

PRODUCT DATA SHEET

SikaProof® A+ 20

Fully bonded FPO sheet membrane for pre-applied and post-applied waterproofing

PRODUCT DESCRIPTION

SikaProof® A+ 20 is a flexible polyolefin (FPO) sheet membrane for below-ground waterproofing of reinforced concrete structures. A special hybrid bonding layer on the membrane forms a full and permanent dual bond with the concrete structure. The membrane can be pre-applied or post-applied. Joints are sealed with cold-applied tapes or by thermal jointing using appropriate heating equipment. The total thickness is 2.5 mm with a 2 mm thick waterproofing layer.

WHERE TO USE

SikaProof® A+ 20 may only be used by experienced professionals.

SikaProof® A+ 20 is suitable for use on shotcrete, and on precast, cast-in-place, and existing reinforced concrete structures and can be used in applications such as :

- Waterproofing of tunnels against water ingress
- Damp-proofing, waterproofing and concrete protection for basements and other below-ground concrete structures

CHARACTERISTICS / ADVANTAGES

SikaProof® A+ 20 provides the following characteristics and benefits:

- Dual bond: full and permanent mechanical and chemical bond with the concrete structure
- Can be used as a pre-applied and post-applied system
- Joints can be sealed using thermal jointing or cold applied tapes
- No lateral water migration between concrete and membrane
- Excellent barrier to radon
- Fast and easy installation
- High flexibility and crack-bridging capabilities
- High watertightness tested according to various standards
- Good resistance to aggressive conditions in natural ground water and soil
- Temporarily resistant to weathering and UV exposure
- Can be combined with other approved Sika® waterproofing and joint sealing systems

APPROVALS / CERTIFICATES

- CE marking and declaration of performance based on *EN 13491:2004/A1:2006 Geosynthetic barriers — Characteristics required for use as a fluid barrier in the construction of tunnels and underground structures*
- CE marking and declaration of performance based on *EN 13967:2012 Flexible sheets for waterproofing — Plastic and rubber damp proof sheets including plastic and rubber basement tanking sheet — Definitions and characteristics*

PRODUCT INFORMATION

Composition / Manufacturing	Membrane layer	Flexible polyolefin (FPO)
	Hybrid layer	Cement-modified polymer
Packaging	Roll width	2 m
	Roll length	15 m or specified
Colour	Top layer colour	Grey
	Bottom layer colour	Light yellow
Shelf Life	24 months from date of production	
Storage Conditions	Store in original, unopened and undamaged sealed packaging in dry conditions, in an horizontal position and at temperatures between 5 °C and 30 °C. Do not stack pallets of rolls on top of each other, or under pallets of any other materials during transport or storage. Always refer to the packaging.	
Effective Thickness	Overall thickness	2.45 mm (- 0.15 mm) (EN 1849-2)
	Waterproofing layer thickness	≥ 2.00 mm
Mass per Unit Area	2.40 kg/m ² (-0.12 kg/m ²) (EN 1849-2)	
Colour	Top layer surface texture	Rough
	Bottom layer surface texture	Smooth

TECHNICAL INFORMATION

Resistance to Impact	Method A, Hard support	≥ 800 mm (EN 12691)
Resistance to Static Load	Hard support	≥ 20 kg (EN 12730)
Resistance to Static Puncture	3.1 kN (- 0.3 kN)	(EN ISO 12236)
Tensile Strength	Longitudinal (MD)	≥ 800 N/50 mm (EN 12311-2)
	Transversal (CMD)	≥ 800 N/50 mm
	Longitudinal (MD)	15.0 N/mm ² (- 2.0 N/mm ²) (EN ISO 527-3)
	Transversal (CMD)	15.0 N/mm ² (- 2.0 N/mm ²)
Burst Strength	D = 0.2 m	≥ 50 % (EN 14151)
Dimensional Change after Heat	Longitudinal (MD), aged 6 hours at 80 °C	≤ 2 % (EN 1107-2)
	Transversal (CMD), aged 6 hours at 80 °C	≤ 2 %
Resistance to Tear	Longitudinal (MD)	≥ 600 N (EN 12310-1)
	Transversal (CMD)	≥ 600 N
Joint Shear Resistance	≥ 300 N/50 mm (EN 12317-2)	
Foldability	- 30 °C (EN 495-5)	

Coefficient of Thermal Expansion	Longitudinal (MD)	193 · 10 ⁻⁶ / °K	(ISO 11359-1)
	Transversal (CMD)	185 · 10 ⁻⁶ / °K	
Reaction to Fire	Class E		(EN 13501-1)
Resistance to UV Exposure	Not permanently UV stable		
Resistance to Weathering	Aged 3000 h at UV 350 MJ/m ²	≥ 80 % retained tensile strength and elongation	(EN 12224)
	Not resistant to permanent weathering		
Resistance to Oxidation	≥ 80 % retained tensile strength and elongation		(EN 14575)
Microbiological Resistance	Change in tensile strength, aged 16 weeks	≥ 85 %	(EN 12225)
	Change in elongation, aged 16 weeks	≥ 85 %	
Watertightness	Method B, 24 h at 60 kPa	Pass	(EN 1928)
Durability of Watertightness against Ageing	Aged 12 weeks at 70 °C, tested 24 h at 60 kPa	Pass	(EN 1928; EN 1296)
Durability of Watertightness against Chemicals	Calcium hydroxide, aged 28 days at 23 °C, tested 24 h at 60 kPa	Pass	(EN 1928; EN 1847)
Service Temperature	Maximum	35 °C	(ÖBV Guideline Tunnel Waterproofing)
	Minimum	- 10 °C	
Adhesion in Peel	≥ 100 N/50 mm to concrete after 28 days		(EN 1372)
Resistance to lateral water migration	Up to 7 bar	Pass	(ASTM D5385 / D5385M)
Water Permeability	< 10 ⁻⁶ m ³ ·m ⁻² ·d ⁻¹		(EN 14150)
Elongation at maximum tensile force	Longitudinal (MD)	≥ 550 %	(EN 12311-2)
	Transversal (CMD)	≥ 550 %	
	Longitudinal (MD)	≥ 550 %	(EN ISO 527-3)
	Transversal (CMD)	≥ 550 %	

APPLICATION INFORMATION

Ambient Air Temperature	Maximum	45 °C
	Minimum	5 °C
Substrate Temperature	Maximum	60 °C
	Minimum	5 °C

SYSTEMS

System Structure

The following products are part of the pre-applied system:

- SikaProof® A+ 20 sheet membrane
- SikaProof® Tape A+ N
- SikaProof® Sandwich Tape

The following products are part of the post-applied system:

- SikaProof® A+ 20 sheet membrane
- SikaProof® Adhesive-22
- SikaProof® ExTape-100

Complementary products are available for detailing and joint solutions.

BASIS OF PRODUCT DATA

Product properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, preparation, application, curing and test methods.

FURTHER INFORMATION

- Method Statement SikaProof® A+
- Application Manual SikaProof® A+
- Application Manual SikaProof® A+ Post-Applied

ENVIRONMENT, HEALTH & SAFETY

This product is a manufactured article that does not require Safety Data Sheets to be marketed, transported or applied at the jobsite, according to the Hazardous Product Act - Section 2. Based on our current knowledge, this product is not classified as dangerous and does not contain any hazardous materials. Always wear personal protective equipment (including safety goggles and gloves) to manipulate and install Sika® products.

APPLICATION INSTRUCTIONS

APPLICATION

Important:

- Strictly follow installation procedures as specified in the Method Statements, Application Manuals, and work instructions.

Sika Canada Inc.

Head Office
601, avenue Delmar
Pointe-Claire, Quebec
H9R 4A9
1-800-933-SIKA
www.sika.ca

Other locations

Boisbriand (Quebec)
Brantford; Cambridge;
Sudbury; Toronto (Ontario)
Edmonton (Alberta)
Surrey (British Columbia)

These must be adapted to suit actual site conditions at all times.

- SikaProof® A+ 20 is not resistant to prolonged UV exposure or weathering. It must be protected as soon as possible; however, no later than 90 days after application.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

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 recommendations, or from any other advice offered. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. 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 or may be downloaded from our website at: www.sika.ca

Product Data Sheet

SikaProof® A+ 20
July 2026, Version 02.01
020720301100000075

SikaProofA+20-en-CA-(07-2026)-2-1.pdf

