Construction

SikaSwell®-P Profile 2010H

Swellable joint sealing profile

Product Description	Sealing profiles which swell in contact with water.
Uses	To seal: • Construction joints in poured in-situ concrete construction • Pipe and steelwork 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 • Can be applied to different substrates • Has a protective coating to avoid premature swelling • Highly economical • Swells in contact with water • Water resistant • No hardening time required • No welding required
Tests Approval / Standards	• STUVA: Water tightness test (October 99) • FH Aachen: Test of resistance to ageing (06.07.01) • PSB Corporation: Testing of hydrophilic sealing profiles (15.08.02) • Hygiene-Institut Gelsenkirchen: Scientific examination according to waterhygienic aspects (14.10.03)

Product Data

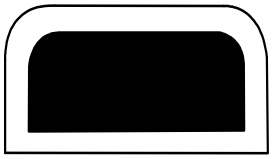
Appearance / Colours

Hybrid Type
Solid hybrid dual swellable profiles
Red outer covering: Highly swellable red part
Black inner core: Swellable part

Packaging

Rolls packed in cardboard boxes. 1 roll equals 10 m, 50m per box.

Types

Type	Width (mm)	Thickness (mm)	Cross section (schematically view)	Description	m / box
Hybrid Type					
2010H	20	10		Dual swellable profile with stabilising inner core	5 x 10 = 50

Storage / Shelf Life

48 months from date of production if stored in unopened, undamaged and sealed original packaging in dry conditions at temperatures between +5℃ and +35℃. Protect from UV light.

Technical Data

Chemical Base

Red part: Combination of hydrophilic swelling resins and rubber
Black inner core: EPDM

Change of Volume

Hydrophilic swelling red part
7 days in tap water: ≥100% (DIN 53521)
14 days in tap water ≥150%
10 dry-wet cycles in tap water: ≥100% (DIN 53521)
(1 cycle = 7 days dry and 7 days in tap water)

Swelling Pressure

≤ 15 bar after 7 days stored in tap water

Mechanical / Physical Properties

Tensile Strength	Hydrophilic swelling red part	≥ 2.5 N/mm²	(DIN 53504)
	EPDM black part	≥ 7.0 N/mm²	(DIN 53504)
Shore A Hardness	Hydrophilic swelling red part	75 +/- 5	(DIN 53505)
	EPDM black part	80 +/- 5	(DIN 53505)
Elongation at Break	Hydrophilic swelling red part	≥ 250%	(DIN 53504)
	EPDM black part	≥ 100%	(DIN 53504)

System Information Application Details

Substrate Quality

The substrate must be sound, clean, dry (no freestanding water) and 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 are prone to leaking. We recommend smoothing of freshly placed concrete with a batten where the sealing profile is to be placed.

Application Conditions / Limitations

Substrate temperature:

Dependant on the adhesive which has been selected.
Please consult the corresponding data sheet for SikaSwell® S-2.

Ambient temperature:

Dependant on the adhesive which has been selected.
Please consult the corresponding data sheet for SikaSwell® S-2.

Substrate humidity:

The substrate must be dry (no freestanding water).

Application Instructions

Application Method / Tools

Fixing methods
SikaSwell®-P Profile can be fixed with SikaSwell® S-2 depending on substrate type and condition.

Smooth, flat, dry substrates such as PVC, metals, precast concrete elements etc:
Apply SikaSwell® S-2 in a narrow 5mm x 5mm x 5mm triangular bead to the substrate. The profiles must be placed within max. 30 minutes onto 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 profile.
Allow SikaSwell® S-2 to harden for 2-3 hours before placing concrete.
Please consult the product data sheet of SikaSwell® S-2.

Rough, uneven, dry or 'matt damp' substrates (e.g. scabbled concrete):
SikaSwell® S-2 must be extruded in sufficient quantity to level the roughness of the substrate.
Apply SikaSwell® S-2 in a minimum narrow 5mm x 5mm x 5mm triangular bead to the substrate. The profiles must be placed within max. 30 minutes onto 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®-P Profiles and the substrate is achieved.
Place SikaSwell®-P Profile in the centre of the concrete section.
Minimum cover to centre of profiles on both sides must be 10 cm (reinforced concrete) or 15 cm (non reinforced concrete).
Connections and corners must be butt jointed and fixed.
During concreting, compact well around SikaSwell®-P Profile to provide a dense concrete without any honeycombs or voids.

Cleaning of Tools

Clean all tools and application equipment with Sika® Thinner C immediately after use.
Hardened/cured material (adhesive) can only be mechanically removed.

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Notes on Application / Limitations

- SikaSwell®-P Profile expands in contact with water. This does not happen immediately, but slowly after several hours. Nevertheless it is advisable not to leave SikaSwell®-P Profile any length of time in the open air or exposed to rain water. SikaSwell®-P Profile can be subjected to rain for a maximum of 24 hours as long as water can drain away.
- Do not use SikaSwell®-P Profile for movement joints!
- **Do not use SikaSwell®-P Profile in salty water.**
- If the water level suddenly increases the watertightness of joints will only be achieved when SikaSwell®-P Profile has swollen.
- In a totally dry state SikaSwell®-P Profile shrinks to its original dimensions, but expands again in contact with water.
- Do not use SikaSwell®-P Profile for sealing against water pressures higher than 2 bar because of the limited sealing distance.
- If SikaSwell®-P Profile is to be fixed around small diameter pipes use additional mechanical fixing such as tie wire or a sleeve.

Notes

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 & Safety Instructions

Protective Measures

- To avoid rare allergic reactions, we recommend the use of protective gloves. Change soiled work clothes and wash hands before breaks and after finishing work.
- Local regulations as well as health and safety advice on packaging labels must be observed.
- For further information refer to the Sika Material Safety Data Sheet which is available on request.
- If in doubt always follow the directions given on the pack or label.

Important Notes

- Residues of material must be removed according to local regulations. Fully cured material can be disposed of as household waste under agreement with the responsible local authorities.
- Detailed health and safety information as well as detailed precautionary measures e.g. physical, toxicological and ecological data can be obtained from the safety data sheet.

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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