



WATERPROOFING SIKA SOLUTIONS FOR POTABLE WATER

WITH SIKA WATERPROOFING SYSTEMS

BUILDING TRUST





ADVANTAGES OF OUR SOLUTIONS

Potable water is an essential foodstuff. That requires absolute clean and watertight facilities to process and store it. Waterproofing of reservoirs and tanks containing potable water must not only be watertight over long periods, but shall also be easily maintainable, food safe, and harmless to health. Sika waterproofing products used in potable water reservoirs and tanks comply with the strict regulations of public water authorities. Food and beverage industry rely on high performance of Sika waterproofing systems in their process water tanks. As the global leader in providing structural waterproofing solutions, Sika has the most complete and comprehensive range of products and systems, that are designed and can be adapted to meet the specific needs and requirements of owners of water reservoirs, architects, engineers and contractors on site.

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WATERPROOFING SOLUTIONS FOR POTABLE WATER RESERVOIRS

VARIOUS INTERNAL WATERPROOFING SYSTEMS that are in direct contact with potable water must fulfill stringent requirements regarding hygiene, durability, exposure and stress conditions, construction method and sequence, ease of application and total cost management. This is required as potable water, out of all natural resources, is our most essential foodstuff. Potable water, stored in reservoirs, needs to be protected to stay clean. Water reservoirs and tanks must therefore be watertight and must fulfill demands of long service life.

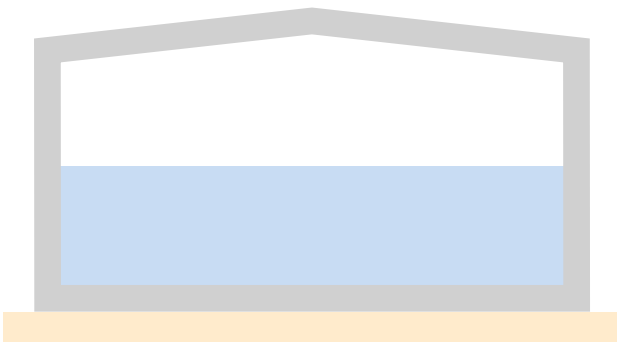
Sika's expertise is combined with more than 100 years of experience from all around the world in the successful waterproofing of water retaining structures. Sika waterproofing experts are able to support our customers throughout their

projects, from initially determining the best waterproofing concept, to the detailed design and site support for successful installation and completion on site, including remedial solutions for any existing structures.

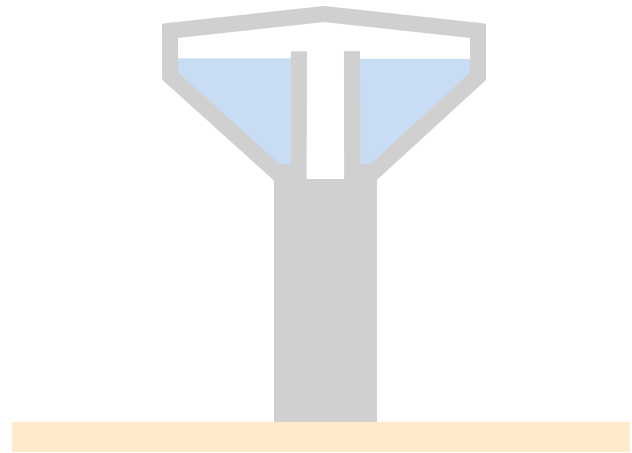


TYPES OF WATER RESERVOIRS

ABOVE GROUND

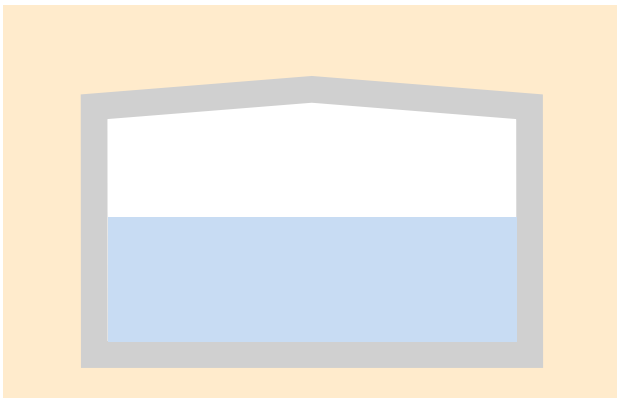


Tanks

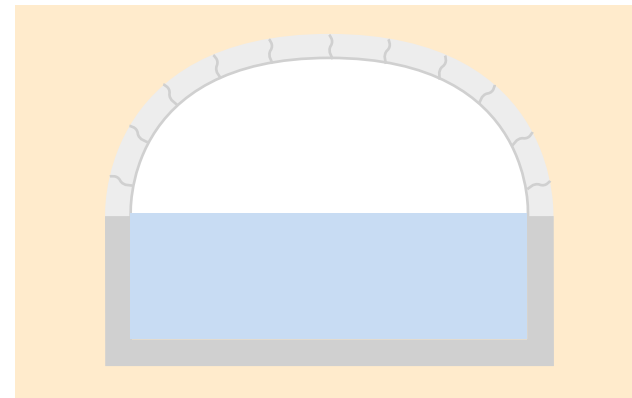


Towers

BELOW GROUND



Tanks



Caverns

New or existing tanks and reservoirs to store potable waters are made of concrete or steel structures built above ground or below ground. Water towers in flat country sides or caverns in mountainous areas at elevated levels secure hydraulic pressure in water supply pipe network.

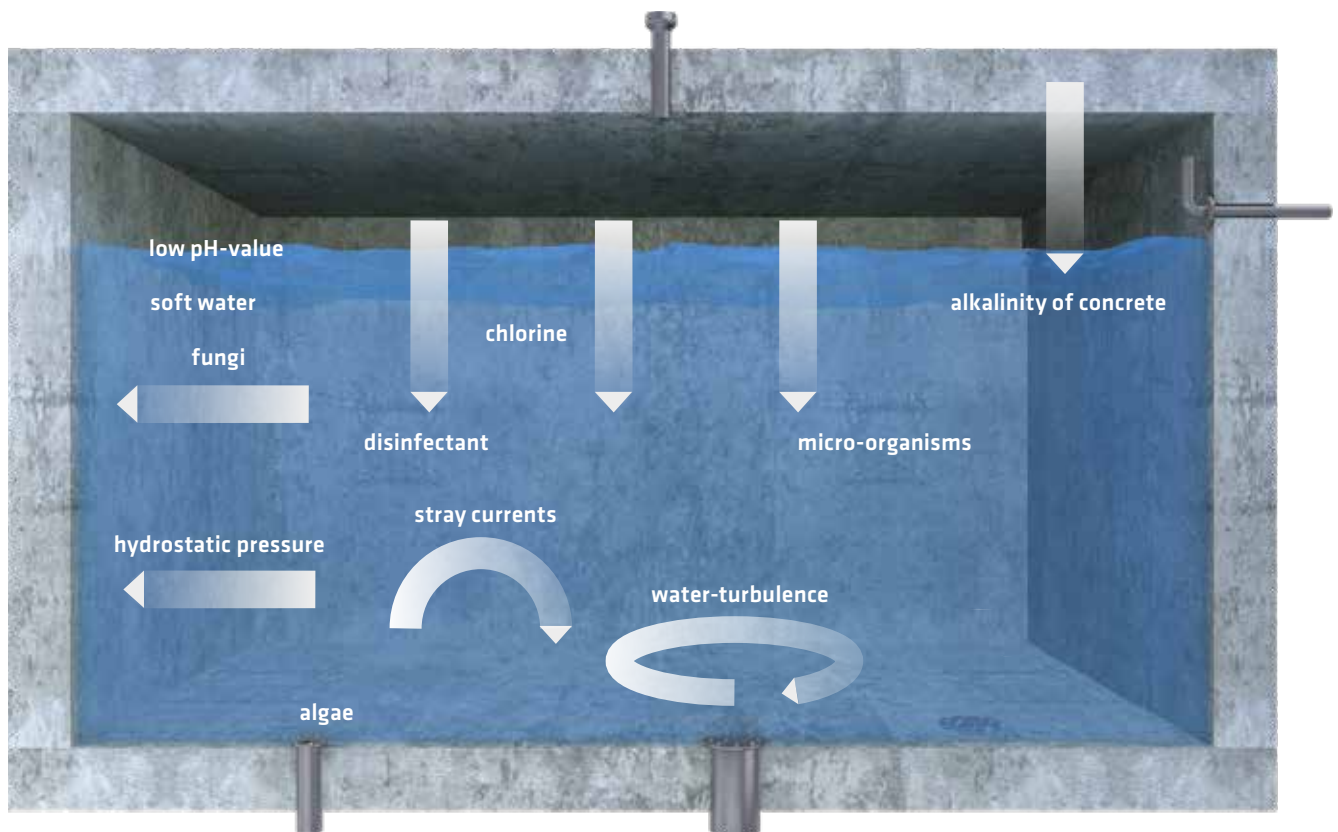
Depending to local requirements for water-holding structures and local water quality conditions, the type of waterproofing for reservoirs can be rigid by cementitious products like structural concrete or mortar layers, or flexible by liquid applied layers of polymer-modified cementitious mortars or reactive resins combined with joint sealing systems,

including on steel substrates, or also linings with loose laid waterproofing sheet membranes. Surface applied waterproofing systems are useable either in new or existing structures in case of waterproofing refurbishment.

All these solutions are designed to meet the specific needs and requirements of owners, engineers and contractors on site.

EXPOSURES AND STRESS

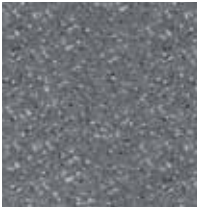




EXPOSURES IN POTABLE WATER RESERVOIRS



Depending on water sources, potable waters in various regions differ in quality, referring to content of minerals, pH value, water temperature conditions and treatment of waters with chemicals. Water-holding structures, such as water reservoirs and water treatment facilities, mainly made of reinforced concrete or steel structures, are exposed to various influences:

- Low pH value, as well as soft water, attack cementitious substrates
- Temperature variations may cause cracks in concrete
- Stray currents may accelerate hydrolytic corrosion
- Chlorine treatment and disinfectants of water to keep the water clean
- Alkalinity of concrete may influence the pH value of water
- Micro-organisms, algae and fungi may influence the water hygiene
- Water turbulences request solutions to prevent washing out effects

IMPACTS ON VARIOUS TECHNOLOGIES

Exposure	Technology				
	Concrete	Mortar	Epoxy Coating	Polyurethane / Polyurea Coating	FPO Membrane
					
Substrate moisture	Not critical	Additional measures needed	Additional measures needed	Additional measures needed	Not critical
Cracked substrate	Critical	Additional measures needed	Additional measures needed	Not critical	Not critical
Alkalinity of concrete	Not critical	Not critical	Not critical	Not critical	Not critical
Disinfectants	Not critical	Not critical	Not critical	Not critical	Not critical
Fungicide	Not critical	Not critical	Critical	Critical	Critical
Chlorine treatment	Not critical	Not critical	Not critical	Not critical	Not critical
Ozone treatment	Not critical	Not critical	Not critical	Not critical	Not critical
Soft (desalinated) water	Critical	Critical	Not critical	Not critical	Not critical
Low pH-value	Critical	Critical	Not critical	Not critical	Not critical
Sunlight	Not critical	Not critical	Additional measures needed	Additional measures needed	Critical
Water temp. ≤ 60°C	Not critical	Additional measures needed	Additional measures needed	Not critical	Critical
Negative water pressure	Not critical	Not critical	Critical	Critical	Critical
Water turbulences	Not critical	Not critical	Not critical	Not critical	Critical
Cleanability	Additional measures needed	Additional measures needed	Not critical	Not critical	Not critical

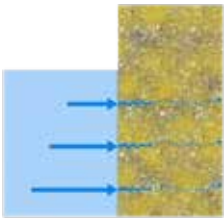
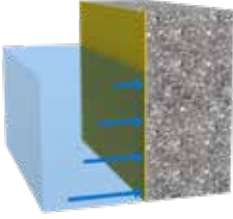
Not critical
 Additional measures needed
 Critical



PROJECT REQUIREMENTS AND USE OF WATERPROOFING SYSTEMS

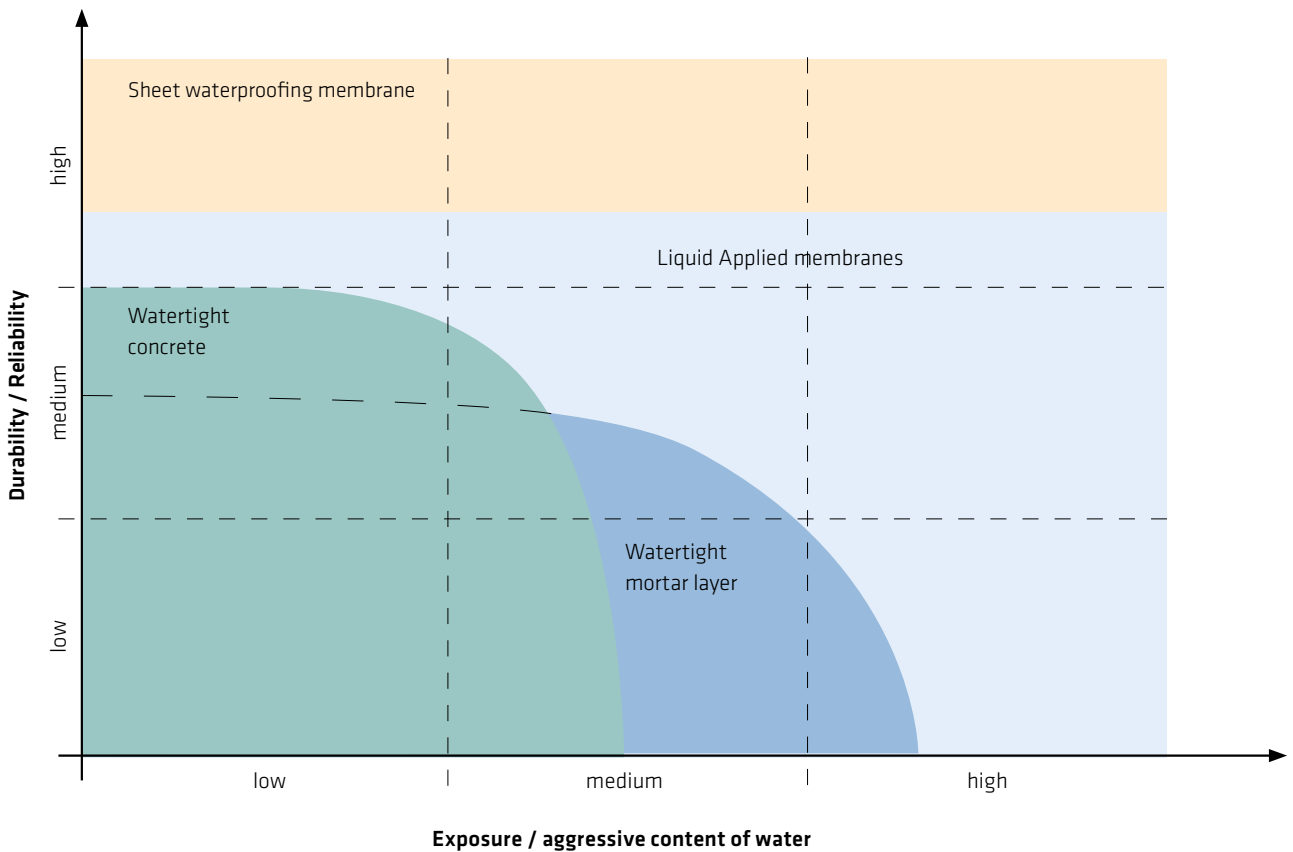
Depending on the specific exposures, the waterproofing system must fulfill the following requirements:

- Resistance against cleaning agents
- Resistance against chlorine and ozone
- Resistance against algae and micro-organisms
- Resistance against hydrostatic pressure
- Smooth appearance of surface for easy cleaning
- No leaching from surface applied waterproofing into water
- No affect on drinking water quality
- Easy and reliable application and installation of surface applied system
- Long service life expectancy of waterproofing
- Resistance against soft water

	Rigid Waterproofing		Flexible Waterproofing		
					
System	Watertight concrete	Watertight mortar layer	Polymer-modified cementitious	Sheet waterproofing membrane	Waterproof coating
Hygienic conditions of systems	Micro-organisms in pores and capillaries of concrete and mortar surface		Micro-organisms in pores and capillaries of concrete and mortar surface	Chlorine demand, turbidity, odor/flavour, organic carbon limit	
Water tightness of systems	Absorption due to porosity of concrete surface	No absorption (no water permeability into mortar)	No absorption (no water permeability into mortar)	No absorption (no water permeability into membrane)	No absorption (no water permeability into coating)
Standard requirements to water hygiene	EN 1508 Systems and components for the storage of water (general requirements) EN-805 Requirement for water reservoirs in service				
Specific Standard requirements	EN-206 Specification, performance, production and conformity of concrete		EN 1504 part 2 Products and systems for the protection and repair of concrete structures. Surface protection systems for concrete	EN 13361 Characteristics for geosynthetic barriers for reservoir structures	EN 1504 part 2 Products and systems for the protection and repair of concrete structures. Surface protection systems for concrete



PERFORMANCE OF DIFFERENT WATERPROOFING TECHNOLOGIES



Durability

low: up to 10 years
 medium: 10 – 20 years
 high: > 20 years / refurbishment required

Exposure / aggressive content of water

low: water turbulences only
 medium: low pH-value, algae, no temperature variations
 high: soft water, high temperatures



SIKA SOLUTIONS FOR THE WATERPROOFING OF RESERVOIRS

SIKA PROVIDES A WIDE RANGE of different waterproofing systems and solutions. The selection of the best system for a specific project depends on many factors, including the local water conditions. The selection of the most suitable waterproofing system depends on the nature of the reservoir structure and the water quality.

RIGID WATERPROOFING SYSTEMS

WATERTIGHT CONCRETE

Waterproofing with concrete admixtures, combined with joint sealing products

Concrete admixtures

- Sika ViscoCrete®
- SikaPlast®
- Sikament®
- Sika® WT

Joint sealing products

- Sika Waterbar®
- SikaFuko® injection hose
- Sikadur-Combiflex® adhered tape system

WATERTIGHT MORTAR LININGS

Waterproofing with waterproofing mortars, combined with joint sealing products

Mortar lining

- Sika®-110 HD
- SikaTop® Seal-107 / SikaTop® Seal-107Plus

Joint sealing products

- Sika Waterbar®
- SikaFuko® injection hose
- Sikadur-Combiflex®

EPOXY LININGS

Waterproofing and protection with liquid applied epoxy resins, combined with glass fabrics

Epoxy lining

- Sikagard®-62
- Sika® Glass Fabric

Joint sealing products

- Sika Waterbar®
- Sikadur-Combiflex® adhered tape system

FLEXIBLE WATERPROOFING SYSTEMS

WATERTIGHT CRACK-BRIDGING MORTAR LININGS

Waterproofing with waterproofing mortars, combined with joint sealing products

Mortar lining

- Sikalastic®-1K
- Sikalastic®-6100 FX

Joint sealing products

- Sika Waterbar®
- SikaSwell®
- Sikadur-Combiflex® adhered tape system

LIQUID APPLIED MEMBRANES

Waterproofing lining with liquid applied reactive resins, combined with joint sealing products

Hot spray membrane

- Sikalastic®-836 DW

Joint sealing products

- Sika Waterbar®
- SikaSwell®
- Sikadur-Combiflex® adhered tape system

Hand applied membrane

- Sikalastic® M 808

LINING WITH SHEET WATERPROOFING MEMBRANES

Waterproofing lining with loose laid sheet membranes, combined with joint sealing products

Sheet membrane lining

- Sikaplan® WT 4220-15 C
- Sikaplan® WT 4220-15 C Felt
- Sikaplan® WT 4220-18 H

Joint sealing products

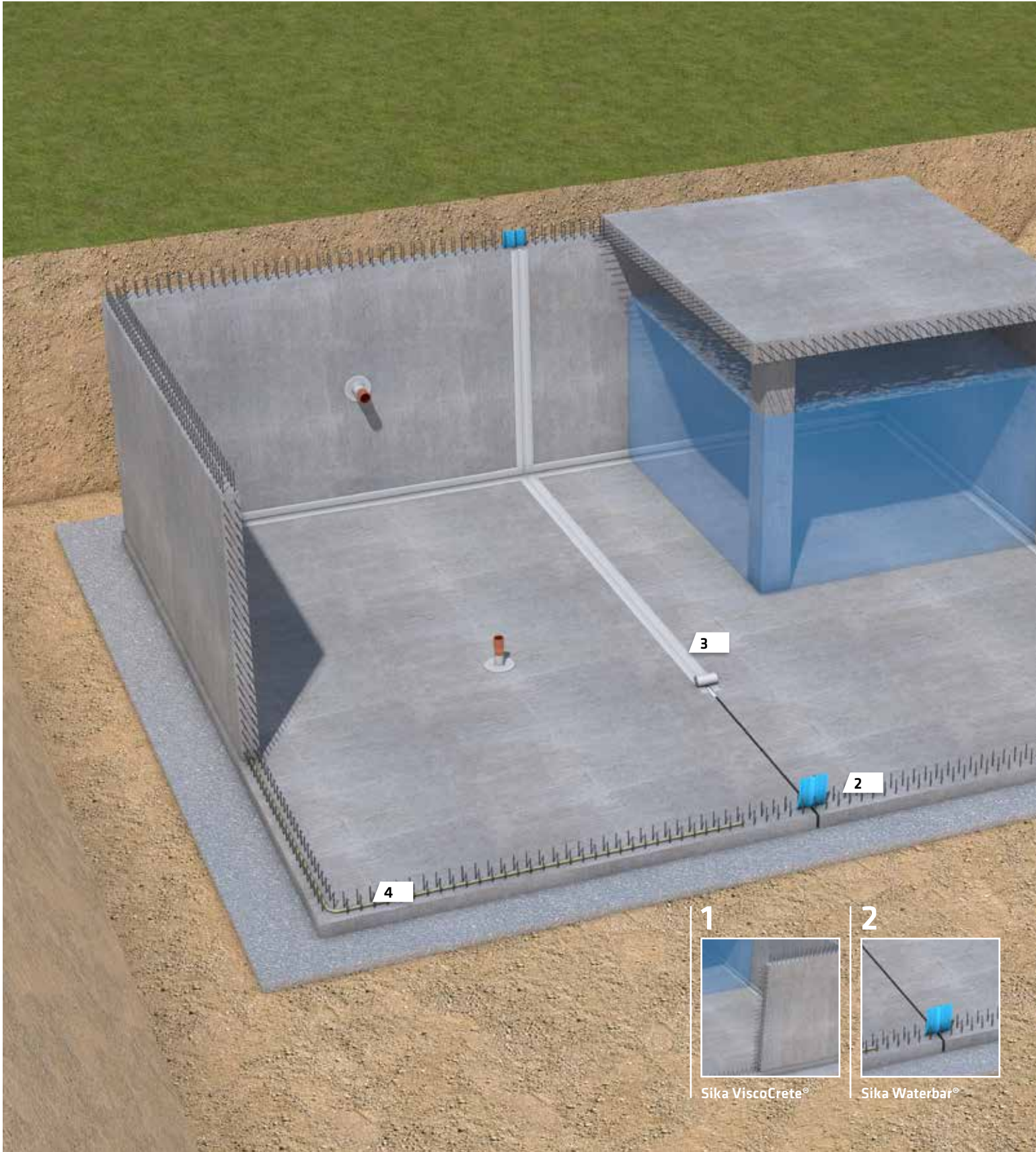
- Sika Waterbar®
- SikaSwell®

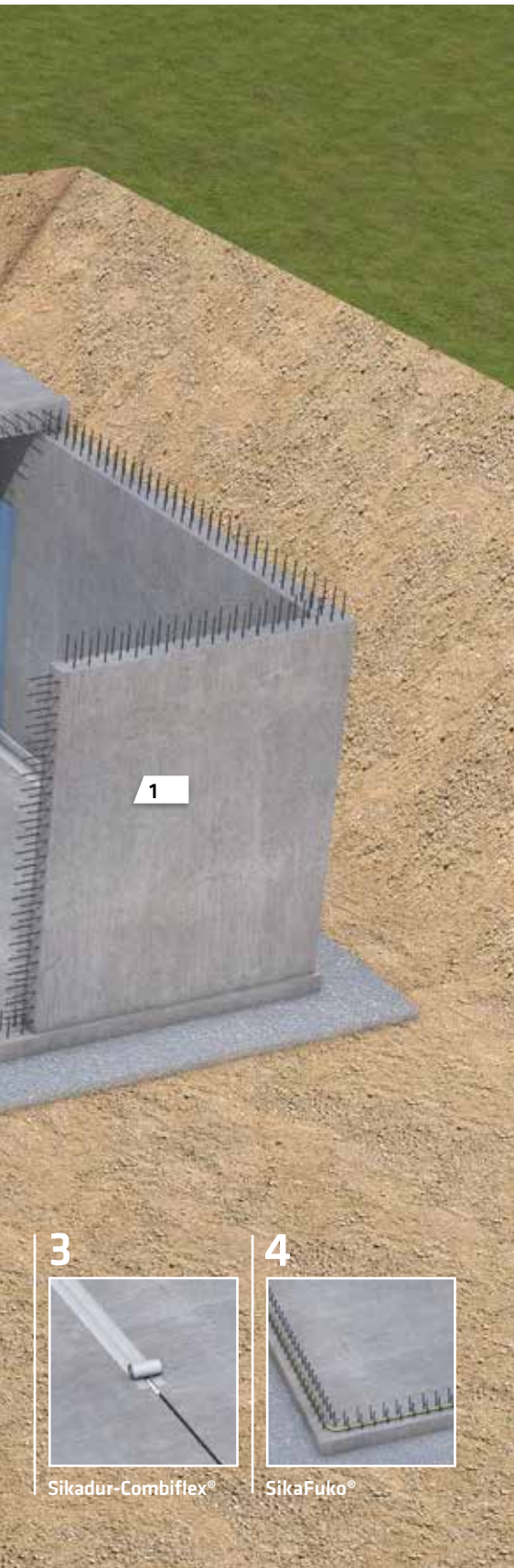
FOLLOWING THE PROJECT SPECIFICATION for lining of potable water reservoirs, the most cost optimized solution is considered in order to fulfill the requirements of the structure and the estimated exposure to local water quality.



WATERPROOFING SYSTEMS	SIKA SOLUTIONS	PERFORMANCE
Watertight concrete for white box system	Sika ViscoCrete®-103 TW Sika® WT	Conventional superplasticizer (concrete admixture product). Waterproofing admixture.
Waterproofing of joints	Sika Waterbar®	Joint profiles based on thermoplastic PVC and FPO for waterproofing construction and expansion joints.
	SikaFuko® injection hose	Ready to use and re-injectable injection hose, cast in concrete. with, or without reverse flow and hydro-swelling properties for waterproofing construction joints.
	Sikadur-Combiflex® system	Ready to use sealing tapes for waterproofing joints; adhered to the surfaces with specific Sikadur® adhesives.
Watertight mortars for post applied waterproofing	Sikalastic®-1K SikaTop® Seal-107 Sika®-110 HD Sikalastic®-6100 FX	Mortar layer, based on cementitious mortar and polymer-modified mortar.
Liquid applied waterproofing coatings	Sikagard®-62 Sikagard® PW Sikalastic® M 808	Two-component coating based on epoxy resin or polyurethane.
Spray applied waterproofing membrane	Sikalastic®-836 DW	Two-part elastic, 100% solids, very fast curing polyurea spray applied membranes.
Flexible sheet membrane waterproofing	Sikaplan® WT 4220-15 C Sikaplan® WT 4220-15 C Felt Sikaplan® WT 4220-18 H	Hygiene approved sheet membranes based on thermoplastic FPO for loose laid lining of water reservoirs and tanks.
Injection systems for repair	SikaInject®-201 DE SikaInject®-304 DE	Two-component PU injection resin. Three-component injection resins based on Acrylate.

SIKA WATERTIGHT CONCRETE





INTEGRAL, RIGID AND COST EFFICIENT SYSTEM

The concept of watertight concrete involves optimum structural design and reinforcement together with an integral rigid waterproofing solution. This consists of a waterproof concrete, combined with an appropriate joint sealing system for any necessary construction and movement joints. To produce watertight concrete requires admixtures including superplasticisers and pore-blocking or active crystallization agents, in order to ensure optimum consistence, flow and easy compaction in a dense matrix of minimal voids. In addition, Sika joint sealing systems are used in watertight concrete, such as FPO-based waterstops, hydrophilic sealants and gas-gaskets to seal construction and expansion joints.

USE

- Local water authority specifies a concrete structure
- Water quality allows concrete surfaces
- No additional linings required
- No structural settlements

MAIN ADVANTAGE

- Cost effective solution concerning material and construction work
- Reduced working procedures on site
- Long lasting waterproofing solution

TYPICAL PROJECTS

- Above ground reservoirs
- Below ground reservoirs
- Water towers

SIKA PRODUCTS AND SYSTEM SOLUTIONS

Concrete admixtures

Sika ViscoCrete®
Sika® Plastiment

Mid and High Range Water Reducing admixtures for reducing pore volumes and improving rheology for consistence.

Sika® WT
Sika® Control
SikaFume®

Pore-blocking and active crystalline admixtures to block pores against water penetration. Shrinkage reducing admixture to limit crack formation throughout the hardening phase. Additives based on pozzolanic silica fume that can be used to reduce the hardened pore volume of the concrete.

Joint sealing products

Sika Waterbar®

Internal and external waterstops based on hygiene approved FPO, cast in concrete for waterproofing joints.

Sika Waterbar® FB-125 +
Sika Waterbar® D-240 FPO

Flexible fully bonded hybrid waterstop (FPO based), for construction joints.

Sikadur-Combiflex® system

Adhesive tape of FPO, bonded with approved Sikadur® adhesive for post applied joint sealing.

SikaFuko®

Ready-to-use and re-injectable injection hose with or without reverse flow and hydro-swelling properties for waterproofing construction joints.

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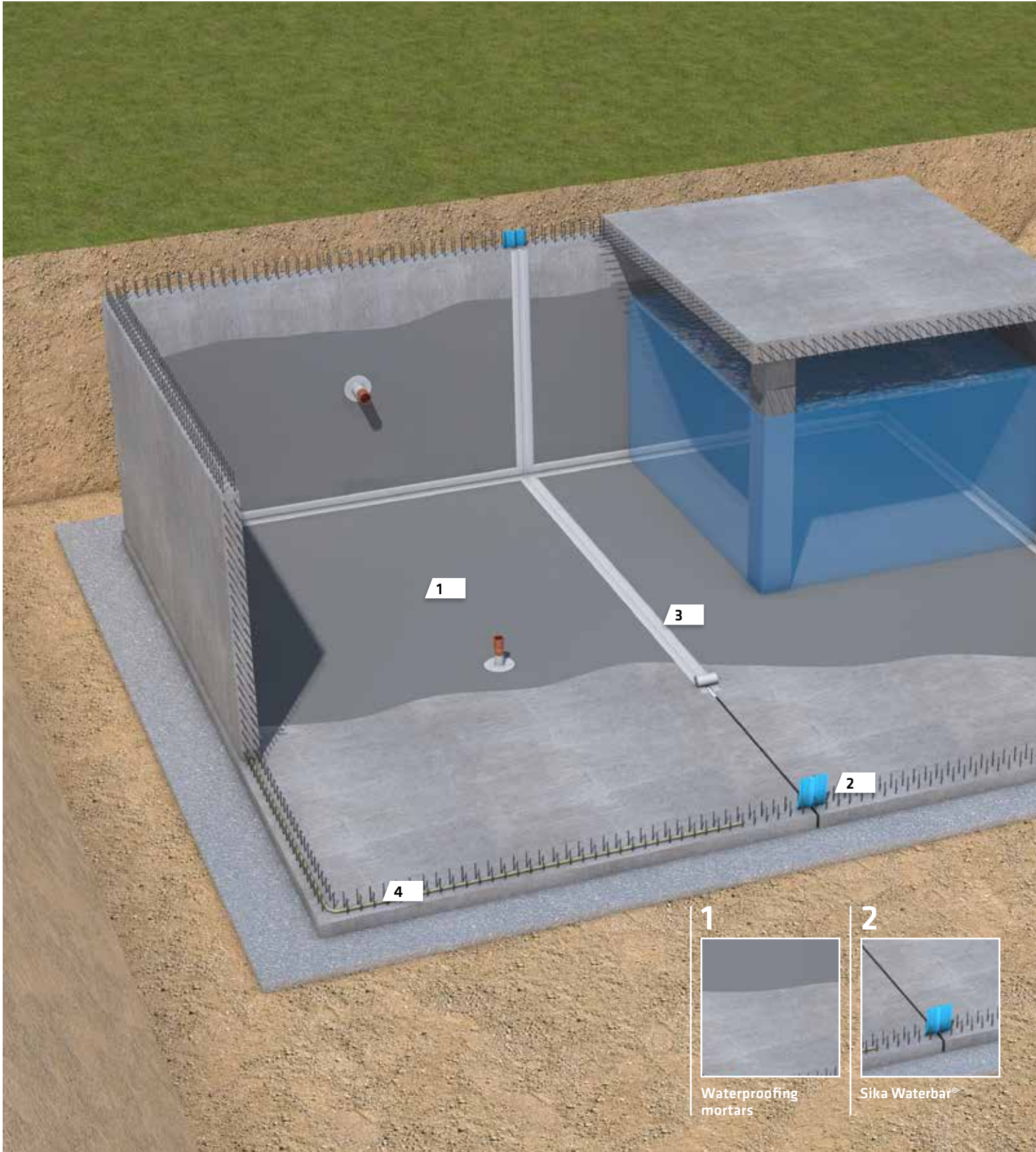
Sikadur-Combiflex®

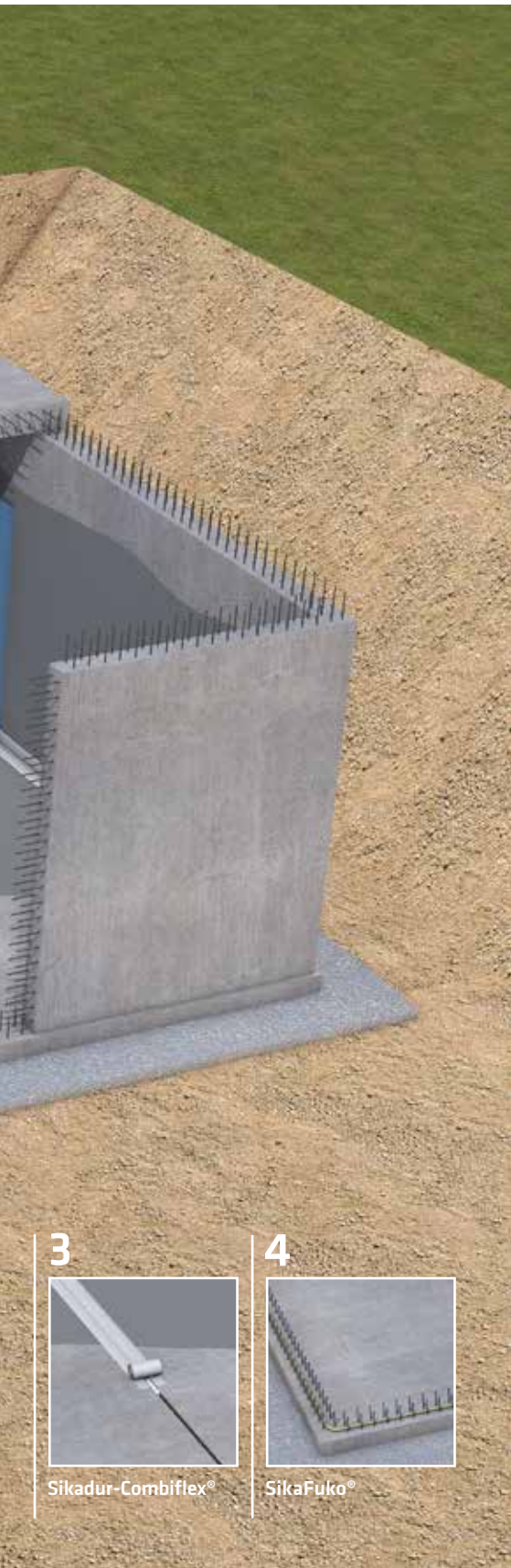
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SikaFuko®

SIKA WATERPROOFING MORTARS





WATERPROOFING MORTAR SYSTEM

Sika waterproof mortars and mortar admixtures for rigid waterproofing lining in potable water tanks have excellent technical properties to seal against damp soil, seepage and percolating water. These materials are applied on prepared, internal concrete surfaces manually, or by spray to provide excellent solutions for complicated detailings. The post applied waterproofing mortar is used in combination with joint sealing products. Applied Sika waterproofing mortar linings have long lasting service life.

USE

- Suitable for refurbishment of reservoirs
- No cracks of substrate expected
- No structural settlements

MAIN ADVANTAGE

- Chemical and abrasion resistant
- Easy application on complex details
- Can be combined with Sika joint sealing systems

TYPICAL PROJECTS

- Above ground reservoirs
- Below ground reservoirs
- Water towers
- Caverns

SIKA PRODUCTS AND SYSTEM SOLUTIONS

Waterproofing mortars

SikaTop® Seal-107	Two-component, polymer modified rigid cementitious waterproofing.
SikaTop® Seal-107 Plus	
Sikalastic®-1K	One-component, polymer modified cementitious waterproofing with crack-bridging ability.
Sika®-110 HD	One-component, polymer-free rigid cementitious waterproofing.
Sikalastic®-6100 FX	Lightweight, one-component, elastic cementitious membrane for waterproofing and concrete protection.

Joint sealing products

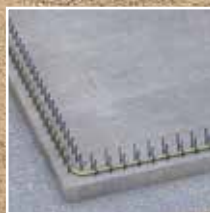
Sika Waterbar®	Internal and external waterstops based on hygiene approved FPO, cast in concrete for waterproofing joints.
Sika Waterbar® FB-125 + Sika Waterbar® D-240 FPO	Flexible fully bonded hybrid waterstop (FPO based), for construction joints.
Sikadur-Combiflex® system	Adhesive tape of FPO, bonded with approved Sikadur® adhesive for post applied joint sealing.
SikaFuko®	Ready-to-use and re-injectable injection hose with or without reverse flow and hydro-swelling properties for waterproofing construction joints.

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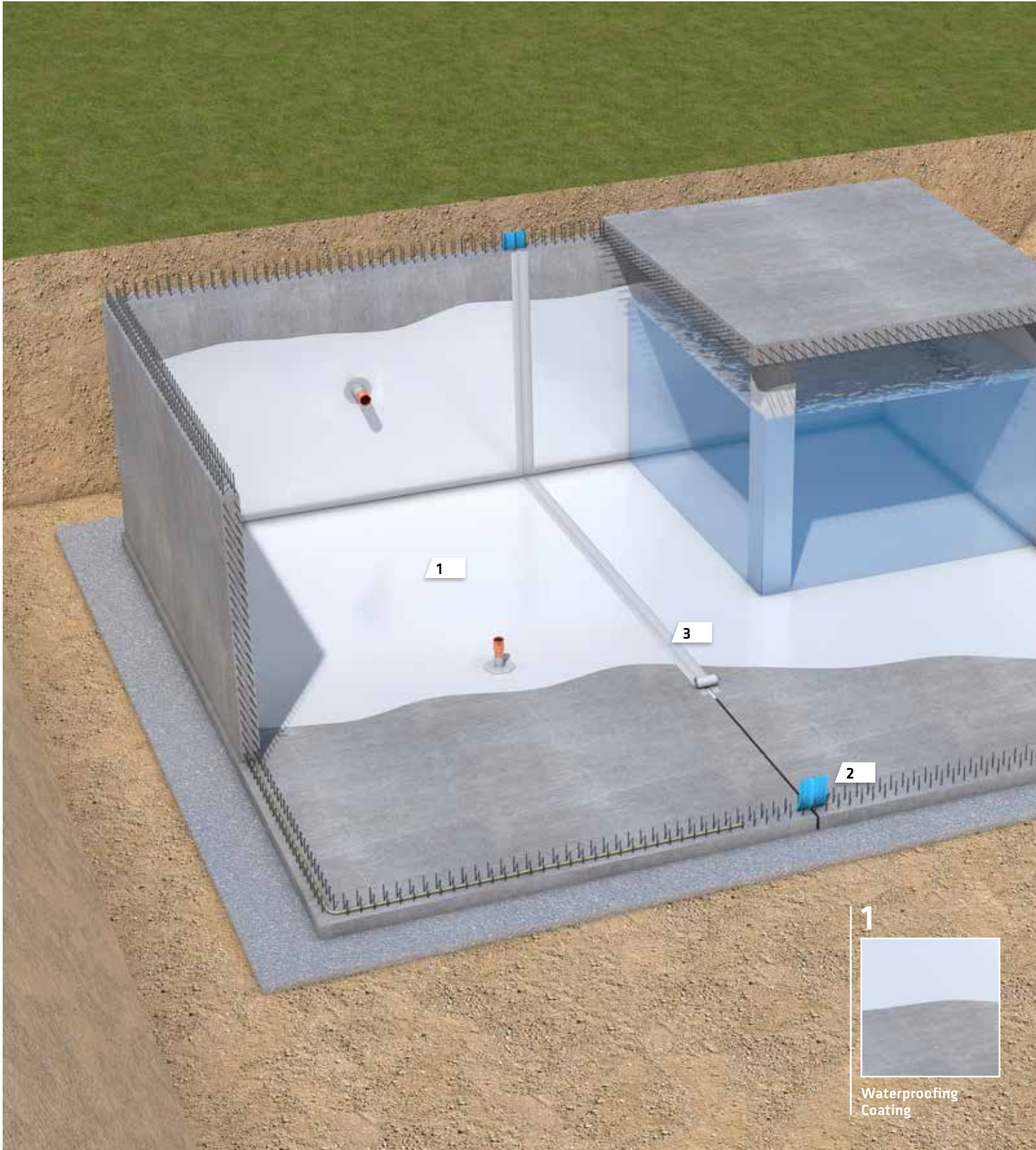
Sikadur-Combiflex®

4



SikaFuko®

HAND-APPLIED WATERPROOFING SYSTEM





ROLLER APPLIED AND CRACK-BRIDGING SYSTEM

Sika liquid applied membranes (LAM) are semi-rigid systems, based on epoxy resins. These materials are applied on prepared and primed internal concrete and steel surfaces by manual application or by spray to provide excellent solutions for complicated detailings. Reinforcements can be incorporated to achieve crack-bridging properties.

USE

- Suitable for new and refurbishment of reservoirs
- Limited cracks of substrate expected
- No structural settlements

MAIN ADVANTAGE

- Chemical and abrasion resistant
- Easy application on complex details
- Can be combined with Sika joint sealing systems
- Long lasting waterproofing solution
- Corrosion protection of steel tanks

TYPICAL PROJECTS

- Above ground reservoirs
- Below ground reservoirs
- Water towers
- Steel tanks

SIKA PRODUCTS AND SYSTEM SOLUTIONS

Waterproofing coating

Sikagard®-62 Two-component coating based on epoxy resin.
Sika® Reemat Optional reinforcement of the epoxy coating for crack-bridging ability.
Sika® Glass Fabric

Sikalastic® M 808 Two-component, crack-bridging membrane based on polyurethane.

Joint sealing products

Sika Waterbar® FB-125 + Sika Waterbar® D-240 FPO Flexible fully bonded hybrid waterstop (FPO based), for construction joints.

Sikadur-Combiflex® system Adhesive tape of FPO, bonded with approved Sikadur® adhesive for post applied joint sealing.

SikaFuko® Ready-to-use and re-injectable injection hose with or without reverse flow and hydro-swelling properties for waterproofing construction joints.

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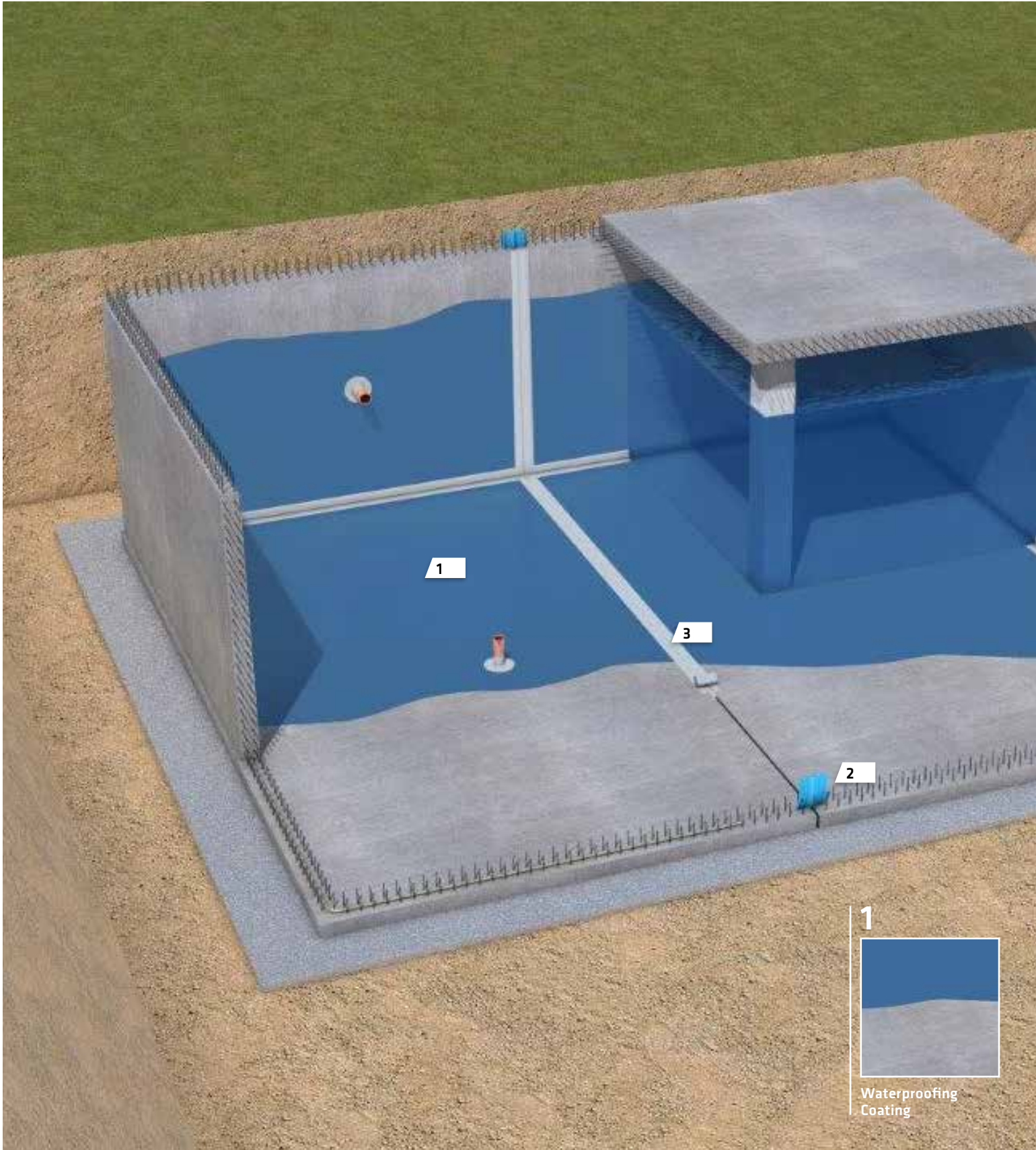
Sika Waterbar®

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Sikadur-Combiflex®

HOT SPRAY APPLIED WATERPROOFING SYSTEM





FAST APPLICATION AND HIGHLY FLEXIBLE SYSTEM

Sika spray applied membranes (LAM) are highly elastic and flexible polymeric systems, based on polyurea. These materials are applied on prepared and primed internal concrete surfaces by hot spray application to provide excellent solutions for complicated detailings. Liquid applied membranes will also prevent underflow of any lateral water in the event of local damage.

USE

- Suitable for refurbishment of reservoirs
- For new water retaining concrete structures

MAIN ADVANTAGE

- Chemical and abrasion resistant
- Easy applicable on complex details
- Can be combined with Sika joint sealing systems
- Long lasting waterproofing solution

TYPICAL PROJECTS

- Above ground reservoirs
- Below ground reservoirs
- Water towers
- Steel tanks

SIKA PRODUCTS AND SYSTEM SOLUTIONS

Waterproofing coating

Sikalastic®-836 DW

Two-part elastic, 100% solids, very fast curing polyurea spray applied membrane, especially designed for the use in potable water installations, reservoirs and fish tanks. Sikalastic®-836 DW and Sikalastic®-840 ES are for machine application only.

Joint sealing products

Sika Waterbar® FB-125 + Sika Waterbar® D-240 FPO

Flexible fully bonded hybrid waterstop (FPO based), for construction joints.

Sikadur-Combiflex® system

Adhesive tape of FPO, bonded with approved Sikadur® adhesive for post applied joint sealing.

SikaSwell®

Range of hydrophillic profiles and gun applied sealants, designed for the sealing and waterproofing of construction joints and penetrations (e.g. pipe entries).

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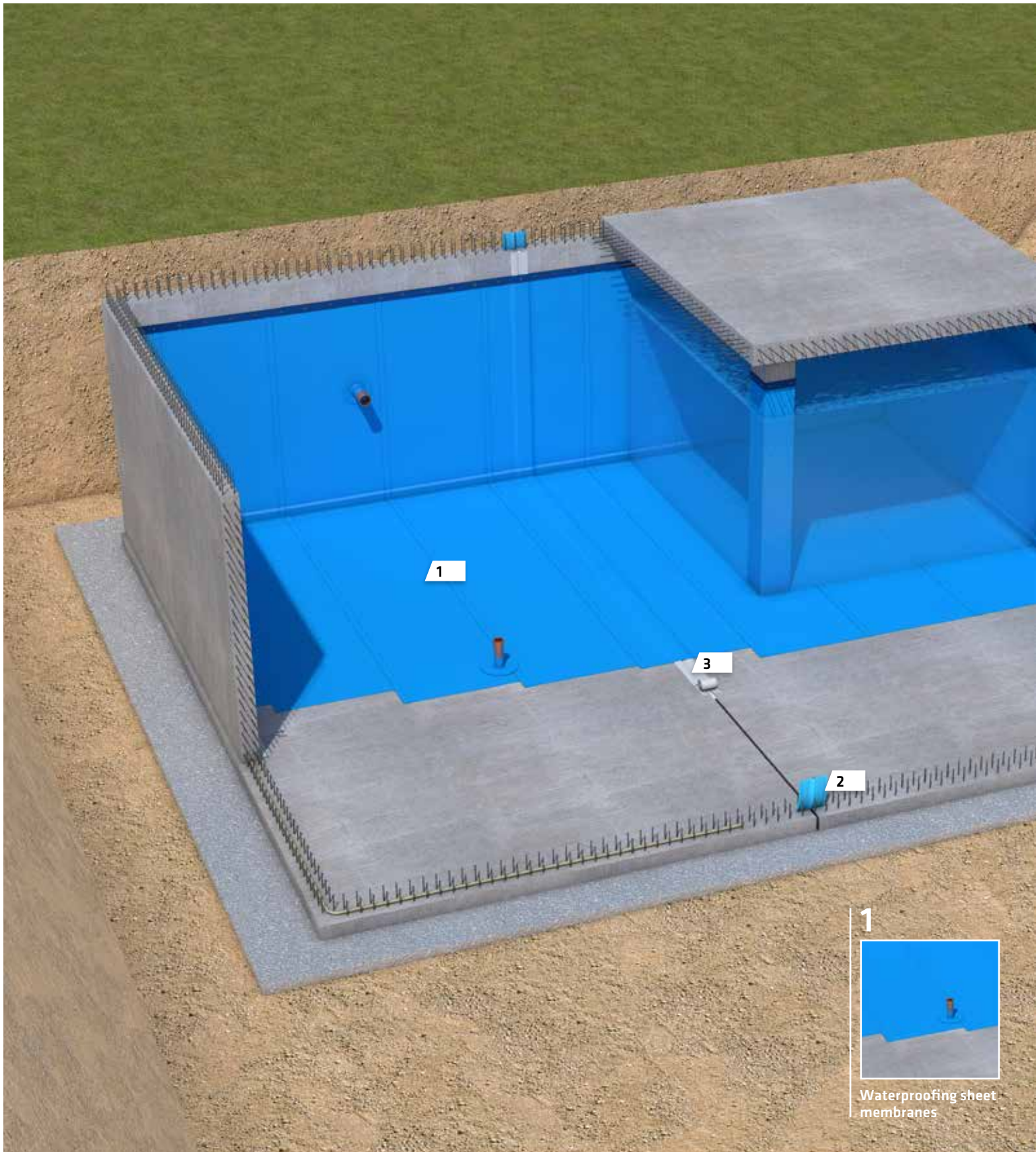
Sika Waterbar®

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Sikadur-Combiflex®

WATERPROOFING SHEET MEMBRANE LINING SYSTEM





HIGH PERFORMANCE, CRACK-BRIDGING, FAST INSTALLATION

Sikaplan® FPO-based membrane is a high flexible waterproofing system, using hygiene approved sheet liner, installed on concrete structure of potable water reservoirs. The membrane can be used in combination with joint sealing products. Sikaplan® waterproofing sheet membrane linings have long lasting service life.

USE

- Suitable for new and re-furbishment of reservoirs

MAIN ADVANTAGE

- Chemical resistant
- Can be combined with Sika joint sealing systems
- Long lasting waterproofing solution
- No substrate preparation required

TYPICAL PROJECTS

- Above ground reservoirs
- Below ground reservoirs
- Water towers
- Steel tanks
- Caverns

SIKA PRODUCTS AND SYSTEM SOLUTIONS

Waterproofing sheet membranes

Sikaplan® WT 4220-15 C	FPO sheet waterproofing membranes, for waterproofing potable water tanks and reservoirs, mechanically fixed at walls, with membrane overlaps sealed by heat welding.
Sikaplan® WT 4220-15 C Felt	
Sikaplan® WT 4220-18 H	

Joint sealing products

Sika Waterbar® FB-125 + Sika Waterbar® D-240 FPO	Flexible fully bonded hybrid waterstop (FPO based), for construction joints.
Sikadur-Combiflex® system	Adhesive tape of FPO, bonded with Sikadur® adhesive for post applied joint sealing.
SikaFuko®	Ready-to-use and re-injectable injection hose with or without reverse flow and hydro-swelling properties for waterproofing construction joints.

2



Sika Waterbar®

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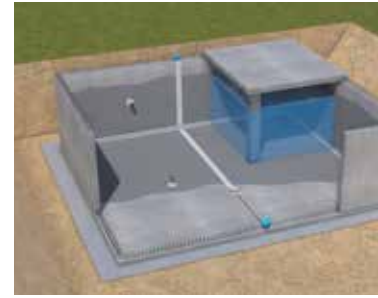
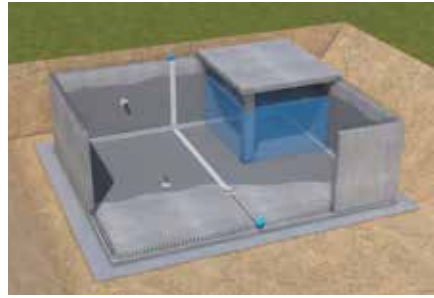
Sikadur-Combiflex®

RESERVOIR WATERPROOFING SOLUTIONS OVERVIEW

RIGID WATERPROOFING

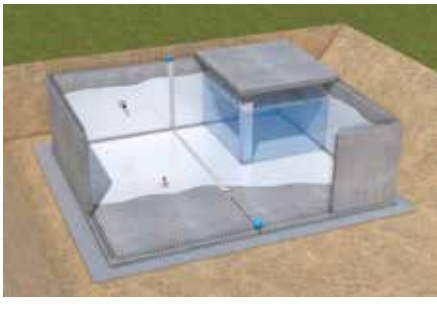




SEMI-RIGID WATERPROOFING

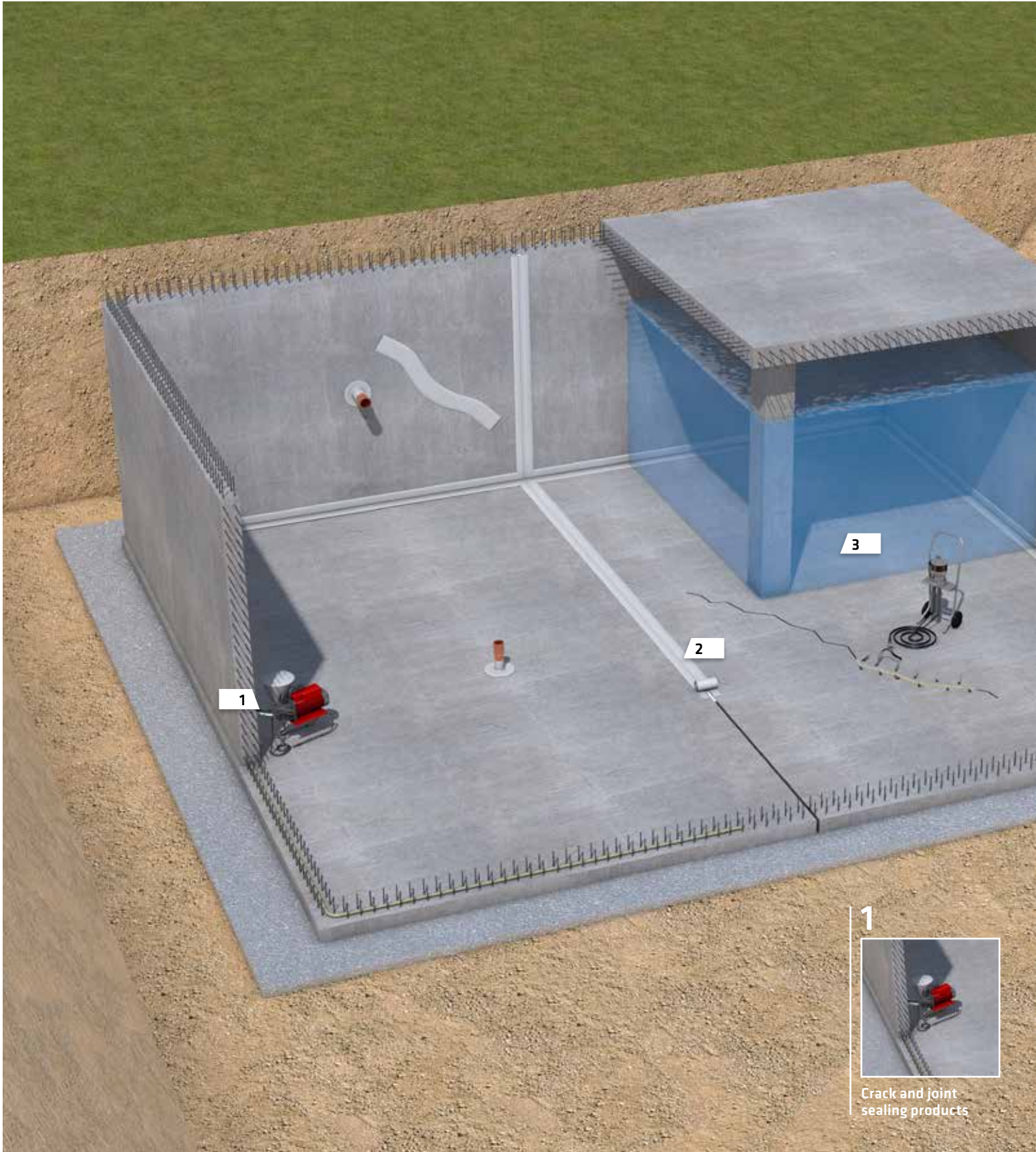


Main Technology / Type of system	Watertight concrete Sika® WT	Waterproofing mortar coating SikaTop®	Waterproofing polymer-modified mortar Sikalastic®
Waterproofing concept	Integral waterproofing of reservoir structures, combined with joint sealing	Internal waterproofing lining of reservoir structures, combined with joint sealing	Internal waterproofing lining of reservoir structures, combined with joint sealing
Performance characteristics	Crack-bridging: n.a. Water vapour tightness: n.a. Chemical resistance: + Durability: ++	Crack-bridging: + Water vapour tightness: + Chemical resistance: + Durability: +	Crack-bridging: ++ Water vapour tightness: + Chemical resistance: + Durability: ++
Nature of surface in contact with potable water	Cement based	Cement based	Polymer-modified cement
Substrate conditions	New structures	New and existing structures Reinforced concrete Brickwork	New and existing structures Reinforced concrete Brickwork
Substrate preparation	Controlled conditions for concreting on site required (temperature, e.g.)	Controlled conditions on site required (temperature) Pre-wet substrate	Controlled conditions on site required (temperature) Pre-wet substrate
Repairability of system	Crack and joint repair with Sikadur-Combiflex® system and Sika® Injection	Crack and joint repair with Sikadur-Combiflex® system	Local refurbishment of coating Crack and joint repair with Sikadur-Combiflex® system
Advantages	<ul style="list-style-type: none"> ■ Very cost effective ■ No protection measures required ■ Simple and fast construction 	<ul style="list-style-type: none"> ■ Very cost effective ■ Simple and fast application ■ Moisture tolerant 	<ul style="list-style-type: none"> ■ Easy detailing solutions ■ No need of reinforcement ■ Moisture tolerant

FLEXIBLE WATERPROOFING

		
<p>Liquid applied coating Sikagard®/Sikalastic®</p>	<p>Hot sprayed coating Sikalastic®</p>	<p>Loose laid and mechanically fixed membrane Sikaplan®</p>
<p>Internal waterproofing lining of reservoir structures, combined with joint sealing for concrete structures Internal waterproofing lining for steel structures</p>	<p>Internal waterproofing lining of reservoir structures, combined with joint sealing for concrete structures</p>	<p>Internal waterproofing lining of reservoir structures</p>
<p>Crack-bridging: ++ Water vapour tightness: ++ Chemical resistance: ++ Durability: ++</p>	<p>Crack-bridging: ++ Water vapour tightness: ++ Chemical resistance: ++ Durability: ++</p>	<p>Crack-bridging: +++ Water vapour tightness: n.a. Chemical resistance: ++ Durability: +++</p>
<p>Epoxy based/Polyurethane</p>	<p>Polyurea based</p>	<p>Polyethylene based</p>
<p>New and existing structures Reinforced concrete Steel</p>	<p>New and existing structures Reinforced concrete</p>	<p>New and existing structures Reinforced concrete Brickwork Steel</p>
<p>Controlled conditions on site required (temperature, dry substrate, low humidity) Substrate preparation required</p>	<p>Controlled conditions on site required (temperature, dry substrate, low humidity) Substrate preparation required</p>	<p>Substrate cleaning required</p>
<p>Local refurbishment of coating</p>	<p>Local refurbishment of membrane</p>	<p>Local repair of leaks in membrane with welding of membrane patches</p>
<ul style="list-style-type: none"> ■ Easy detailing solutions ■ Can be reinforced 	<ul style="list-style-type: none"> ■ Easy detailing solutions ■ Fast application 	<ul style="list-style-type: none"> ■ Very limited substrate preparation ■ Fast installation procedure by trained personnel

REPAIRING OF LEAKS OF RIGID WATERPROOFING SYSTEMS



1
Crack and joint
sealing products



SIKA INJECTION SOLUTIONS FOR REPAIR AND REFURBISHMENT OF RIGID WATERPROOFING SYSTEMS

In situations with loss of water due to localized damage of the rigid waterproofing system, appropriate repair works have to be undertaken in reservoirs and tanks, waterproofed either by watertight concrete, or lined with waterproofing mortar layers. This can be done by injection or application of a waterproofing mortar.

The success of a durable and tight injection work is a combination of Sika's materials and equipment selection, as well as application experience.

USE

- Suitable for new and refurbishment of existing reservoirs

MAIN ADVANTAGE

- Quick repair methods by injection of cracks and joints in concrete
- Quick repair for sealing with waterproofing mortars and Sikadur®-Combiflex® system on concrete surface

TYPICAL PROJECTS

- Above ground reservoirs
- Below ground reservoirs
- Water towers
- Caverns

SIKA PRODUCTS AND SYSTEM SOLUTIONS

Crack and joint sealing products

Sikadur-Combiflex® system Adhesive tape based on FPO, bonded with Sikadur® adhesive for post applied joint sealing system; sealing around pipe penetrations and access door frames.

SikaTop® Seal-107 / SikaTop® Seal-107 Plus One- and two-component and cementitious waterproofing mortars for repair and sealing of crack in concrete and repair of homey-combed surfaces.

Sikalastic®-1K

Sika®-110 HD

Sikalastic®-6100 FX Lightweight, one-component, elastic cementitious membrane for waterproofing and concrete protection.

Injection systems for repair

SikalInject®-201 DE Two-component PU injection resin.

SikalInject®-304 DE Three-component injection resin based on Acrylate for waterproofing cracks and joints into structural concrete.

2



Sikadur-Combiflex®

3



SikaTop®

PROJECT REFERENCES

JOINT SEALING



Réservoir Dupail, France: 900 m of Sikadur® Combiflex® SG Tapes.

JOINT SEALING



Water treatment plant Albacete, Spain: Sika Waterbar® FB-125

WATERPROOFING MORTARS



Rapid refinery Pengerang, Malaysia: Tank refurbishment with Sikalastic®-1K (spray application), Sikadur® Combiflex® SG Tapes and Sikaflex® PRO-3.

MULTI-LAYER SYSTEMS



Drinking water tank, Oman: Multi-layer: Sikafloor®-161, Sikagard® PW in blue color.

HOT-SPRAY MEMBRANE



Basin San Esteban, Spain: 800 m² of Sikafloor®-161 and Sikalastic®-840 ES.

POLYMER-MODIFIED MORTAR



Reservoir Loaysa Granada, Spain: approx. 12'500 m² of Sikalastic®-6100 FX.

HAND-APPLIED MEMBRANE



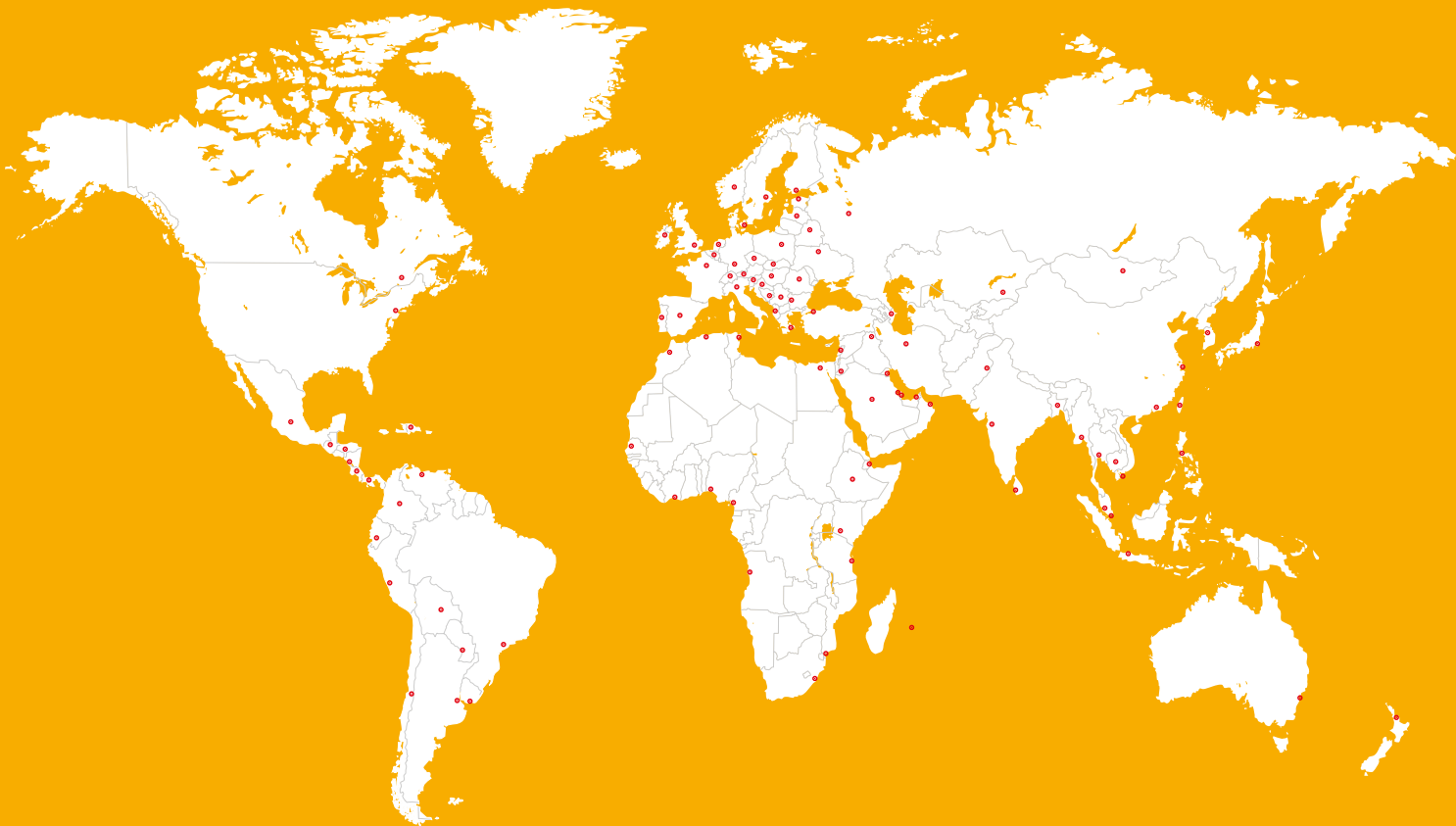
Drinking water treatment plant Kluizen, Belgium: Sikalastic® M 808

SHEET MEMBRANE



Water tower Beersel, Belgium: Sikaplan® WT-4220.

GLOBAL BUT LOCAL PARTNERSHIP



FOR MORE INFORMATION:



WE ARE SIKA

Sika is a specialty chemicals company with a leading position in the development and production of systems and products for bonding, sealing, damping, reinforcing and protecting in the building sector and the motor vehicle industry. Sika's product lines feature concrete admixtures, mortars, sealants and adhesives, structural strengthening systems, industrial flooring as well as roofing and waterproofing systems.

Our most current General Sales Conditions shall apply. Please consult the most current local Product Data Sheet prior to any use.



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