressures higher than 20 m, because of the limited sealing distance. Contact Sika Technical Services for guidance.
- If Sika® SwellStop profiles are to be fixed around small diameter pipes, use additional mechanical fastening with tie wire or a sleeve.

## Health and Safety Information

For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent **Material Safety Data Sheet** containing physical, ecological, toxicological and other safety-related data.

## Protective measures

Wear safety glasses with side shields (or goggles) and a face shield. Avoid contact with eyes. In case of contact immediately flush eyes with plenty of water. Get medical attention, if irritation persists.

## Disclaimer

*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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