

BUILDING TRUST

PRODUCT DATA SHEET

Sika Waterbar® Tricomer Type FA

Waterbars for capping joints in watertight concrete construction

DESCRIPTION

Sika Waterbars Tricomer NB Type FA are highly flexible waterbars made from PVC/NBR copolymer for sealing capping joints in watertight concrete structures. They 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
- Capping joint sealing in insitu concrete

Typical Structures:

- Residential building basements
- Commercial building basements, underground car parks
- Water treatment plants
- Dams

Principles for Application:

- Design and installation principles according to DIN 18197
- Jointing system in accordance with DIN 18197 and DIN 18541

CHARACTERISTICS / ADVANTAGES

- High tensile strength and elongation
- Permanent flexibility and high resilience
- Suitable for medium water pressures and stress
- Resistant to all natural mediums aggressive to concrete
- Not bitumen resistant
- Resistant to a broad spectrum of chemical agents (testing necessary for any specific situations)
- Robust sections for handling on site
- Weldable

APPROVALS / STANDARDS

Standards/Directives:

- DIN 18541-1/-2
- DIN 18197
- WU Directive DAfStb.
- Welding Instructions
- Welding Equipment Instruction Manual
- Method Statements

Test Certificate / Approvals:

- Certificate of Conformity DIN 18541, parts 1 and 2
- External monitoring by MPA NRW
- Test certificates on resistance to sewage slurry, liquid manure and municipal wastewater
- Manufacturer's test certificate, other tests and approvals as required

PRODUCT INFORMATION

Chemical Base	Tricomer NB = thermoplastic copolymer based on PVC-P with NBR, 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

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Appearance / Colour	The product does not expire if stored correctly	
Shelf Life		
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 Tricomer waterstops must be protected from heat sources and strong artificial lights with a high UV content 	

TECHNICAL INFORMATION

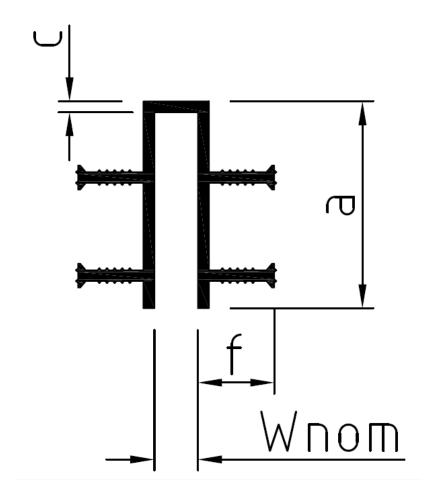
Shore A Hardness	67 ± 5	DIN 53505		
Tensile Strength	≥ 10 MPa	DIN EN ISO 527-2		
Elongation	≥ 350 %	DIN EN ISO 527-2		
Tear Strength	≥ 12 N/mm	DIN ISO34-1		
Chemical Resistance	For special stresses or exposure to mediums outside the substances or	Exposure to different temperatures and chemicals: For 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.		

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.



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Total width (mm) a	Joint width (mm) k	Thickness (mm) c	Width of sealing part N / f (mm)	Water pressure (bar)	Resulting movement Vr (mm)	
50/20/25						
50	20	5	2 / 35	0	20	
FA 50/20/35						
50	20	5	2 / 35	0	20	
FA 70/20/45						
70	20	5	2 / 45	0	40	
FA 90/20/25						
95	20	5	4 / 25	0,1	20	
FA 90/20/35						
95	20	5	4 / 35	0,1	20	
FA 130/50/35 *						
140	50	5	4 / 35	0,1	30	
FA 130/30/35 *						
140	30	5	4 / 35	0,1	30	
FA 130/20/25						
140	20	5	6 / 25	0,3	20	
FA 130/20/35						
140	20	5	6/35	0,3	20	

^{*}Waterstop to DIN 18541-2

BASIS OF PRODUCT DATA

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

APPLICATION INSTRUCTIONS

APPLICATION METHOD / TOOLS

<u>General</u>

As specified in DIN 18197 only butt joints should be formed on site with Sika Waterbars Tricomer NB Type FA.



¹⁾ Special project-related data

Vr = Resulting movement Vr = $(v_x^2 + v_y^2 + v_z^2) \frac{1}{2}$

N = Number of anchoring ribs

f = Height of profile

Prefabricated formpieces:

Standard formpieces (flat or vertical) for Sika Waterbars Tricomer NB Type FA include: Cross pieces, Tpieces, 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 systems is 20 m. Longer formpiece systems on request. Handling:

As specified in DIN 18197.

- Careful transport and handling on site
- Installation only at waterbar material temperatures ≥ 0°C
- Protection is required until the waterbar system is fully cast in
- Special care must be taken of free waterbar ends
- Waterbars must be cleaned before casting in Application:
- Waterbars for capping joints are to be installed in the joint, set back by the dimension of the joint chamfer.

Detailed information on installation is given in the relevant method statement and instruction for use. Jointing on site:

The thermoplastic Sika Waterbars Tricomer NB Type FA are butt jointed by welding according to DIN 18197. Jointing 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, sub-

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