BUILDING TRUST

PRODUCT DATA SHEET

Sika Waterbar® - PVC-P NB Type A

Internal waterbars for joint sealing in watertight concrete construction according to factory standard

PRODUCT DESCRIPTION

Sika Waterbar® - PVC-P NB Type A made from PVC-P NB are used for sealing construction joints in watertight concrete structures.

Sika Waterbar® - PVC-P NB Type A are available in a range of different types, shapes and sizes to suit different structures and applications.

USES

Application fields:
- Joint sealing in concrete structures
- Construction joint sealing in insitu concrete

Typical structures include:
- Residential building basements
- Commercial building basements
- Underground car parks

CHARACTERISTICS / ADVANTAGES

- High tensile strength and elongation
- Permanent flexibility
- Suitable for medium levels of hydrostatic pressure and stress
- Resistant to all natural mediums in soil and groundwater that are aggressive to concrete
- Weldable

APPROVALS / STANDARDS

Standards / Directives:
- Profile geometry and physical properties according to Sika Factory Standard
- German WU - Directive DafStb
- Sika Waterbar® PVC-P NB welding instruction and method statement

Testing & Approvals:
- Manufacturer's test certificates provided, other certificates by agreement

PRODUCT INFORMATION

Chemical Base	PVC-P NB = Polyvinyl Chloride Plasticized, not bitumen resistant
Packaging	▪ Standard rolls 20 or 25 m dependent on profile, on euro or disposable pallets ▪ Prefabricated formpieces supplied on euro or disposable pallets dependent on size
Shelf Life	The product does not expire if stored correctly
Storage Conditions	▪ To be stored on the pallets as supplied on a flat base ▪ For long-term storage ≥ 6 months in enclosed areas: The storage area should be covered, cool, dry, free from dust and moderately ventilated. The Sika Waterbar® - PVC-P NB Type A must be protected from heat sources and strong artificial lights with a high UV content ▪ Short-term storage > 6 weeks and < 6 months in enclosed areas on construction sites, outdoors: As for long-term storage i.e, in dry storage protected by suitable covers from direct sunlight, snow and ice or any other form of contamination, store separate from other potentially harmful materials, plant and equipment such as structural steel, reinforcement or fuels etc., store away from traffic and site roads in a dry area ▪ Short-term storage ≤ 6 weeks on construction sites, outdoors: Protected from contamination or damage, protected by suitable covers from strong sunlight and snow or ice etc.
Appearance / Colour	Black

TECHNICAL INFORMATION

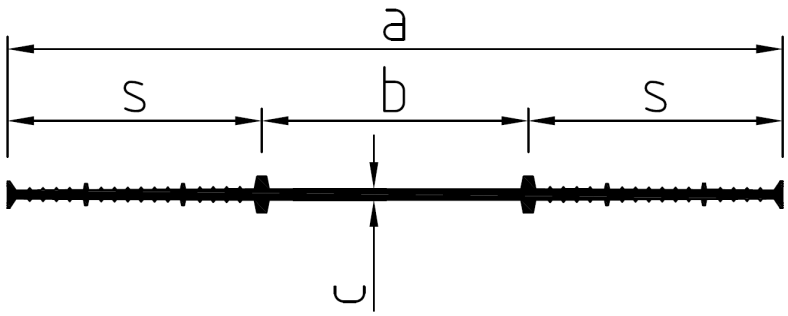
Shore A Hardness	75 ± 5	DIN 53505
Tensile Strength	≥ 8 MPa	EN ISO 527-2
Elongation	≥ 275 %	EN ISO 527-2
Tear Strength	≥ 12 N/mm²	ISO34-1
Service Temperature	For pressurised water	- 20°C bis + 40°C
	For non pressurised water	- 20°C bis + 60°C

Chemical Resistance	Exposure to different temperatures and chemicals: For special stresses or exposure to different temperatures and/or chemical mediums outside the substances or situations specifically defined in DIN 4033, separate tests are always necessary.	
Reaction to Fire	Class E	EN ISO 11925-1 EN 13501-1

SYSTEM INFORMATION

System Structure

Forms:
The limits of water pressure and stress given in the tables below apply to standard uses without specific additional testing. Different values may be used when precise information on all of the relevant stresses and structural requirements are available.



Total width (mm) a	Width of momevent part (mm) b	Thickness (mm) c	Width of sealing part (mm) s	Water pressure (bar)	Resulting movement Vr (mm)
A 19					
190	75	3,0	57,5	0,14	3
A 24					
240	85	3,5	77,5	0,24	3
A 32					
320	110	4,5	105	0,8	3
SFA 24					
240	70	3,5	85	0,1	3
SFA 32					
320	110	5	105	0,3	3
ISA/F 24					
237	88	4	75	0,24	2
ISA/F 32					
316	106	4	105	0,80	2

Vr = Resulting movement Vr = $(v_x^2 + v_y^2 + v_z^2)$ ½

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.

ECOLOGY, HEALTH AND SAFETY

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..
To select an appropriate protective equipment under www.sika.de our info datasheets are available: "General information on OSH" (Code 7510) and "General information on the wearing of protective gloves" (Code 7511).

APPLICATION INSTRUCTIONS

APPLICATION METHOD / TOOLS

General
Only butt joints should be formed on site with Sika Waterbar® - PVC-P NB Type A
Prefabricated formpieces:
Standard formpieces (flat or vertical) for Sika Waterbar® - PVC-P NB Type A include: Cross pieces, T-pieces, L-pieces.
Prefabricated formpieces help to reduce the required butt joints on site to a minimum.
Special formpieces:
Combined formpiece systems using combinations of different standard connections and profiles.
The standard maximum total length of formpiece system is 20m maximum. Longer formpiece systems on request.
Handling:

- Careful transport and handling on site
- Installation at ambient and waterbar material temperatures ≥ 0°C
- Protection until the waterbar system is fully cast in the concrete
- Special care must be taken with the waterbar system ends
- Waterbars must be cleaned before casting in

Application:

- Internal waterbars are to be installed within the concrete section and clearance from the edge of the concrete must be at least half of the total width a of the waterbar

Detailed information on installation is given in the relevant method statement and instruction for use. If there are very high stresses or difficult concreting conditions, the waterbars can be combined with integrated injection hoses installed locally on the lateral anchoring ribs to additionally inject / grout around the cast-in parts at a later date.
Jointing on site:
The Sika Waterbar® - PVC-P NB Type A are butt jointed by welding.
Bonding with adhesives is not permitted.
Requirement: Minimum ambient temperature + 5°C and dry weather conditions.
Site joints must be formed only by trained and qualified personnel. The welding training certificates are valid for 2 years.
Training courses leading to certification are run by Sika Deutschland GmbH, Stuttgart.

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.

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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