



PREMIUM LINE  
**ankox**  
sealing engineering

**Polyfleece SX<sup>®</sup> 1000**  
Flexible like no other



# X-PERT

in waterproofing constructions

Why with us?

**ankox**  
Firmengruppe

**Because waterproof construction is our speciality.**

As one of Germany's leading manufacturer of waterproofing systems for concrete structures, we're the experts when it comes to professionally and permanently sealing building elements that are in direct contact with the ground. For almost 20 years we have been producing and processing first-class waterproofing products for applications in the traditional surface and subsurface

structural engineering sector, as well as for building restoration work and for civil engineering jobs such as tunnel building and other large-scale projects. Innovation, flexibility and customer focus are our top priorities.

## Have you built close to water?

There's no need to shed a tear. Every building is in contact with the ground, so all are more or less in contact with moisture.

If the moisture should remain on the building's outside, there are only two possibilities. Either you build in the desert or you build watertight.

But can a structure be sealed completely? Really watertight? Even against highly pressurised water? And remain impermeable for decades?

Yes, it can!  
With ankox.

*The exclusive Marina Bay Sands in Singapore –  
waterproofed with ankox products*

# An all-embracing system

Super flexible & for the highest demands



\* see page 7

## THE POLYFLEECE-SYSTEM

**Not simply one single product, but a complete solution**

The experiences of recent years have shown that seemingly, waterproofed constructions is not always enough to ensure security.

More and more experts in Germany are therefore recommending the integration of a pre-applied waterproofing membrane to 'white tank' systems as an extra dose of security.

The super flexible Polyfleece SX® 1000 is perfectly equipped to take on all imaginable challenges in 'white tank' constructions

**POLYFLEECE SX 1000 OFFERS YOU a patent-pending, pre-applied waterproofing membrane system with**

- fantastic laying qualities
- an extensive service programme for professional structural waterproofing
- direct supply from the manufacturer with decades of experience and know-how in development, production and building work
- international references and a product that has been successfully tried and tested in practice for decades
- the best workmanship qualities and security even under extreme weather conditions

**Discover the first pre-applied waterproofing membrane system with reactive properties**

## POLYFLEECE SX® 1000 WALL

A high-quality, pre-applied waterproofing membrane system with a unique hydrophilic coating (swelling rate: approx. 150%) and a watertight LDPE lining.

## POLYFLEECE SX® 1000 RADON THE ONLY ONE THAT'S REALLY RADON-PROOF

Offers all the benefits of Polyfleece SX 1000 Wall plus additional protection against harmful radon.



## Radon – the unknown danger

The subject of radon has been coming to the fore for the past few years. The concentration of the radioactive gas in the ground differs from region to region, but for those affected areas it is no longer an issue of trivial importance. Radon gas's risk association to lung cancer is second only to smoking. As a result, radon-proof seals will in future be keeping many building owners and contractors busy. So play it safe with us:

**POLYFLEECE SX® 1000 RADON is the only waterproofing membrane system proven of being radon-proof**

## TAILOR-MADE Especially for you:

We can customise Polyfleece SX® 1000 with different strengths and linings for all desired needs and all construction sites

Improved seams provide security even under extreme weather conditions.

2 metre width

1 metre width



# POLYFLEECE SX® 1000

## Added security

Ingeniously simple – simply ingenious



### POLYFLEECE SX® 1000

Used either as an external pre- or post-applied waterproofing membrane.

It consists of a fleece that has an additional coating on one side. Each of the membrane's layers performs a special function. The uncoated, soft fleece side absorbs some of the water/cement mix from the fresh concrete so that the concrete interlocks with the waterproofing fleece. As a result, a secure and effective bonded seal is created that prevents lateral water tracking.

### Doubly secure

The reactive coating is made of modified polymers that swell on contact with water and enable its self-healing properties. Possible cracks or damage to the membrane are securely sealed – there and then – due to its self-healing properties. The water-facing side consists of a layer of waterproof LDPE.



### THE POLYFLEECE ADVANTAGES:

- prevents water tracking and bridges cracks
- self-healing capabilities due to swelling rate of up to 150%
- soft & pliable
- stops harmful radon gas
- suitable accessories and in-detail solutions for all situations

### No matter what, no matter where – it's always on the safe side

Polyfleece SX® 1000 gives you the best possible security and flexibility on the building site whatever the job. And this regardless of whether its cast-in-place concrete or prefab concrete parts. With the waterproof membrane system from anko's Premium Line, you'll be on the safe side in all situations.

### NATURALLY TESTED

- CE mark according to DIN EN 13967
  - 3x building regulations certifications (AbPs) for
1. Surface sealing in combination with normal concrete (based on Building Regulations List (BRL) A, part 3, No. 1.2, that differs from the demands of DIN V 20000-202, section 5.3.

### FLEXIBLE LIKE NO OTHER.

Polyfleece SX® 1000 is extremely resistant yet is as soft as a piece of cloth. It can therefore be laid and applied to all floor and wall layouts, to penetrations, corners and other tricky places without complex sealing elements and regardless of the weather.



2. External, strip-form sealing of construction and crack-control joints with concrete with a high resistance to water penetration according to BRL A part 2, No. 2.53

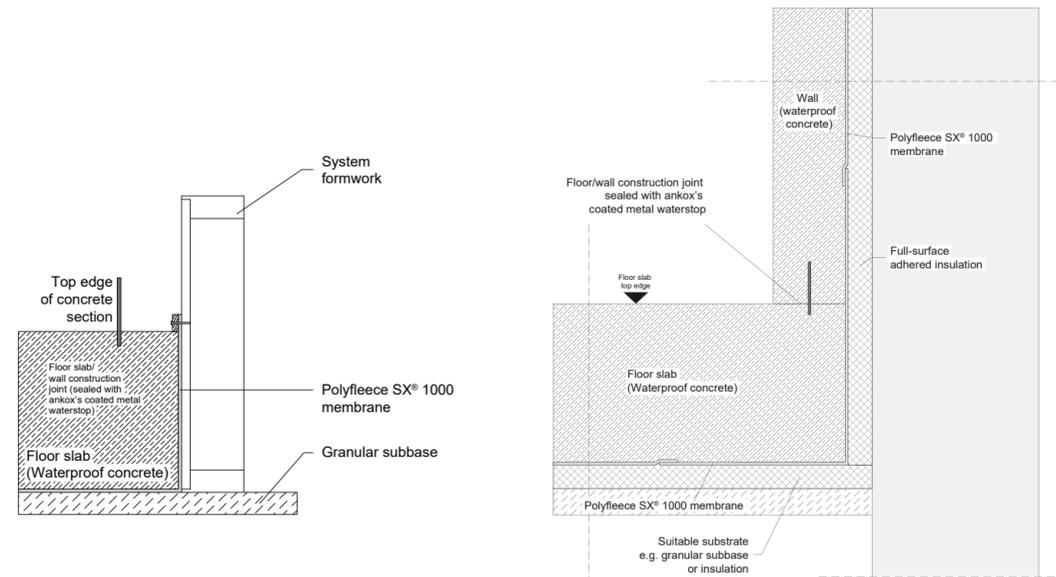
3. Sealing of the transition area of building elements made of concrete with a high resistance to water penetration according to BRL A, part 2, No. 2.48

# Keeping pace with the times:

What experts and building practitioners recommend

The experiences of recent years has shown that simply employing a 'white tank' waterproofing system is not always enough. More and more experts in Germany are therefore recommending the integration of a pre-applied waterproofing membrane to such systems as added security. The super flexible Polyfleece SX® 1000 is perfectly equipped to take on all imaginable challenges in 'white tank' constructions

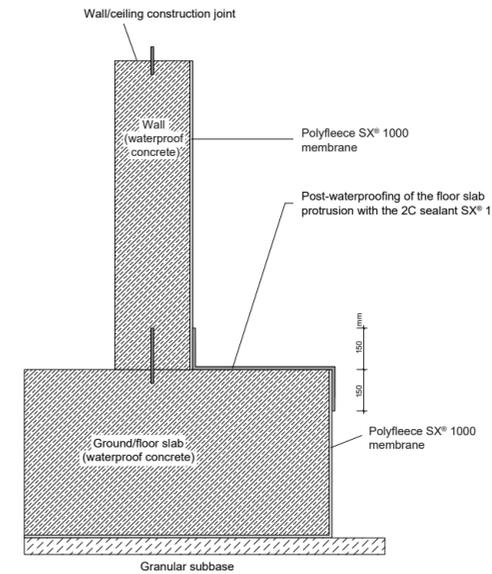
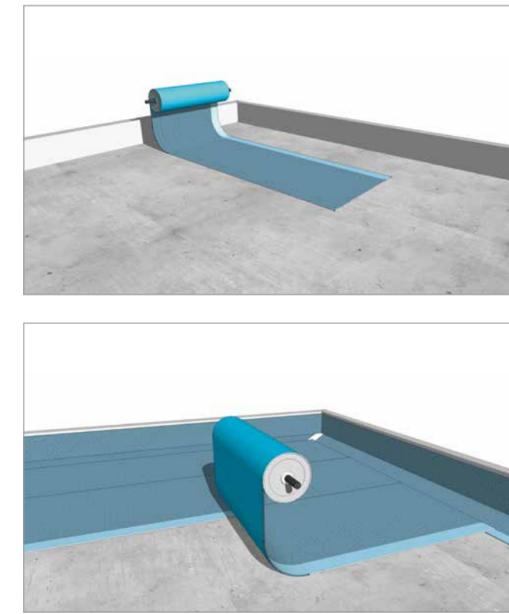
**Polyfleece SX® 1000 – concrete specialists recommend: additional security for your constructions**



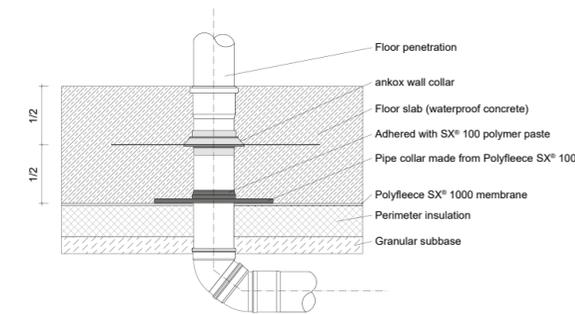
**Single-sided floor slab edge:**  
Formwork edge for floor slab with pre-applied waterproofing membrane Polyfleece SX® 1000 laid on the granular subbase and on the formwork edge

**Floor slab – wall transition:**  
Installation of Polyfleece SX® 1000 membrane in the floor slab – wall transition zone. Continuous horizontal and vertical installation.

**Strip for strip** – self-healing and prevents water tracking right into the last corner: Polyfleece SX® 1000 gives 'white tank' constructions a decisive advantage in waterproofing reliability.



**Floor slab – wall transition with slab protrusion:**  
Post-waterproofing of the protrusion with the 2 component sealant SX® 1



**Pipe penetration in floor slab:**  
Pipe penetration with Polyfleece SX® 1000 pipe collar and sealed with SX® 100 polymer paste

## Prefab concrete parts with integrated surface sealing

The innovative characteristics of the patent-pending, surface-sealing Polyfleece SX® 1000 Wall solve problems in the precast concrete industry.

The advantages of the pre-applied waterproofing membrane system Polyfleece SX® 1000 Wall can now also be enjoyed in the precast concrete sector: ankox constructs the sections to the desired lengths, corresponding normally to the planned wall height.

Thanks to its excellent features such as preventing water tracking, an adhesive bond, flexibility, robustness and a self-healing mechanism, the pre-applied waterproofing membrane system, Polyfleece SX® 1000 Wall, has in the meantime established and proven itself worldwide as a surface sealant for cast-in-place concrete constructions. For the precast industry, the integrated waterproofing membrane system solves two critical problems:

*“Structures with prefab walls work well with properly cast core cement as long as no damage occurs to the outer but also the inner sides,”* says Mark Weichert, head of development at ankox.

*But in practice, we know that slight damage can easily occur to these during transportation or when being lifted with the crane. Water can then penetrate the construction through these cracks.”*

An integrated waterproofing membrane can prevent this from the outset.



Precast wall elements integrated with Polyfleece SX® 1000 Wall delivered to the building site in a ready-to-use state



The precast concrete elements with integrated Polyfleece SX® 1000 Wall including permanent formwork allow for fast and problem-free handling on the building site



## Integrated surface sealing solves prefab wall problems

One problem for prefab manufacturers is the fact that prefab walls are often used where space is extremely confined, for instance, in narrow trenches where, later on, external access to the joints is no longer possible.

### The ankoX solution:

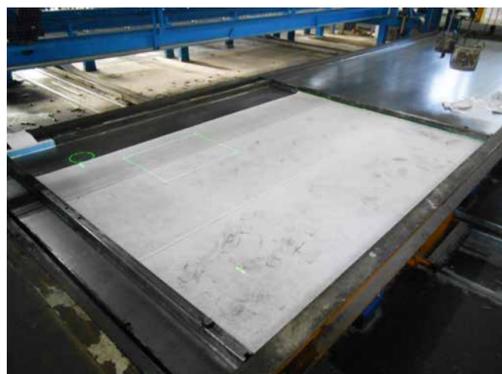
Special panels with permanent formwork and integrated Polyfleece SX® 1000 Wall now make subsequent waterproofing steps unnecessary. The membrane system integrated into the prefab walls in combination with these special joint sealing panels ensure that no moisture whatsoever can penetrate the triple-skinned, prefab wall construction that can result in interior problems that are difficult and costly to rectify later on.

*"Hence the idea being very well received,"* says Mark Weichert. *"Construction companies and prefab wall manufacturers know all about these problems and they can therefore reduce these risks considerably."*

The production process involved comprises only a few steps: in the prefab plant, the sheets are laid on the formwork preparation table. Overlapping the joint seams also takes place here. Openings, possibly for windows, etc., are measured and marked out by laser on the waterproofing membrane. After this, the reinforcement meshes are laid directly onto the waterproofing sheets. Finally, the prefab outer wall followed by the inner wall are then cast in the plant.

Working with the elements on the building site is also a fast and problem-free process. As soon as the prefab walls are standing and have been concreted in, the strip-form sealing of the butt joints takes place using ankoX's 2-component sealant SX® 1 if the joints can be accessed well from the outside. A solution for joints difficult to access later is provided by the special Polyfleece SX® 1000 Wall panels (permanent formwork with integrated waterproofing membrane). For additional waterproofing security in the vertical joints (corner and wall), crack-control elements from ankoX's Premium Line (AquaProofX® 1 SRE and MegaProofX® 1 SRE) are installed.

Up close: the permanent formwork with integrated Polyfleece SX® 1000 ensures butt joint impermeability in case the area cannot be accessed later.



The prefab concrete elements with integrated Polyfleece SX® 1000 Wall including permanent formwork allow for fast and problem-free handling on the building site



The outer strip-form sealing of the butt and construction joints is carried out with ankoX's 2C sealant SX® 1

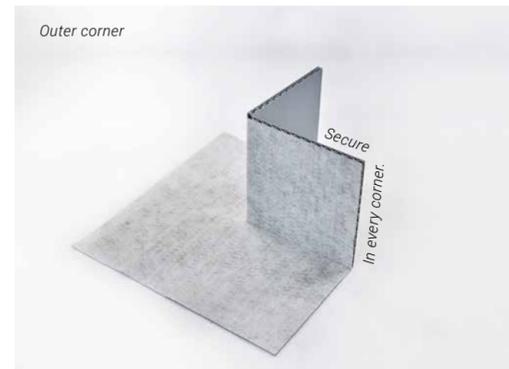
# Polyfleece accessories

We walk through walls for you and see around corners.

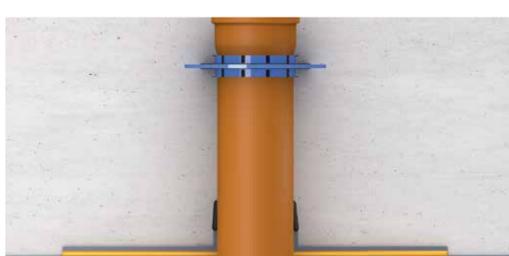
## POLYFLEECE SX® 1000 CORNER ELEMENTS

Foldable. Durable. Commendable.

It couldn't be more practical: The Polyfleece SX® 1000 corner elements for inner and outer corners are flat and stackable, take up little space when being transported and can be easily folded onsite where and when needed.



ANKOX'S DETAILED SOLUTIONS. WITH EVERYTHING IN MIND. FAST & FLEXIBLE

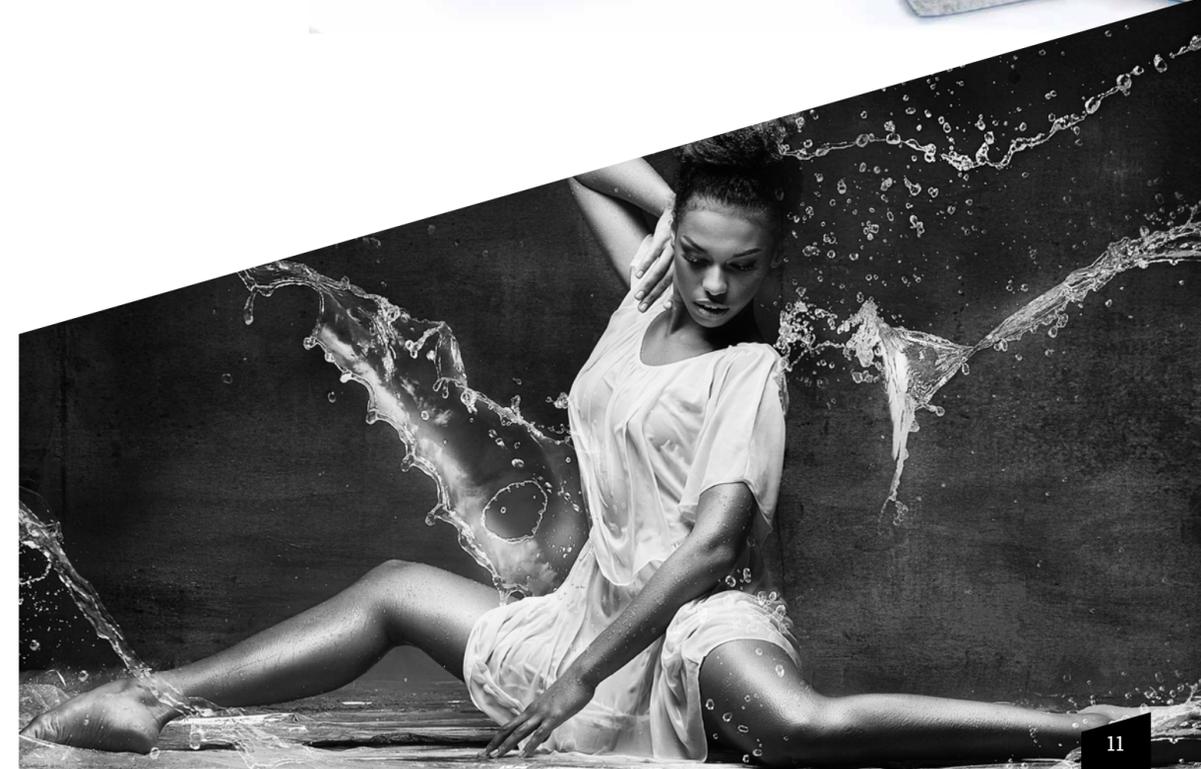


## THE POLYFLEECE FAMILY IS COMPLETE

### One system, many components

In need of detailed solutions? The Polyfleece SX® 1000 system offer accessories and components for many special jobs that make waterproofing that much simpler.

- POLYFLEECE SX® 1000
  - Corner elements
  - Formwork edge elements
  - Pipe feed through with collar
  - Adhesive tape
- 2-C SEALING COMPOUND SX® 1
- POLYMER-SWELLINGPASTE SX® 100



# ankox in action

all around the world



Opera Tower, Frankfurt



Mercedes-Benz Museum, Stuttgart



EnBW City Panorama, Stuttgart



Exhibition hall 11, Frankfurt am Main



Houses of Parliament, London



Marina Bay Sands Casino, Singapur



Skyper, Frankfurt am Main



Mercedes-Benz-Arena, Stuttgart



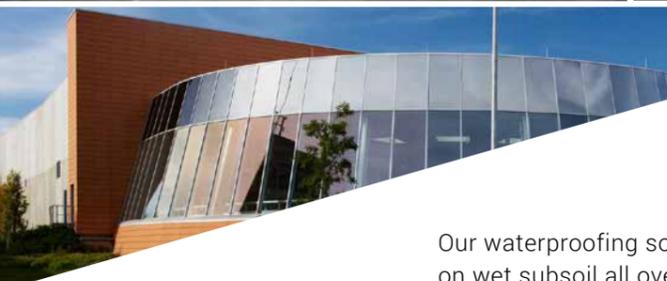
Vivico building, Berlin



Christian Dior flagship store,  
New Bond Street, London  
John Newton Waterproofing, UK



Porsche-Museum, Stuttgart



Our waterproofing solutions work everywhere – after all, buildings are constructed on wet subsoil all over the world. Hence one reason why waterproofing products from ankox can be found in buildings all over the world – from small detached homes to large commercial properties.

## WHO PROFITS FROM ANKOX PRODUCTS?

### Architects and planners.

They get reliable products with building standards certification. The building process runs smoothly, the risk of building damage is minimised and possible claims for compensation are reduced.

### Executing firm onsite.

They get products that make their job easier as they allow for trouble-free and secure processing. That saves time which is an important factor in daily building site life.

### Building owners.

They get a building that is securely waterproofed without complaints.

# A system in perfect balance

Good partners ensure stability

SERVICE & TRAINING  
**ankox**  
sealing systems

If you want more from us, you get more from us. ankox will train your employees in the use of all the associated system components. They will receive concentrated expert knowledge on the waterproofing products both in theory and practice.

**Our experts -  
always working for you.**

## WE'LL TRAIN YOU

- at your own offices
- directly on the spot on the building site
- or at ankox's premises

**X-PERT**  
in waterproofing constructions

# The ankox at a glance

Firmengruppe

SERVICE & TRAINING  
**ankox**  
sealing systems

## Service & know-how, worldwide.

ankox sealing systems offers you expert advice and a reliable service package for the application of all our company's products.

Besides this, you will receive comprehensive training in theory and practice from our experts. Numerous customers worldwide have been using and fully backing our offer for many years.

PREMIUM LINE  
**ankox**  
sealing engineering

## The best from ankox

The high-end products of ankox sealing engineering's Premium Line have established themselves worldwide and have for many years offered additional security to all demanding tasks in the waterproofing of buildings.

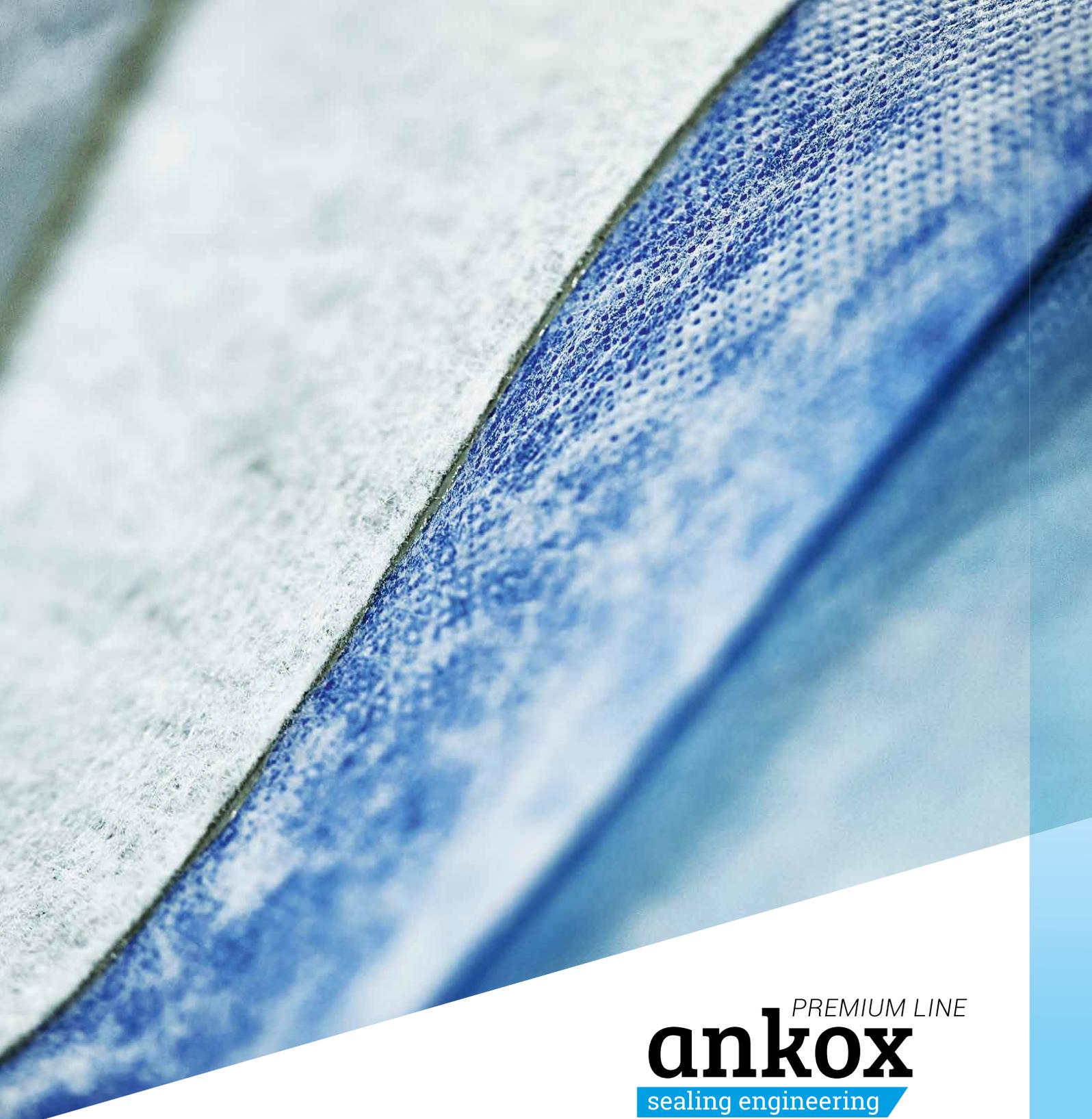
Here you will find top solutions – individualised, certified and high-performing – for traditional surface and subsurface structural engineering applications, but also for building restoration work and complex civil engineering tasks such as tunnel building and other large-scale projects.

ECONOMY LINE  
**ankox**  
sealing products

## Quality for the thrifty-minded

ankox's Economy Line range of sealing products offer you internationally tested, quality products for waterproofing concrete structures and elements.

The product spectrum covers everything from metal waterstops and injection hoses to hydrophilic waterbars and pre-applied waterproofing membranes. It also offers economical solutions for reliably combating ground water and moisture.



*PREMIUM LINE*  
**ankox**  
sealing engineering

**ankox GmbH sealing engineering**

Blumenstraße 42/1  
D-71106 Magstadt  
Service telephone: +49(0)7159 42 008 40  
EMail: info@ankox.de

[www.ankox.de](http://www.ankox.de)

