



WATERPROOFING SIKA SOLUTIONS FOR CONCRETE BASEMENTS



ADVANTAGES OF OUR SOLUTIONS

Basements and below grade civil structures protected with Sika waterproofing solutions increase living comfort and widen possibilities for us. In addition, total cost of ownership is reduced while the durability for the entire service life of the project is increased.

Our fully integrated and compatible system solutions are sustainably produced and well proven over many decades in practice all over the world, plus they are fully tested and certified to all leading and international standards. This gives owners and their project specifiers and contractors the security of clearly defined performance characteristics for all Sika's waterproofing solutions.

CONTENT

4	Sika Waterproofing Solutions
6	Below Grade Structures - Exposure and Stress
8	Owner's Project Requirements
11	Basement Waterproofing – Concept and Strategy
12	Waterproofing Technologies
14	Excavation and Construction Procedures
16	Sika White Box Concept and Watertight Concrete Systems
18	Fully Bonded Flexible Sheet Membrane Systems
20	Compartmentalized Membrane Systems with Integrated Control and Injection Back-up
22	Basement Waterproofing Systems – Overview and Selection Guide
24	Repair and Refurbishment Solutions
26	Sika – The Global Leader in Structural Waterproofing

WATERPROOFING SOLUTIONS

WATERPROOFING SYSTEMS for below grade structures are faced with more stringent requirements regarding durability, exposure and stress conditions, construction method and sequence, ease of application and total cost management. In addition, sustainable system solutions are becoming more important in order to save natural resources and reduce CO₂. As the global leader in providing structural waterproofing solutions, Sika has the most comprehensive range of products and systems that can be adapted to meet the specific needs and requirements of owners, architects, engineers and contractors.



RESIDENTIAL BUILDINGS

Basement waterproofing solutions for storage rooms, wellness and fitness areas or movie theatres in residential buildings.



COMMERCIAL OFFICE BUILDINGS

Basement waterproofing solutions for strong rooms, computer rooms or storage rooms in commercial office buildings.



ARCHIVES/LIBRARIES

Completely dry basement waterproofing solutions for humid sensitive archive rooms in libraries.



UNDERGROUND PARKING AREA

Basement waterproofing solutions for different grades of watertight underground parking areas.

Basements or any below ground structures that are formed by a base slab, walls and a top slab, partially or fully exposed to surrounding soil and groundwater are susceptible to exposure and stress from prevailing permanent or temporary environmental conditions. Today new building owners generally request a service life of 50 years or more and as much as 120 years for structures such as tunnels. Any lack of water tightness severely reduces the long term durability of a building or other below ground structure and adversely affects its planned use as water ingress will result in physical attack and deterioration of the concrete. This leads to expensive structural repair work, damage or loss of interior finishes and goods and operational downtime.

The selection of the appropriate waterproofing method, the project specific design of the waterproofing system and its correct installation are key elements in minimizing the Total Cost Of Ownership. A waterproofing system typically amounts to less than 1% of the total core construction costs, yet the selection of a high quality waterproofing solution can easily save this amount or more in future repair and maintenance costs over the service life of the structure.

Sika provides a full range of technologies and systems used for the below ground waterproofing. This includes highly flexible membrane systems, self-adhering polymeric waterproofing membrane, watertight concrete admixtures, joint waterproofing systems, waterproofing mortars / coatings and injection sealing grouts. All of these solutions are designed to be used together to meet the specific needs and requirements of owners, architects, engineers and contractors.

Sika's expertise is combined with more than 100 years of experience from all around the world providing successful waterproofing solutions for basements and below grade civil structures such as tunnels and water retaining structures. Sika waterproofing experts are able to support our customers throughout their projects from determining the best waterproofing concept, through design work, through detailing, to on-site support for successful installation. This also includes extensive remedial solutions for waterproofing existing structures.



BELOW GRADE RAIL STATIONS

Specific waterproofing solutions for metro stations build in open-cut construction method.



SERVICE ROOMS

Basement waterproofing solutions for various plant rooms and underground power stations.



RETAIL UNITS AND WAREHOUSES

Complete dry waterproofing solutions to protect goods against humidity in retail units and warehouses.



LEISURE FACILITIES

Basement waterproofing solutions for below ground leisure facilities and indoor swimming pools and other sport rooms.

BELOW GRADE STRUCTURES - EXPOSURE AND STRESS



TYPES OF EXPOSURE AND STRESS

Below grade structures can be subject to many different exposure conditions including:

- Different levels of water exposure and pressure (e.g. damp soil, percolating water or water under hydrostatic pressure, and open water)
- Aggressive ground water containing chemicals (commonly sulphates and chlorides in solution)
- Unequal static forces (due to load, settlement, or uplift, etc.)
- Dynamic forces (e.g. from settlement, earthquake, explosion, etc.)
- Temperature variations (frost during the night/winter, heat during the day/summer)
- Gases in the ground (e.g. Methane and Radon)
- Aggressive biological influences (plant roots/growth, fungal or bacterial attack)



EXPOSURE IMPACT ON BELOW GRADE STRUCTURES

These different types of exposure may adversely influence the use, watertightness and durability of a basement structure, resulting in a reduced service life of the entire structure.

Exposure	Impact on structure
Water ingress	→ Damage to structure, finishes, contents and the internal environment (condensation and mold growth etc.), loss of thermal insulation, corrosion of steel reinforcement
Aggressive chemicals	→ Concrete damage (due to sulphate attack), corrosion of steel reinforcement (due to chloride attack)
Unequal static forces	→ Structural cracking
Dynamic forces	→ Structural cracking
Temperature variations	→ Condensation, scaling or cracking of concrete
Gas penetration	→ Gas penetration and exposure for occupants
Fungal/bacterial attack	→ Damage to the waterproofing system, finishes or contents

OWNER'S PROJECT REQUIREMENTS

To define the appropriate waterproofing strategy and type of system for a specific project, it is important to consider not only the ground conditions but also the project requirements of the owner: Functionality and future use, the service life and the total cost of ownership.

Owners requirements

1 Functionality
(Use, grade of water tightness)

2 Service Life / Durability

3 Total Cost of Ownership
(incl. maintenance cost)

1 DEGREE OF WATER TIGHTNESS REQUIRED

The future use defines the degree of water tightness and protection of a structure. The British standards describes in BS 8102-2009 different level of water tightness which can be combined with additional protection requirements.

GRADE 1

Basic utility

Some seepage and damp areas tolerable*

* Dependent on use



- Underground parking garages
- Plant rooms
- Workshops

GRADE 2

Better utility

No water penetration, some damp areas tolerable*, ventilation may be required

* Dependent on use



- Underground parking garages
- Storage areas
- Plant rooms
- Workshops

GRADE 3

Habitable

No water penetration acceptable, ventilation and dehumidification are required



- Ventilated residential units and offices
- Restaurants and commercial areas
- Leisure facilities

ADDITIONAL REQUIREMENTS (FORMERLY GRADE 4)

As Grade 3 plus:

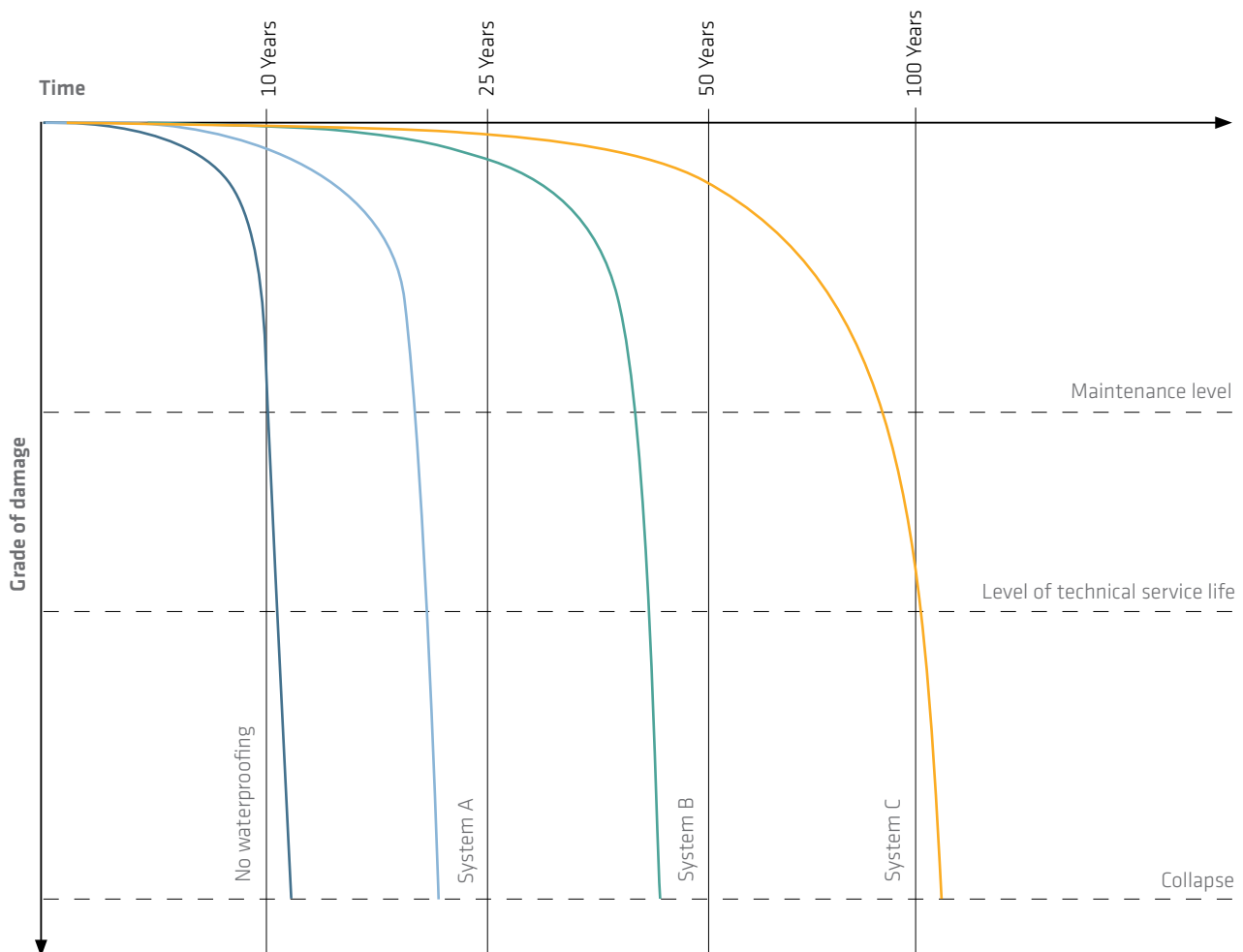
- No water vapor penetration
- Totally dry environment
- Protection against chemical attacks
- Gas barrier



- Residential areas
- Computer rooms
- Archives
- Special purpose facilities and areas

2 SERVICE LIFE / DURABILITY

The required service life of an individual concrete structure is mainly affected by water ingress and depends on the protection performance and longevity of the selected waterproofing system. The graphic below shows the service life/durability of a structure depending on the grade of waterproofing system.



No Waterproofing: structure directly exposed to ground water without any waterproofing system.

System A: structure protected with low grade waterproofing system.

System B: Structure protected with a medium grade waterproofing system.

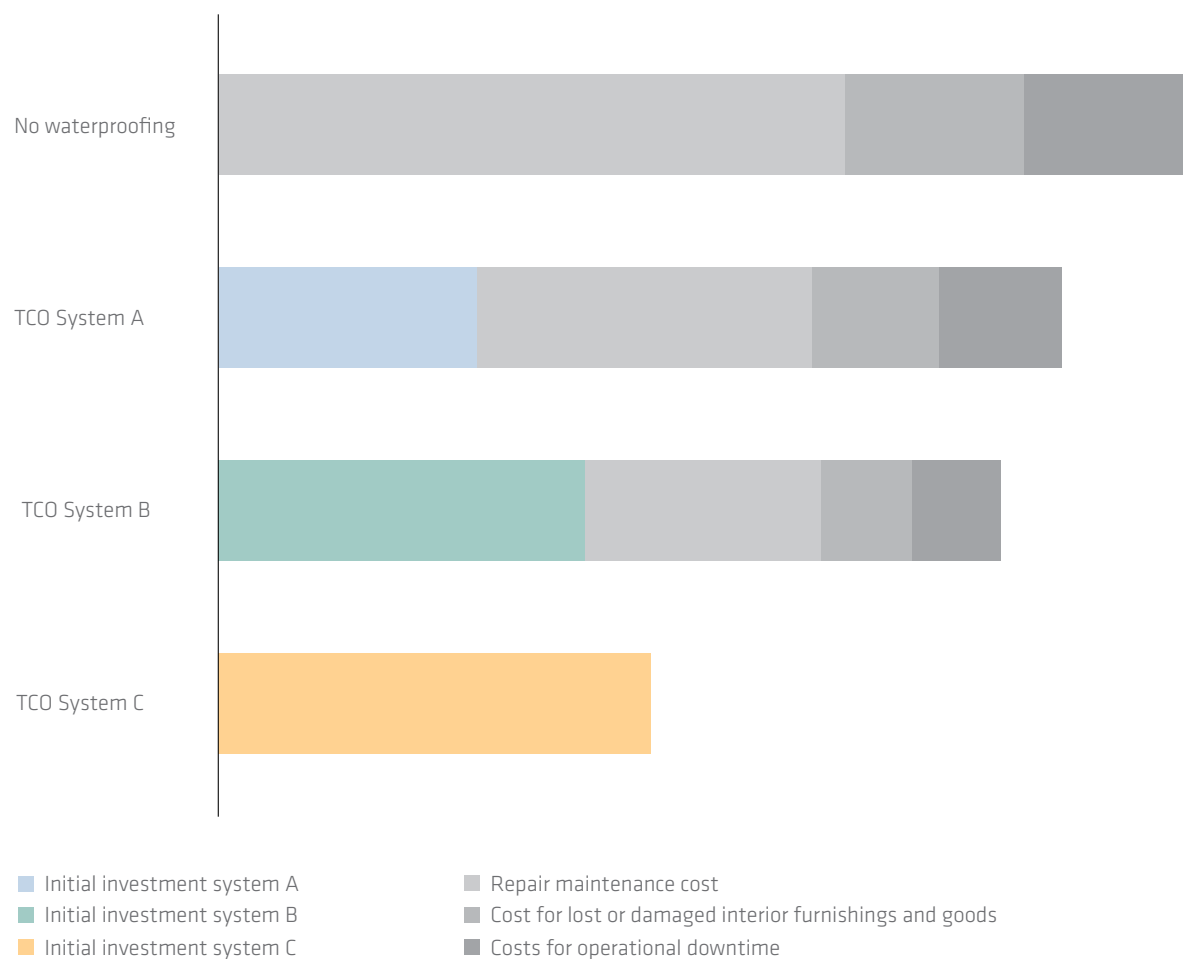
System C: Structure protected with a high grade waterproofing system.

OWNER'S PROJECT REQUIREMENTS

3 TOTAL COST OF OWNERSHIP

The total cost of ownership (TCO) for the owner and investor includes all of the building costs for the entire service life of the structure, including the initial investment, the cost of any loss or damage to interior furnishings and goods etc. due to water ingress, the cost of any repair and maintenance, plus the cost of any downtime during any such work.

The graphic below illustrates the total cost of ownership for a specific project (e.g. typical commercial building) with a required service life of at least 50 years.



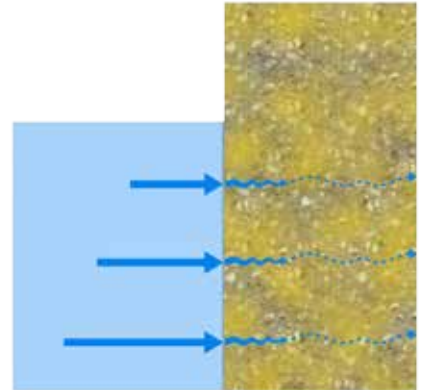
BASEMENT WATERPROOFING – CONCEPT AND STRATEGY

In general there are 3 different waterproofing concepts which can take all of the relevant project requirements into consideration:

INTEGRAL WATERPROOFING SYSTEM

A waterproofing system integrated into the concrete structure. Liquid water penetration is stopped by the structure itself and cannot entirely pass through into the basement. Typical products are admixtures for watertight concrete combined with appropriate joint sealing systems for connection, construction and moving joints.

- Grade of water tightness: Grades 1–3
- Application: New construction
- Protection provided: Waterproofing
- Durability: Very high durability (for non-aggressive ground water)

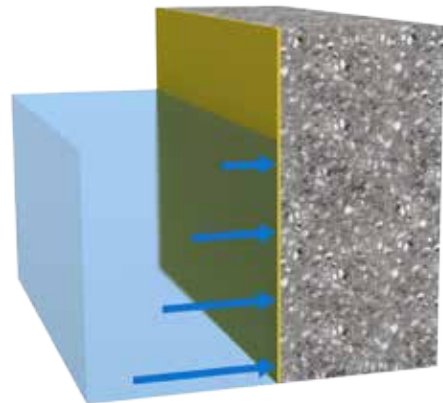


EXTERNAL WATERPROOFING SYSTEM

A waterproofing barrier applied on the external surfaces that are exposed to ground water (positive side). The structure is protected against water ingress and also against any aggressive substances or influences.

For some materials such as post applied waterproofing mortars and coatings, access to the external surfaces is required for application after concreting.

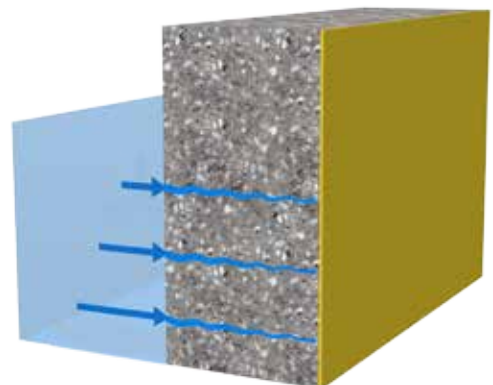
- Grade of water tightness: Grades 1–3 plus additional requirements
- Application: New construction
- Protection provided: Waterproofing & concrete protection
- Durability: Low to high durability



INTERNALLY APPLIED WATERPROOFING SYSTEM

A waterproof barrier is applied on the internal surfaces of the structure (negative side). These systems do not prevent damage to the structure from water ingress, nor concrete damage due to aggressive chemicals. Generally these systems are applied as coating or sheet membrane linings and are only recommended for refurbishment work where access to the directly exposed surface is not possible.

- Grade of water tightness: Grades 1–3
- Application: Generally for refurbishment only
- Protection provided: Waterproofing
- Durability: limited durability (as the structure is unprotected)



WATERPROOFING TECHNOLOGIES



Waterproofing mortars and renderings



Fully bonded sheet membranes



Sika White Box concept/Watertight concrete



Compartmentalized sheet membrane systems

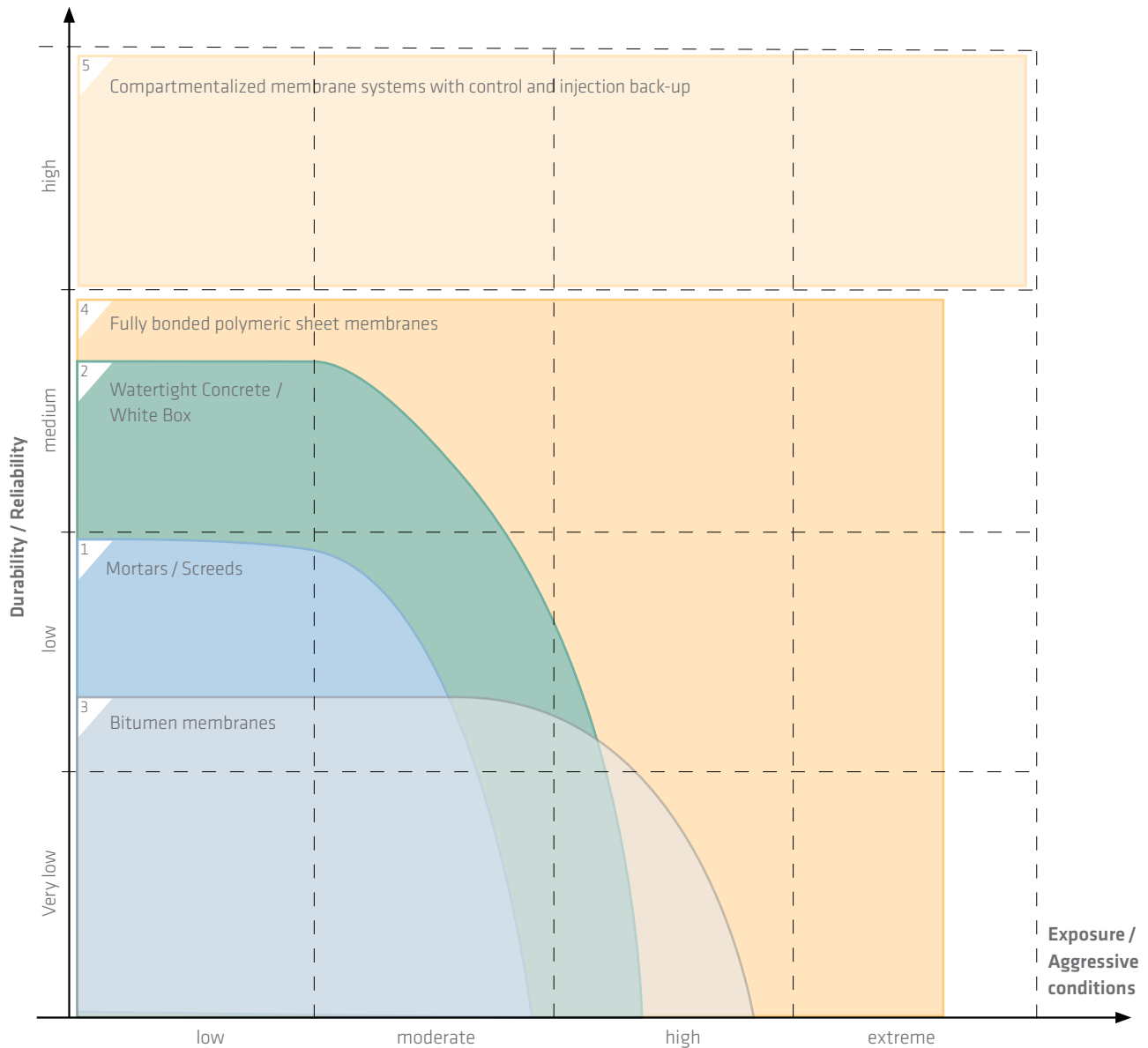


Bitumen membranes



Liquid applied reactive membranes (PUR/PUA)

The performance of each different waterproofing technology can generally be positioned as follows:



Durability / Reliability

Very low: <10 years/water ingress not really controlled.
 Low: 10 – 20 years/water ingress limited.
 Medium: 25 – 50 years/water ingress very limited.
 High: >50 years/water ingress complete under control.

Exposure / Aggressive conditions

Low: water pressure 0 – 5 m/no settlement, no aggressive ground water.
 Moderate: water pressure 5 – 10 m/no aggressive ground water, cracks <0.2 mm.
 High: water pressure 10 – 20 m/aggressive ground water, settlement.
 Extreme: water pressure >20 m/very aggressive ground water, earthquake, gas penetration.

EXCAVATION AND CONSTRUCTION PROCEDURES

The type and depth of excavation and construction procedure also affects the selection and installation of the waterproofing system, e.g. for some externally applied waterproofing systems, working space is required. Therefore this has to be taken into consideration at an early stage of the design phase in order to plan sufficient excavation and any temporary work required such as shoring etc.. Waterproofing systems and their use with typical excavation requirements / construction methods are shown below.

OPEN CUT EXCAVATION

WITH SLOPING SIDES

Description:

This basic excavation method using sloping sides allows an easy bottom-up construction method and has no impact on the selection or installation of the waterproofing system.

Waterproofing systems:

Integral waterproofing systems:

- Sika White Box / Watertight Concrete System

Externally applied waterproofing systems:

- Compartmentalized membrane systems
- Pre- and post-applied fully bonded sheet membranes
- Liquid applied membranes
- Waterproofing mortars and coatings (in combination with drainage systems)



WITH RETAINING WALLS

Description:

Open cut excavation using temporary shoring/ retaining walls does not influence the selection or installation of the waterproofing system when enough space (>1.0 m) can be provided between the retaining wall and the structure.

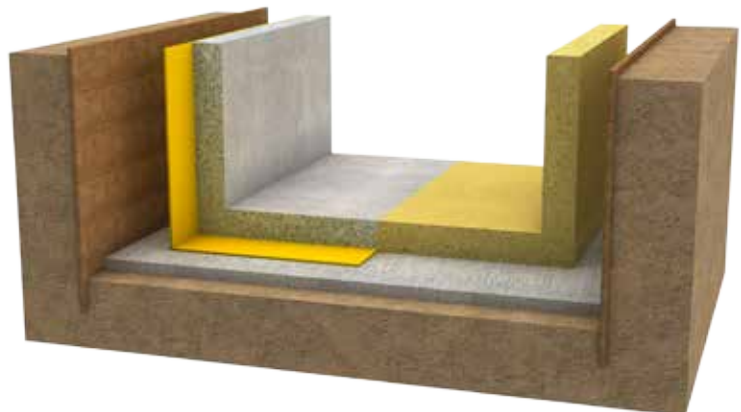
Waterproofing systems:

Integral waterproofing systems:

- Sika White Box / Watertight Concrete System

Externally applied waterproofing systems:

- Compartmentalized membrane systems
- Pre- and post-applied fully bonded sheet membranes
- Liquid applied membranes
- Waterproofing mortars and coatings (in combination with drainage systems)



CONSTRUCTION WITH PILED / DIAPHRAGM WALLS

CONSTRUCTION INSIDE PILE WALLS

Description:

Pile walls or diaphragm walls limit the selection of the waterproofing system due to limited space and access. This is because the structure is normally built directly against this wall. Post and externally applied, bonded waterproofing systems can therefore not be used for these structures.

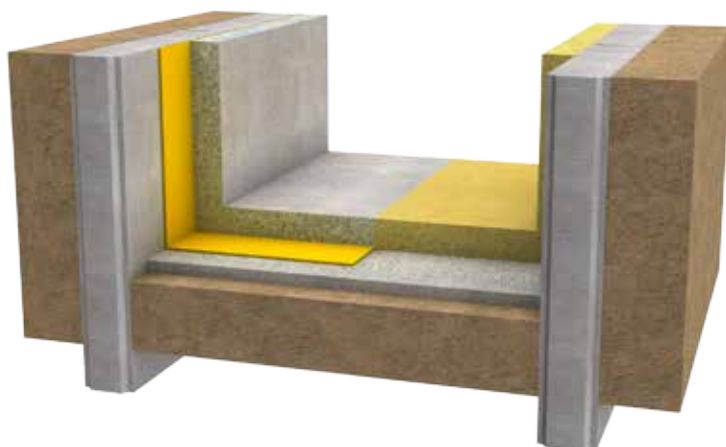
Waterproofing systems:

Integral waterproofing systems:

- Sika White Box / Watertight Concrete System

Externally applied waterproofing systems (base slab):

- Compartmentalized membrane systems
- Pre-applied fully bonded sheet membranes



PILE WALLS FORMING PART OF THE STRUCTURE

Description:

This method can be used for bottom-up as well as top down construction. Unlike other methods, diaphragm walls are also used to form part of the new structure. Waterproofing of the connections and intersections between base slab / walls are key. Externally applied waterproofing can only be used below the base slab.

Waterproofing systems:

Integral waterproofing systems:

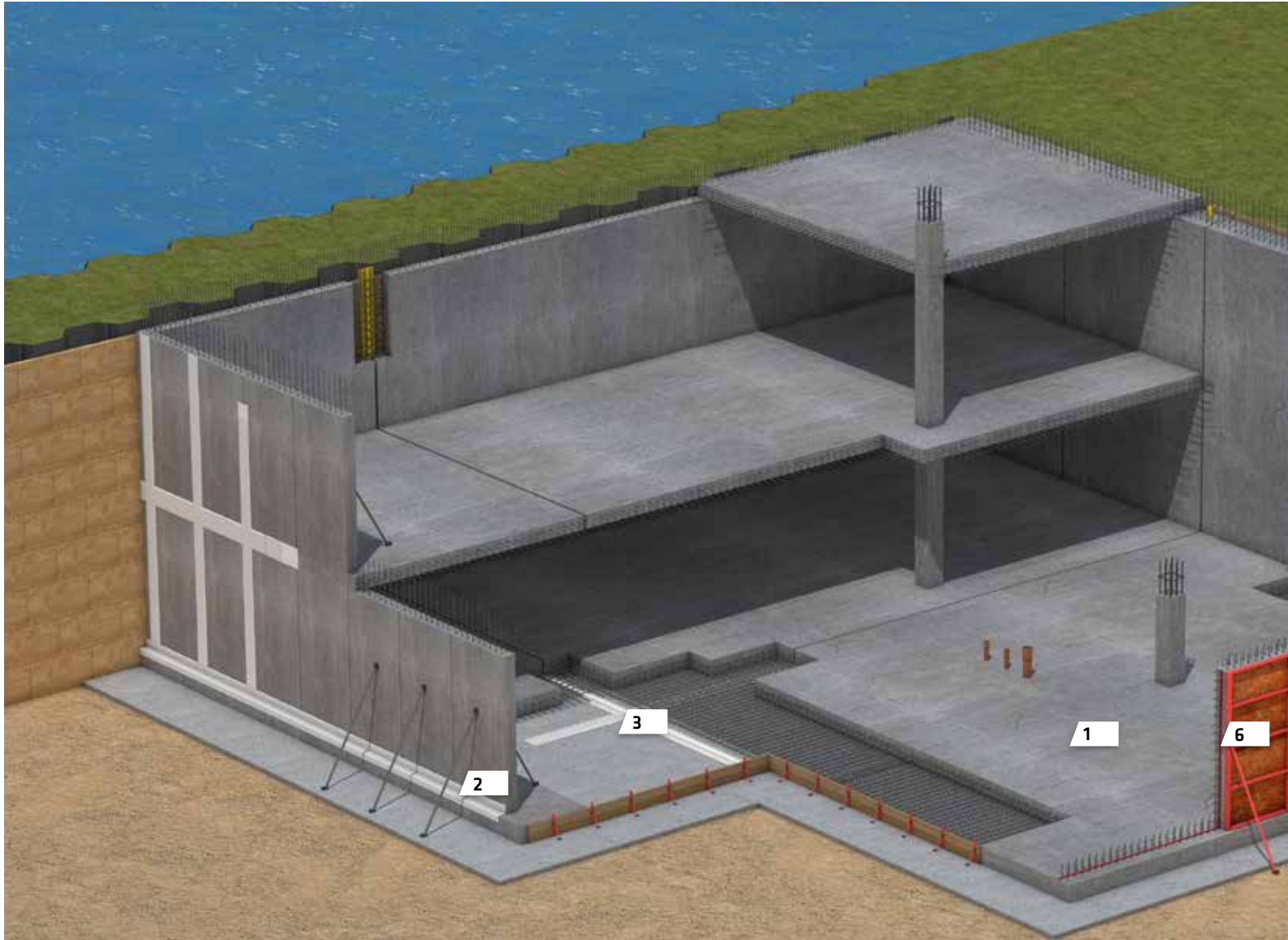
- Sika White Box / Watertight Concrete System

Externally applied waterproofing systems (base slab):

- Compartmentalized membrane systems
- Pre-applied fully bonded sheet membranes



SIKA WHITE BOX CONCEPT AND WATERTIGHT CONCRETE SYSTEMS



1



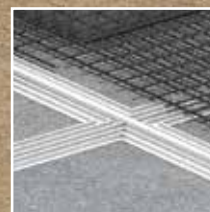
Sika ViscoCrete® /
Sika® Watertight
Concrete Powder /
Sika® WT-215 P

2



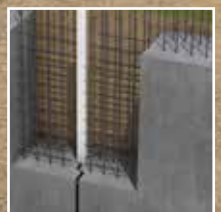
Sikadur-Combiflex® SG /
Dilatec®

3

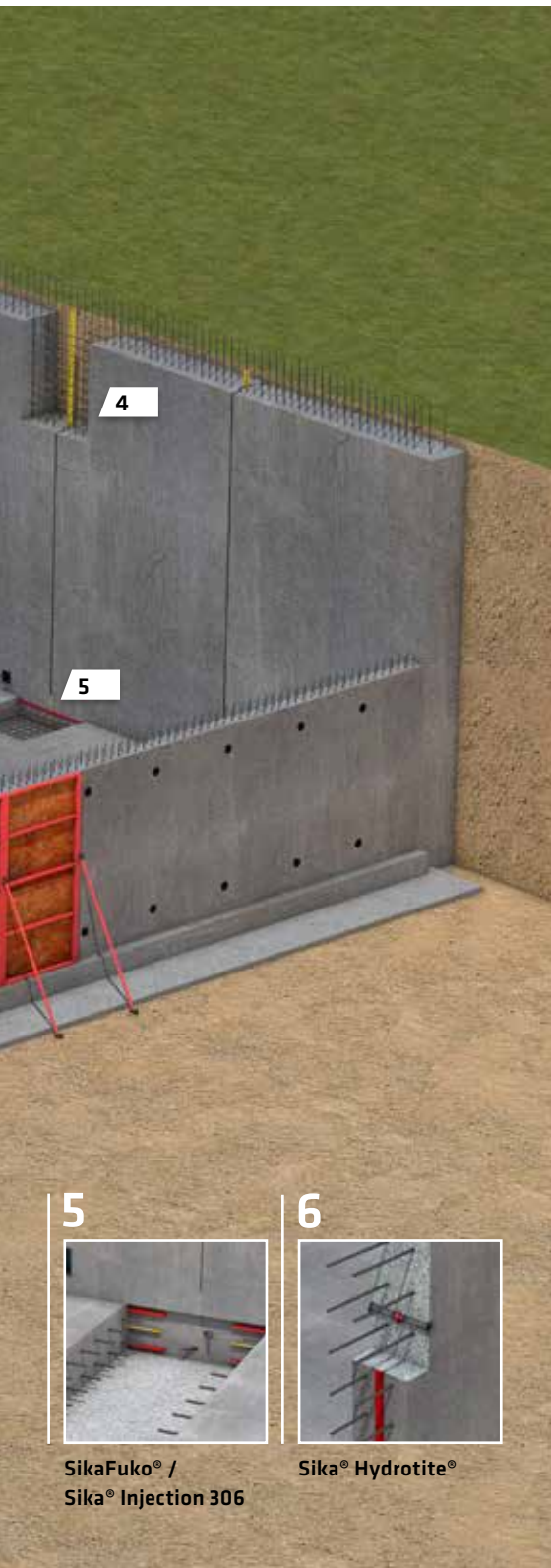


Sika® Greenstreak®
Waterstops

4



Sika® Westec®
Chemically Resistant
Waterstops



INTEGRAL, RIGID AND COST EFFICIENT SYSTEMS

The “Sika White Box Concept” involves optimum structural design and reinforcement together with an integral rigid waterproofing solution. This consists of waterproof concrete combined with appropriate joint sealing systems for any necessary construction and movement joints. To produce watertight concrete that is impermeable to water, special admixtures including superplasticizers and pore-blocking or active crystalline agents have to be used in order to ensure optimum consistence, flow and ease of compaction in a dense matrix with minimal voids. For sealing the joints, many different Sika solutions can be used including hydrophilic sealants / profiles, waterstops in various material qualities and injection hoses or sealing tapes, depending on the type and location of the joint and its requirements.

USE

- As the waterproofing solution for Grades 1 – 3
- For non-moving structures and less aggressive environments (without additional concrete protection)

MAIN ADVANTAGE

- Cost effective solution (Material + Application)
- Very durable waterproofing system
- Reduced working procedures on site

TYPICAL PROJECTS

- Parking Garages
- Commercial developments
- Residential buildings
- Industrial facilities
- Zoo / Aquarium Exhibits / Pools

SIKA PRODUCTS AND SYSTEM SOLUTIONS

SikaPlast® / Sika ViscoCrete®

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

Sika® Watertight Concrete Powder / WT-215 P

Hydrophobic pore-blocking and active crystalline admixtures to block pores against water penetration.

Sika® Control

Shrinkage reducing admixture to limit crack formation throughout the hardening phase.

Sikacrete® range

Additives based on pozzolanic silica fume that is used to reduce the hardened pore volume of the concrete.

Sika® Greenstreak® Waterstops / Sika® Westec® Chemically Resistant Waterstops

Internal or external applied waterstops based on PVC or TPER for construction and movement joints.

Sika® Hydrotite® Sealants and Profiles

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

SikaFuko® Injection Hoses

Injection hoses for construction joints that can be used for sealing by injection and re-injection in the event of future movement etc.

Sika® Injection 306

High performance, ultra-low viscosity, elastic polyacrylic resin used for injection of SikaFuko injection hoses to seal construction joints.

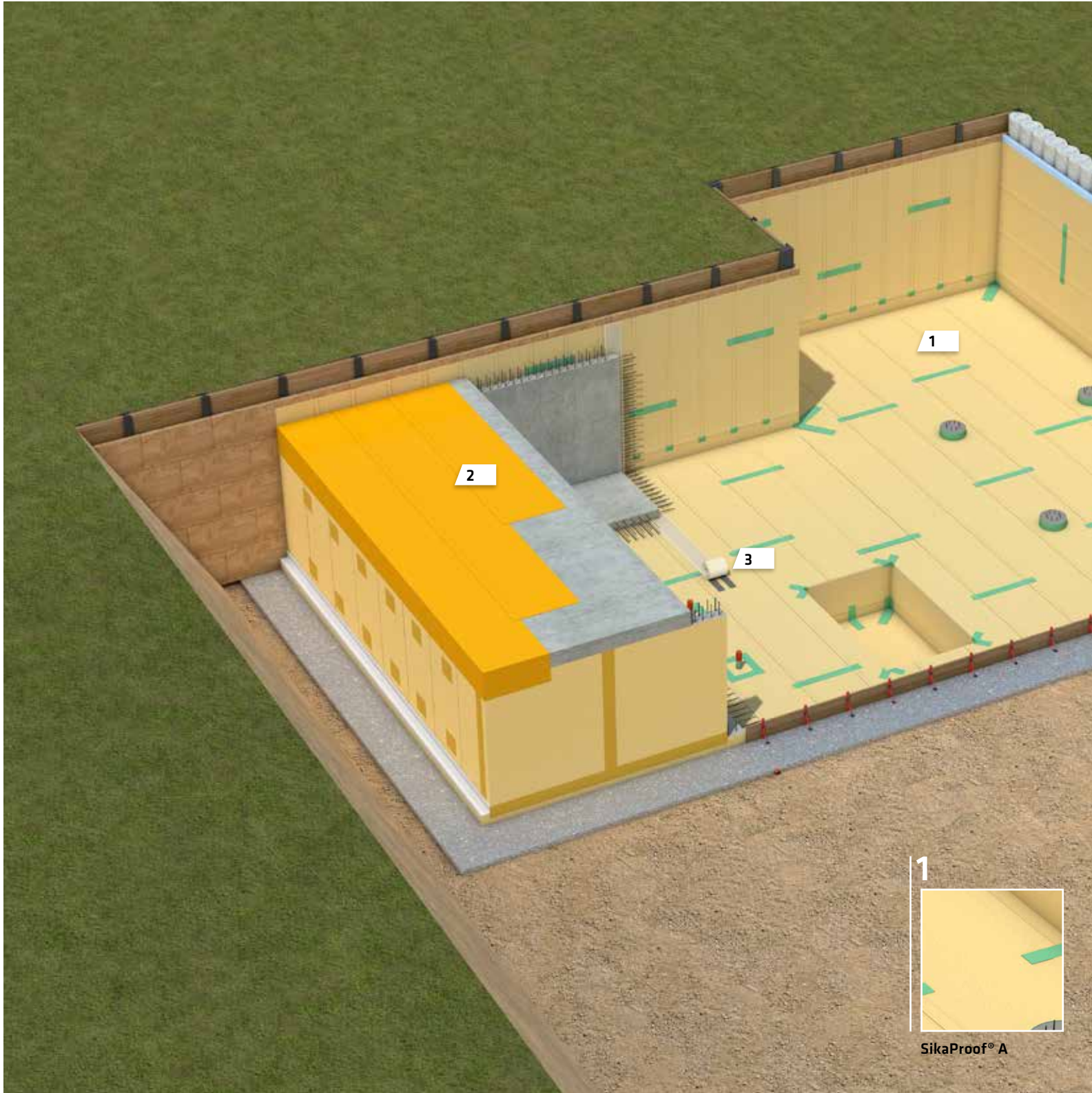
Sikadur-Combiflex® SG System / Dilatec®

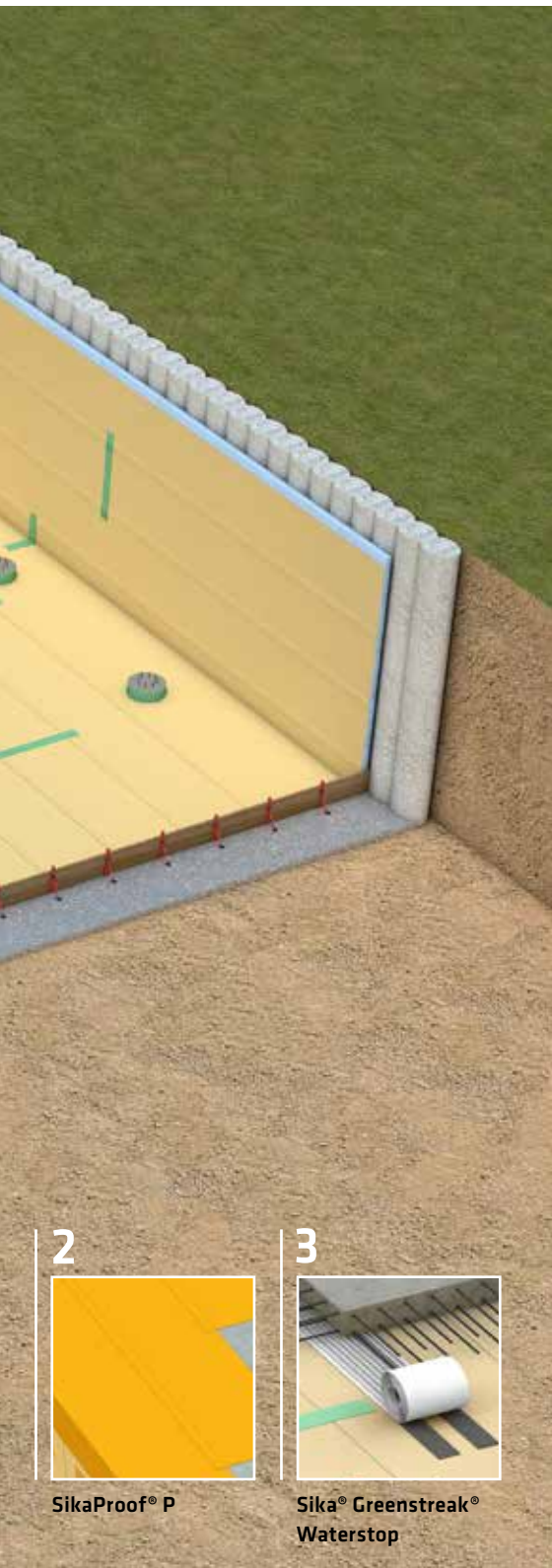
High performance, over-banding sealing tape system for post-sealing and waterproofing of construction and movement joints.

SikaFuko® / Sika® Injection 306

Sika® Hydrotite®

FULLY BONDED FLEXIBLE SHEET MEMBRANE SYSTEMS





SIKA'S UNIQUE, PRE-APPLIED, FULLY BONDED AND CRACK-BRIDGING MEMBRANE SYSTEM

SikaProof®, the fully bonded and highly flexible FPO sheet waterproofing membrane systems can permanently prevent any lateral water underflow between the waterproofing and the structural concrete in the event of local damage, even when this has occurred below the base slab. The SikaProof® fully bonded sheet waterproofing membrane systems are simple and easy to use, making them fast and secure to install on site. The overlaps, butt joints and details are all connected and sealed very simply by bonding them together with sealing tapes or self-adhered strips. There are no complicated welding procedures and no special equipment is required on site.

USE

- As the waterproofing solution for Grades 1 – 3+
- For aggressive ground conditions (ground water and soil, Radon gas etc.)

MAIN ADVANTAGE

- Cost effective solution (Material + Application)
- High durability
- No lateral water underflow
- High flexibility and crack-bridging ability
- Approved detailings

TYPICAL PROJECTS

- All types of concrete basements (residential, commercial etc.)
- Industrial facilities
- Precast structures

SIKA PRODUCTS AND SYSTEM SOLUTIONS

SikaProof® A

Pre- and cold applied sheet waterproofing membrane system for application below base slabs, plus on single and double-faced formwork cast walls.

SikaBit®

SikaBit® is a proprietary composite, uniquely designed to provide high strength, low temperature adhesion and high temperature stability in a superior waterproofing membrane. A tough cross-laminated film forms a resilient barrier against physical damage and water migration. It is a cold applied system requiring no heat or special equipment to install.

SikaProof® P

Post-applied sheet waterproofing membrane system, specially designed for roof slabs and double-faced formwork cast walls.

Complementary products for joint sealing and waterproofing:

Sika® Greenstreak® Waterstops

Externally fixed, cast-in-place waterstops based on PVC or TPO for sealing and waterproofing construction and movement joints.

Sikadur-Combiflex® SG System / Dilatec®

Over-banding sealing tape system for post-sealing and waterproofing of construction and movement joints, around penetrations and for connections.

Sika® Hydrotite® Sealants and Profiles

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

SikaFuko® Injection hoses

Injection hoses for construction joints and other details, with or without swelling strips, which can be used for sealing by injection and re-injection in the event of future movement etc.

2



SikaProof® P

3



Sika® Greenstreak® Waterstop

COMPARTMENTALIZED MEMBRANE SYSTEMS WITH INTEGRATED CONTROL AND INJECTION BACK-UP





HIGH PERFORMANCE, CRACK-BRIDGING AND FULLY CONTROLLED

Highly flexible waterproofing systems using Sikaplan PVC based or FPO based sheet waterproofing membranes are installed externally and cover the entire basement structure in contact with the ground. The waterproofing layer is divided into 'compartments' with a network of cast in place compatible waterstops that are welded to the membrane. This allows a significant reduction of risk regarding the formation of leaks (i.e. from damage to the membrane), the position of the leak is easy to locate by the control and injection sockets and remedial action (i.e. injection) can be taken to ensure continued watertightness and concrete protection of the system at any time during its service life.

USE

- As waterproofing solutions for Grades 1 – 3+
- For high demands and harsh ground conditions
- Protection against radon or methane gas
- For structures in aggressive groundwater like coastal areas

MAIN ADVANTAGE

- Water tightness is controlled and secured at any time
- Highly crack bridging
- Easily repaired in case of leaks due to direct access of compartment
- Secure full protection of concrete

TYPICAL PROJECTS

- Parking Garages
- All types of buildings residential, commercial, Public etc.)
- Industrial facilities
- Containment areas
- Civil engineering structures (e.g. Metro stations)

SIKA PRODUCTS AND SYSTEM SOLUTIONS

Sikaplan® WP 1100 series	Homogeneous and plasticized PVC sheet waterproofing membranes and gas-tight barriers for general use, loose laid with the membrane overlaps connected by heat welding.
---------------------------------	--

Sika® Greenstreak® Waterstop	Cast-in-place external waterstops, based on PVC or FPO, connected with similar based sheet waterproofing membranes by heat welding, for compartmentalized waterproofing systems.
-------------------------------------	--

Control- and Injection Sockets	Preformed pieces based on PVC or FPO, connected with flexible injection pipes to allow access to compartments for the control of watertightness and injection in the event of leaks.
---------------------------------------	--

Complementary sealing system solutions:

Sika® Dilatec® E/ER	Adhesive sealing tapes based on plasticized PVC, compatible to Sikaplan WP sheet membranes for water proofing terminations of post applied compartment systems.
----------------------------	---



**Sika® Greenstreak®
Waterstop plus
SikaFuko®**



**Sika® Dilatec®
Sikaplan® WT Tape**

BASEMENT WATERPROOFING SOLUTIONS

An overview and selection guide for new constructions

Sika White Box

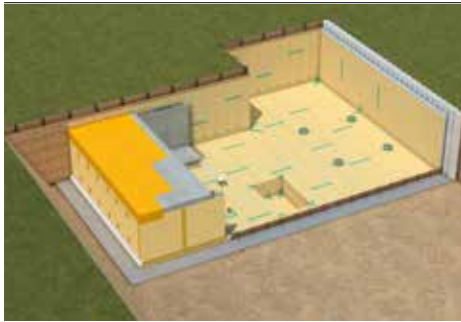


SikaBit®



Technology / Type of system	Watertight Concrete	Self-Adhering Sheet Waterproofing Membrane
Waterproofing Concept / Strategy	Integral	Externally applied
Grade of watertightness	Grades 1–3	Grades 1–3 plus additional requirements
Concrete protection	Low	High
Water resistance level	<ul style="list-style-type: none"> ■ High hydrostatic pressure ■ Seepage / percolating water ■ Rising capillary water 	<ul style="list-style-type: none"> ■ Medium hydrostatic pressure ■ Seepage / percolating water ■ Rising capillary water
Performance characteristics	Crack-bridging: n.a. Water vapor tightness: + Chemical resistance: + Gas barrier: + Durability: +++	Crack-bridging: ++ Water vapor tightness: ++ Chemical resistance: ++ Gas barrier: ++ Durability: +
Safety level / Reliability	Low to medium	Medium
Excavation method	Open excavation and piled walls	Only open excavation
Repair in the event of leaks	By local injection of limited areas. Damage is easy to locate	By crack injection
Conditions of application	<ul style="list-style-type: none"> ■ Limited to suitable temperatures for concreting works. ■ No substrate preparation required 	<ul style="list-style-type: none"> ■ Controlled conditions required (temperature, water, humidity) ■ Substrate preparation required
Advantages	<ul style="list-style-type: none"> ■ Very cost effective ■ No protection required (walls) ■ Simple & fast construction ■ High durability 	<ul style="list-style-type: none"> ■ Cost Effective ■ Easy detailing solutions ■ High durability

SikaProof®



Fully bonded Sheet Membrane

Externally applied

Grades 1–3 plus additional requirements

High

- High hydrostatic pressure
- Seepage / percolating water
- Rising capillary water

Crack-bridging: ++
 Water vapor tightness: ++
 Chemical resistance: ++
 Gas barrier: ++
 Durability: ++

Medium to high

Open excavation and piled walls

By crack injection

- Controlled conditions required (temperature, water, humidity).
- Substrate preparation required
- Membrane must be protected until the reinforced concrete is placed

- Highly efficient
- High performance
- Easy to apply
- Low risk
- High durability

Sikaplan®



Compartmentalized Membrane System with integrated control- and Injection back-up

Externally applied

Grades 1–3 plus additional requirements

Very high

- Very high hydrostatic pressure
- Seepage / percolating water
- Rising capillary water

Crack-bridging: +++
 Water vapor tightness: +++
 Chemical resistance: +++
 Gas barrier: +++
 Durability: +++

Very high

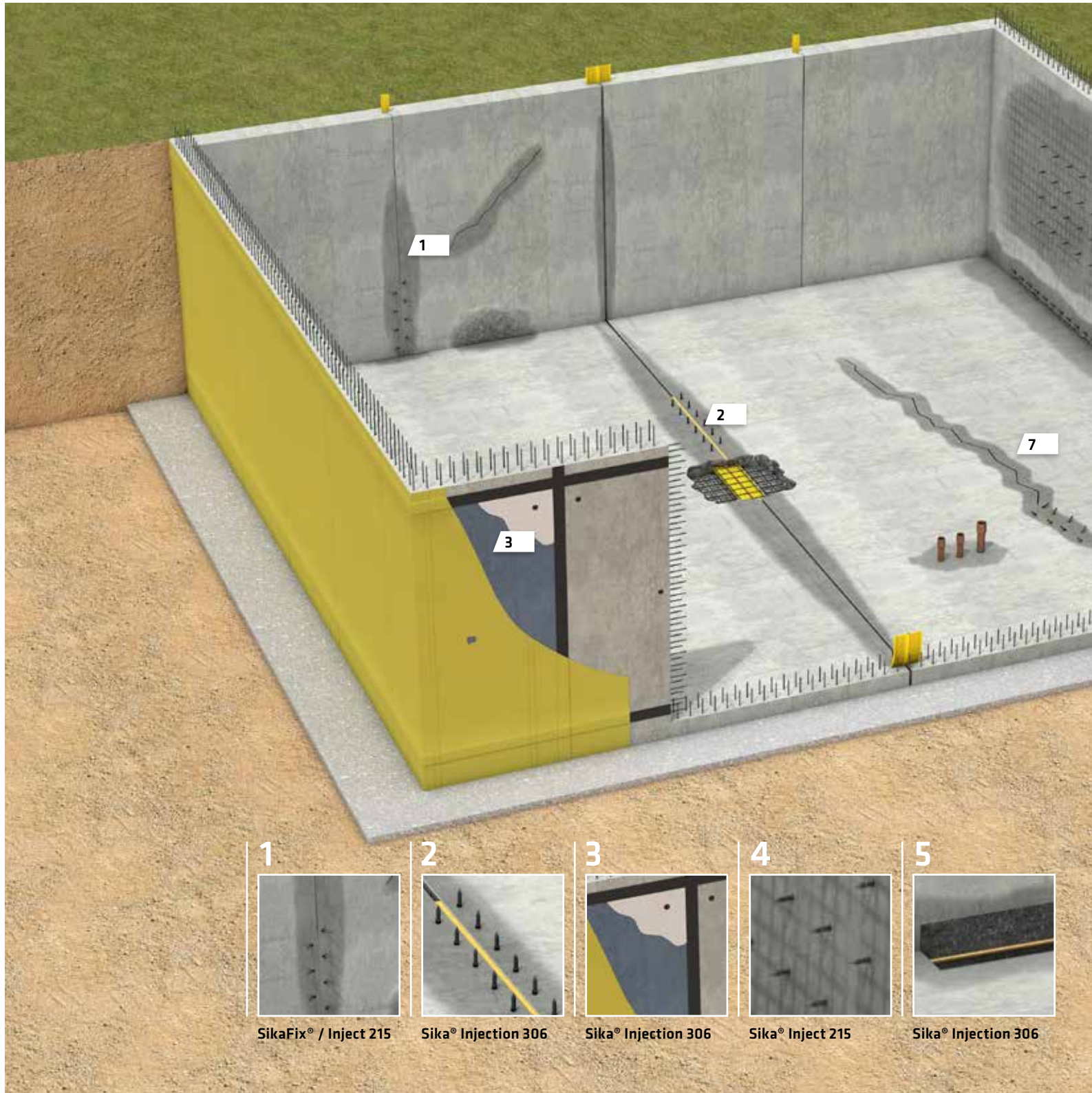
Open excavation and piled walls

By injection of leaking compartments through integrated back-up system. Easy to control and locate due to control sockets or active control system. Re-injection possible.

- Substrate preparation required

- High waterproofing security
- Very high performance
- Simple and fast to repair
- High durability / reliability
- Integrated system redundancy

REPAIR AND REFURBISHMENT SOLUTIONS





SIKA INJECTION SOLUTIONS FOR REPAIR AND REFURBISHMENT WORK

In situations with water ingress due to localized damage of the waterproofing system, appropriate repairs to seal the leaking areas have to be undertaken. These can often only be done by injection, because of inadequate access to the waterproofing system itself in most basements and below ground structures. According to the type of damage / leakage (i.e. through joints, cracks or honey-combed areas, etc.) and the waterproofing requirements, the right materials have to be used. Successful and durable repairs by injection are ensured by the combination of Sika's expert diagnosis, using Sika materials and recommended equipment, plus Sika trained installers.

USE

Sealing and repairing of:

- Cracks
- All types of joints
- Sikaplan compartments
- Sealing of leaking areas by curtain injections

MAIN ADVANTAGE

- No excavation necessary
- Localized repair works
- Durable repairs

TYPICAL PROJECTS

- Suitable for all types of basements and civil engineering projects including structural waterproofing

SIKA PRODUCTS AND SYSTEM SOLUTIONS

SikaFix®	Flexible, solvent-free, fast foaming polyurethane (PUR) grout for temporary water-stopping of high water intrusions through cracks, joints and cavities in concrete.
Sika® Inject 215	Elastic, solvent-free PUR-Injection resin for permanent sealing of dry, damp or water-bearing cracks and joints in concrete.
Sika® Injection 306	Elastic, very low viscosity polyacrylic injection resin for permanent sealing of water-bearing cracks, voids and joints in concrete. It is also used for the repair of damaged waterproofing membrane compartments and injection of SikaFuko injection hoses.
Sikadur®-52	High-strength, solvent-free, low viscosity epoxy resin for structural bonding and sealing of cracks, including in damp conditions.

6



Sikadur®-52

7



Sika® Injection-200 series

SIKA – THE GLOBAL LEADER IN STRUCTURAL WATERPROOFING

SIKA PROVIDES A WIDE RANGE of alternative waterproofing solutions for different requirements in new basement construction and refurbishment. With more than 100 years of experience in Structural Waterproofing, Sika is the reliable partner for all of the parties involved on every project. Innovative Sika waterproofing solutions that include both rigid and flexible waterproofing systems, create Added Value for our customers every day, and are a key driver of our global success and one of the key reasons why Sika is the clear number 1 in Structural Waterproofing. With a local presence all around the world, now in more than 80 countries, Sika is ideally positioned to support our customers everywhere – right from the initial project design and detailing, through to successful installation and completion on site.

DESIGN SUPPORT



- Selection of appropriate concept and system solutions
- Concrete mix design and control
- Engineering details, custom solutions
- Cost/Performance/Life cycle analysis

SPECIFICATION SUPPORT



- Specifications, Method Statements and Bills of Quantities
- Detail drawings including CAD
- Watertight guarantee concepts

SITE SUPPORT

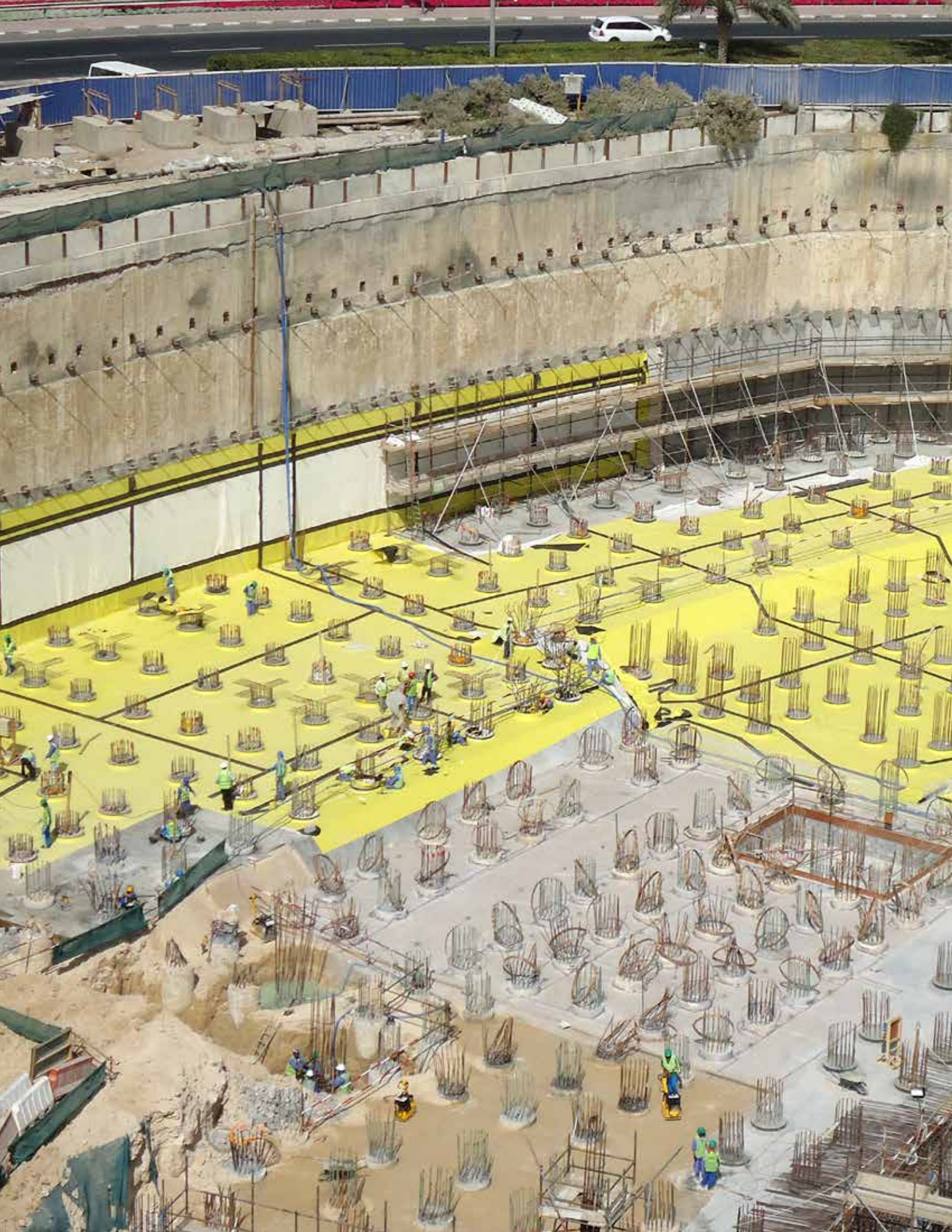


- Application training on site
- Troubleshooting
- Quality Control procedures

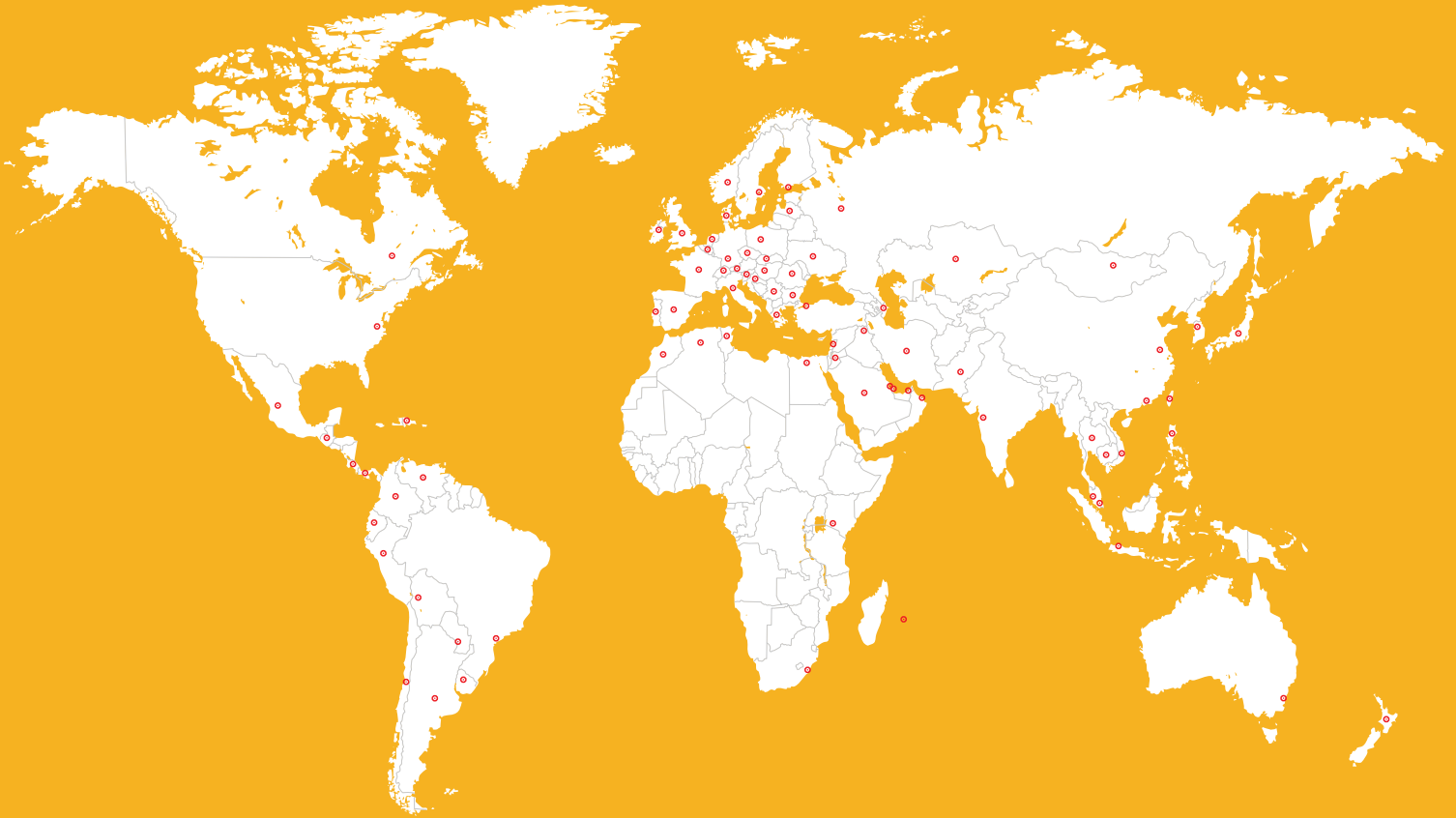
MAINTENANCE SUPPORT



- Maintenance Manuals
- Refurbishment systems
- Repair and refurbishment documentation
- Site Inspection and refurbishment proposals



GLOBAL BUT LOCAL PARTNERSHIP



The sale of all Sika products are subject to the following Limited Warranty:

LIMITED MATERIAL WARRANTY

Sika warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor.

NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.

Our most current General Sales Conditions shall apply. Please consult the Product Data Sheets prior to any use and processing.



SIKA - US - ST. LOUIS

3400 Tree Court Industrial Blvd.
St. Louis, MO 63122
Phone: 800-325-9504
usa.sika.com

Greenstreak

BUILDING TRUST

