



CONSTRUCT THE WORLD WITH SIKA

WITH QUALITY, SUSTAINABLE CONSTRUCTION MATERIALS



BENEFIT OF OUR SOLUTIONS

When you design and build a project, our experienced engineers accompany you at each project stage with products, systems and solutions from basement to roof. Since 1910, Sika team is composed of trustworthy and knowledgeable people. Our motto: Building Trust!

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EVERYDAY EVERYWHERE SIKA IS ON YOUR PROJECT SITE

YOU CAN RELY ON our experienced construction experts available in every phase of the construction process for valuable advices: from the initial consultation phase, through the project planning phase, the detailed design phase, application on job site, and finishing with quality control, completion and final handover. Sika also offers tailor made guarantee concepts and future maintenance plans to give extra reassurance.

This is our traditional way of serving our customers: provide project management to help them be more successful and have peace of mind.

Our knowhow in projects is based on more than 100 years onsite experiences, which enables us to provide recommendations and long-lasting solutions for any project you have, no matter large or small. These projects can be:

CIVIL ARCHITECTURE

- Residential buildings
- Educational buildings
- Office buildings
- Transportation buildings
- Cultural buildings
- Sports facilities
- Commercial buildings
- Healthcare facilities
- Communication facilities
- Judiciary buildings
- Landscape architectures
- Mixed-use buildings
- Other domestic buildings / structures

INDUSTRIAL FACILITIES

- Research / lab / test buildings
- Industrial buildings
- Other industrial structures

INFRASTRUCTURES

- Water Infrastructures
- Transportation infrastructures
- Power plants
- Mining
- Other infrastructures

SIKA SOLUTIONS



SIKA REFERENCES



SIKA SOLUTIONS IN CONSTRUCTION

BASEMENT

- Concrete admixtures for watertight concrete
- Watertight membrane systems
- Waterproofing coatings and mortars
- Joint waterproofing

STRUCTURE

- Concrete admixtures
- Structural strengthening and bonding
- Corrosion protection coatings
- Joint sealing of construction elements
- Fire protection coatings

WALL

- Concrete admixtures for normal pre-cast walls and artistic concrete walls
- Wall coatings (incl. hygienic coatings)
- Concrete repair and protection
- Tile bonding

GLASS CURTAIN WALL

- Bonding, sealing, glazing insulating and grouting of glass panels

CONCRETE FACADE

- Concrete admixtures for artistic concrete wall
- Concrete repair and protection
- Joint sealing between construction elements, for facade joints, window and door joints, and other joints
- Tile and tack panel bonding

FLOOR

- Seamless flooring
- Tile floor, wood floor and carpet floor bonding
- Underlayment
- Floor joint sealing
- Concrete admixtures for high quality floor slabs

ROOF

- Roofing
- Roof joint sealing
- Roof graphics
- Solar roof installation
- Metal roof installation

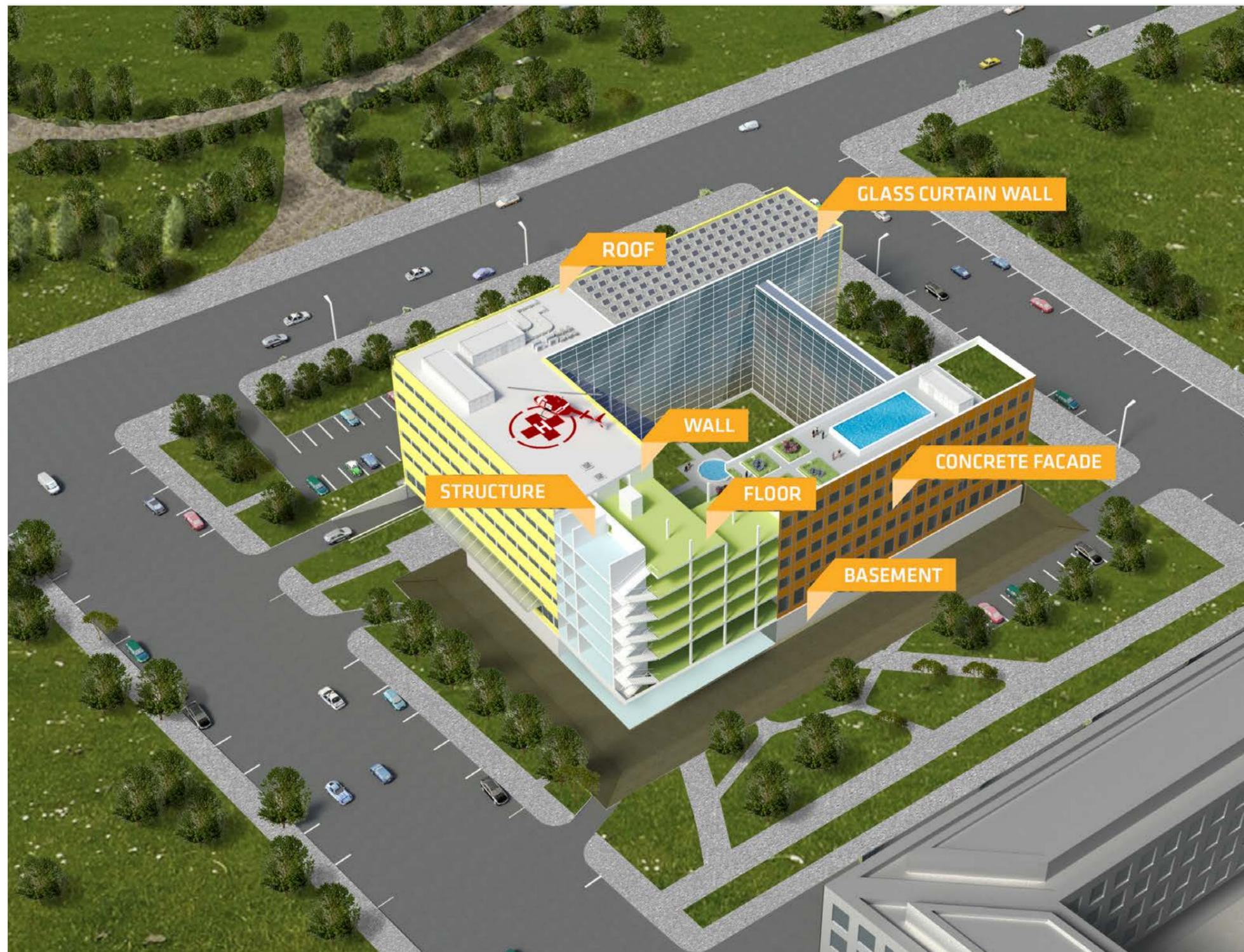
OTHERS

- Anchoring and grouting
- Waterproofing of swimming pools
- Tack panel bonding

SIKA SOLUTIONS



SIKA REFERENCES



STADIUM

The challenges architects face in designing or renovating sport facilities make it the most attractive project type among all:

- Visual appearance and passion: shape, color, material, texture, size, lightning, surrounding...
- A mixture of large and small spaces with complex functions and the flexibility of space usage
- The activities during, before and after the games or events, – very often, it not only hosts games, but also serves as a culture and sport center in the local life
- Long life expectancy

Each year, many sport facilities have been built newly, many have been renovated.

Sika has expertise in stadium construction and refurbishment all over the world. If you can design it, chances are our engineers can help you create it with our unique systems. We are especially good at:

Tailored concrete admixtures for durable structures and different purposes incl. architectural concrete for facades

Concrete repair and protection for rehabilitation of sport venues

Structural strengthening for structures with immense load

Seamless flooring systems, especially for spectator area, walkways and parking garages

Corrosion and fire protection coatings for large concrete, steel and wood structures

Roofing systems, especially for large roofs with designed shapes with long life expectancy

The project shown on this page is the Krakow Arena, Poland (opened in May 2014). Sika supplied roofing systems for the whole roof, flooring systems for spectator area, walkways and carpark, concrete repair systems, structural strengthening systems of the load bearing structure, and joint sealing systems between concrete elements.

SIKA SOLUTIONS



SIKA REFERENCES



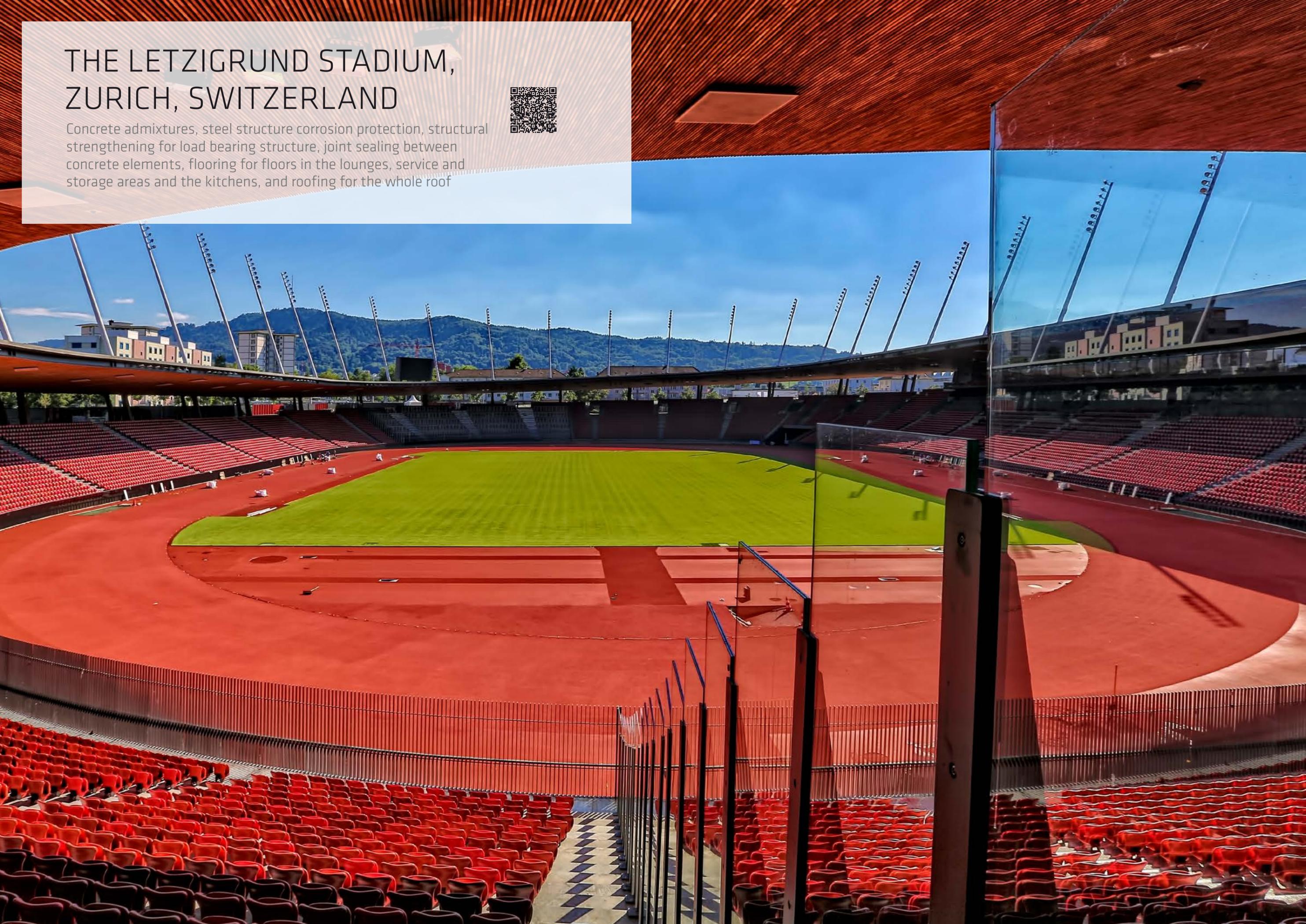
OLYMPIC STADIUM, MONTREAL, CANADA

Roofing system replacement with Sarnafil® PVC roofing system



THE LETZIGRUND STADIUM, ZURICH, SWITZERLAND

Concrete admixtures, steel structure corrosion protection, structural strengthening for load bearing structure, joint sealing between concrete elements, flooring for floors in the lounges, service and storage areas and the kitchens, and roofing for the whole roof



SCHOOL, UNIVERSITY AND KINDERGARTEN

More and more, this type of facilities is positioned as centers of the community and helps bridge the gaps between students, residence and local businesses with the goal of inspiring curiosity and learning. The space and facade design tends to be more and more creative, transparent, flexible, warm and humane, with the possibility to stay and communicate comfortably anywhere at anytime.

Sustainability is an important topic architects are focusing on when designing educational buildings. The goal is very often to reduce energy cost, carbon emission, water use and waste cost through the life cycle, and give the buildings a long life span. Safety is also an important consideration.

Sika systems have been used in educational facilities very often. A good case study is the Leutschenbach School, Zurich (see the photo on this page) designed by architect Christian Kerez. Sika concrete admixture technologies were used to provide a reliable watertight concrete basement using recycled concrete. The steel structures used in the facades are protected by a Sika corrosion and fire protection coating system.

To summarize, among all the basement to roof solutions for educational facilities are, we are especially good at:

Tailored concrete admixtures for different purposes

Waterproofing of basements and pools

Concrete repair and protection for renovation

Sealing of joints between building elements at e.g. structure connections, facades, floors, roofs and other positions

Seamless flooring systems with bespoke colors and super comfort for different function zones and spaces, especially for sport floors

Roofing systems, especially for sustainable and durable roofs with functions such as solar roof and roof garden, and for roof installations requiring zero flame for safety reasons

**SIKA
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**SIKA
REFERENCES**



REVIUS LYCEUM HIGH SCHOOL, WIJK BIJ DUURSTEDE, THE NETHERLANDS

Floor refurbishment with Sika ComfortFloor® flooring system



CULTURAL BUILDING

Cultural buildings are architects' favorite. The design experiences start with investigating the local culture, environment and the behaviors of the locals, then extend to the vision of the life style and district atmosphere the project will bring. When the architects begin to sketch, all these need to be transformed creatively in his mind for the architectural visualization and layout design. Such buildings, which can be a museum, a concert hall, or a multi-functional cultural center, very often look very spectacular and become a landmark or a district center, playing very important roll in the society.

Looking at the King Fahd National Library In Riyadh, Saudi Arabia, shown on this page: Sika supplied mechanically fastened Sarnafil® TPO roofing system for the exposed roof. For detailing at the 56 cantilevered steel trusses that penetrate the roof, Sika high performance MTC liquid polyurethane membrane Sikalastic®-621 was applied as a seamless waterproofing solution.

Apart from excellent tailored **roofing solutions**, among all the basement to roof solutions, Sika is also especially good at providing:

Tailored concrete admixtures for durable structures and different purposes incl. Architectural concrete for facades

Concrete repair and protection for renovation

Waterproofing of basements and pools

Sealing and bonding of glass facades

Corrosion and fire protection coatings for concrete, steel and wood structures

Seamless flooring systems with sleek, stylish look with bespoke color and texture options for interior

SIKA SOLUTIONS



SIKA REFERENCES



STAVANGER CONCERT HALL, NORWAY

Tailor made concrete admixtures for architectural concrete
facade with special colors and effects



FINE ARTS MUSEUM, BRUSSELS, BELGIUM

Sika Comfortfloor® flooring system for architectural floor



Allegories of fertility and abundance

Allegories of fertility and abundance

Allegories of fertility and abundance



OFFICE BUILDING

The following points have become more and more important in the design and construction of office buildings, where Sika's innovative product ranges can play a role:

- Durability, longer life span, safety, less concerns and maintenance during operation, fast return of investments. Sika's a proven reliable provider with high performance products and systems supported by competence and know-how from basement to roof.
- "Green" trends: minimize the energy, carbon, and other environmental footprints of the buildings. Recent studies show around 40% energy consumption is consumed in residential and commercial buildings. Sika is a serious company which invests a lot in technologies driven by sustainability. We also provide life cycle cost evaluation and comparison for projects if it is required. Sika has a full range of tight building envelop systems to reduce the energy consumption.
- Open space for working, shopping and entertaining environment. More humane design which takes human needs and habits in consideration – Sika ComfortFloor® support seamless floor design and can be supplied in bespoke color.

Sika solutions for a tight and energy saving building envelope:

- | | | |
|--|--|--|
| <p>Tailored concrete admixtures for durable structures and different purposes</p> <p>Structural strengthening</p> <p>Basement waterproofing</p> | <p>Concrete repair and protection</p> <p>Sealing of joints between building elements at e.g. structure connections, various facades, floors, roofs and other positions</p> | <p>Bonding of wooden panels, tiles, tack panels</p> <p>Sealing, bonding, insulating and glazing of glass panels at glass curtain walls</p> <p>Roofing systems</p> |
|--|--|--|

Sika solutions for interior finishing:

- | | |
|--|---|
| <p>Seamless comfort and colorful flooring and wall coating systems</p> <p>Bonding of various floors such as wood floor, tiles, carpets, and more</p> | <p>Seamless colorful and high performance flooring systems for car parks</p> <p>Sealing of joints between building elements</p> |
|--|---|

Photo on this page: 80 landmarks in London where Sika supplied solutions for glass facades bonding, sealing, vapor proofing and grouting, facade cladding with tack panels, argon-filled insulating glass, and more.

SIKA SOLUTIONS



SIKA REFERENCES



PRIME TOWER, ZURICH, SWITZERLAND

Tailored concrete admixtures for the concrete mix
design of the whole concrete structure



AIRPORT AND HANGAR

Airports and hangars usually are of big scale with long structural span, and have daily heavy traffic. Some air terminals are almost like a city and act as the entrance and landmark of the cities. Functionality, safety, durability, aesthetics, ease of maintenance and operation, long-term and reliable construction project management are the concern in the design and construction.

Sika has its footprints all over the world in airports and hangars with high performance construction materials from basement to roof addressing above points. Sika provides reliable consultancy for various problems in specification, renovation and construction. We are especially good at providing:

Tailored concrete admixtures for durable structures and different purposes

Structural strengthening for structures with immense load

Waterproofing of basements

Corrosion and fire protection coatings for concrete, steel and wood structures

Sealing, bonding and glazing of glass panels at glass curtain walls

Seamless flooring systems for floors in car parks, hangars, logistics, food processing, catering and related areas, public and commercial areas, etc.

Concrete repair and protection

Airfield construction solutions with special concrete admixtures, fast curing runway repair systems and airfield joint sealing systems

Roofing for all shapes and purposes

Photo on this page: Enfidha International Airport, Tunisia. Sika has supplied full range solutions including concrete admixtures, waterproofing, structural strengthening, tiling adhesives, glazing, and much more.

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REFERENCES**



RIZON HILL JET HANGAR, BIGGIN HILL AIRPORT, KENT, UK

Sikafloor® MultiDur flooring system



CAR PARK

The main challenge in designing a car park is to draw the most efficient and safe layout for the vehicle and pedestrian traffic, set up clear signs for the traffic, then specify the right flooring materials for the floor surfaces to handle the various traffic wears and exposures. The exposures of a carpark is more similar to that of a bridge than building, therefore the structures can deteriorate quickly if not protected with proper materials and result in cost intensive refurbishment.

Sika is specialized in high quality and robust systems to protect the whole structure of a car park:

Concrete admixtures to produce precast concrete elements and onsite ground bearing park deck structures

Structural strengthening

Waterproofing

Corrosion protection coating systems for steel frames and stairs

Sealing and bonding

Fire protection coating systems for structures

Concrete repair and protection including total corrosion management

Flooring systems for various traffic wears - with bespoke colors, and for parking garages on different floors including underground floors, roofs, ramps and more

The picture shown on this page is the Q-Park, Belgard Square East, Tallaght, Dublin. Q-Park is an international parking company with good to strong market positions in many European countries. Sika car park flooring systems are the coatings of choice for all the Q-Park throughout Ireland.



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HOTEL

Time has changed. Online booking naturally involve interior design to be part of the marketing for a hotel - visual impression in the online gallery is vital! Architects are now hands-on in hotel marketing, responsible for creating unique memorable aesthetics and feeling-home comfort experiences. Designers have also a great responsibility to specify sustainable materials and design options for clients which mostly reflect in cost reduction due to tightening economics, through design and specification: energy saving building envelope, less maintenance and cleaning cost, longevity, etc..

If you are looking for a unique memorable aesthetics in interior, Sika supplies:

Unique seamless decorative flooring systems which provide more than just a sleek, stylish floor. It is about how people see and respond to the cool look and the warm touch. It is about artistry with bespoke color and texture options. They are also easy to clean and renew

Reliable adhesives for installation of floor materials such as wood, tile, carpet, and more

Sika's other solutions from basement to roof also make sure that your hotel project has a durable and tight building envelop which would meet the energy saving and life cycle cost expectation of the hotel. Here are some Sika specialities for hotels:

Tailored concrete admixtures for durable structures and different purposes

Sealing, bonding and glazing of glass facade

Waterproofing of basement and swimming pools

Roofing systems in various climates and for various roof shapes

Concrete repair and protection

The project on this page, Sofitel Vienna Stephansdom in Wien, shows the Sika seamless ComfortFloor® in a guest room: absolutely modern and visually appealing.



SIKA SOLUTIONS



SIKA REFERENCES



THE SAFFIRE RESORT IN COLES BAY, TASMANIA, AUSTRALIA

Sarnafil® PVC roofing system



HOSPITAL, CLINIC AND HOME

Hygiene, healthcare facility efficiency, process optimization, easy maintenance and safety. Beside these consideration, architects aim more and more to provide the staffs and patients a pleasant and comfort healing and treating environment with a mixture of creative and positive space design, innovative furniture and sustainable building materials.

Sika provides **seamless floor, ceiling and wall finishes** in bespoke colors that combine stunning aesthetics with high performance to support quality of care and improved health outcomes in short- and long-term care environments. With our solution, the interior is smooth, jointless and washable with disinfectants. Moisture and dirt are unable to retain or permitted.

To protect the interior environment, a good looking, watertight and secure building envelope is needed. Sika's solutions from basement to roof aim at high quality and cost saving by minimizing energy consumption and reducing future external repair and maintenance. These solutions include:

Tailored concrete admixtures for durable structures and different purposes **Concrete repair and protection**

Roofing systems

Basement waterproofing

The picture shown on this page is the Hospital AZ Groeninge, Belgium, a project constructed in 2015, where Sika seamless flooring systems were applied in various function areas. The floors look modern and stylish. The most important benefit: easy to keep clean and easy to clean, slip resistant even when it is wet, plus easy to renew in the future.



SIKA SOLUTIONS



SIKA REFERENCES



WHY SEAMLESS MATTERS FOR HYGIENE



HANCOCK MEDICAL CENTER BAY ST. LOUIS, MS, USA

Roof refurbishment with Sarnafil® PVC roofing system



SAINT CONSTANTIN HOSPITAL, BRASOV, ROMANIA

Hygienic wall coating



HOUSING AND CONDOMINIUM

Life quality with comfortable, timeless and clean space, open or closed, according to the property owner's taste. Bathrooms that feel more like living spaces. Texture on the wall or floor which makes a room truly beautiful and unique. Reliable water-tight materials providing peace of mind to the owner. A house which can last many years ...

Sika provides various systems in residential projects and they are available in both direct sales and distribution channels:

Structures: concrete admixtures

Basement: waterproofing and seamless flooring

Floor: bonding for wood floor, carpet and tiles, seamless flooring with our ComfortFloor® range which looks absolutely sleek and stylish with color and texture options, balcony flooring, joint sealing, garage flooring, driveway repair

Facade and walls: concrete repair and protection, admixture for artistic concrete wall, tile adhesive, joint sealing, window installation, anchoring of shelving, hooks, etc.

Bathroom and kitchen: tile adhesive, waterproofing, seamless flooring, joint sealing, multi purpose glue

Swimming pool: waterproofing

Roof: roofing for new build and refurbishment

The Montearroyo Residential Complex, Villavicencio, Colombia, the project shown on this page, used various Sika products: watertight concrete for the building foundations and the swimming pools, concrete admixtures for the structure, tile adhesives, joint sealants, protection coatings for concrete and mortar surfaces and nature stone facade.



SIKA SOLUTIONS FOR CONDOMINIUM



SIKA SOLUTIONS FOR A SINGLE HOUSE



SIKA REFERENCES



MATAVAI AND TURANGA BUILDINGS, SYDNEY, AUSTRALIA

Joint sealing systems for facade



M a t a v a i

MANUFACTURING FACILITY

The key for designing an efficient manufacturing facility is to study the production line and operation requirements, and communicate frequently with the facility manager.

In an industrial facility, depending on what it manufactures or stores, there are normally many ongoing daily activities including traffic carrying heavy loads, pallets and boxes being dragged across the space, strict temperature requirements, etc. The floors not only have to withstand severe exposure, including mechanical, chemical and thermal stresses, but also need to provide the right degree of slip resistance for safety regulations. Another common issue is also the need of the facility owner to renew the floors to host a totally different business after certain years. Sika's full range **seamless and resistant flooring solutions** offer various world leading technologies and proven quality to meet all these challenges.

Sika has also expertise and proven record in providing the **best roofing solutions** for industrial facilities in almost all climates.

Sika's high performance **concrete admixtures** are frequently used in large facility construction.

Further basement to roof solutions are also with high quality and excellent performance.

The project shown on this page is the new Volkswagen production plant in Wrzesnia, Poland. Equipped with the latest technology, this plant is operated by approximately 3,000 people. The plant can make 20 vehicles per hour, which produces 450 cars per day. Sika supplied steel corrosion protection, roofing, flooring, concrete admixture, concrete impregnation, joint sealing and grouting systems to this project.



SIKA SOLUTIONS



SIKA REFERENCES IN HEAVY INDUSTRY



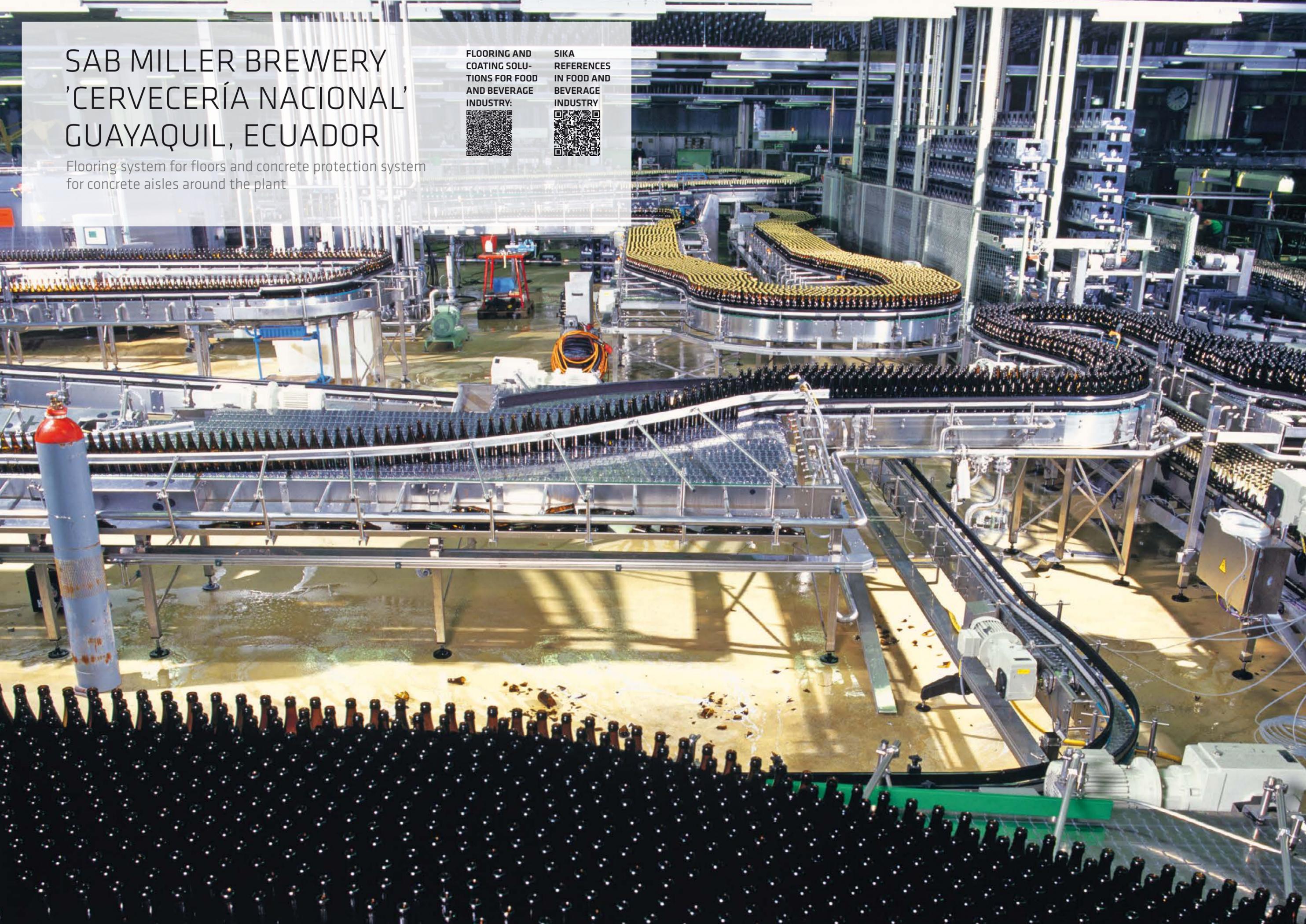
SAB MILLER BREWERY 'CERVECERÍA NACIONAL' GUAYAQUIL, ECUADOR

Flooring system for floors and concrete protection system
for concrete aisles around the plant

FLOORING AND
COATING SOLU-
TIONS FOR FOOD
AND BEVERAGE
INDUSTRY:



SIKA
REFERENCES
IN FOOD AND
BEVERAGE
INDUSTRY



PHILIPS AVENT-1 PLANT, NOGALES, MEXICO

Flooring system, repair product for floor substrate and floor joint sealing system

SIKA REFERENCES
IN LIGHT
INDUSTRY



DDPS SAFETY LABORATORY, SPIEZ, SWITZERLAND

Decontaminable flooring system and wall coating system

SIKA REFERENCES IN
CHEMICAL AND OIL
INDUSTRY:



CHIMNEY AND COOLING TOWER

Cooling towers made of concrete can have large scale and heavy structure. They have large circumference and diameter with a low mass to surface area. It is used to remove excess heat that is generate in place such as power station, chemical plants, etc. Therefore their structures are exposed to thermal variations and cycling cooling water. Then the external wall surfaces are also exposed to the climate, exhaust gases and condensates, and influence from the neighbor cooling towers or chimneys. The internal surfaces of cooling towers are very large and exposed directly to the heat, exhaust gases and condensates. Additionally the top of internal surfaces is also exposed to the climate influences. These form irregular and serious thermal stresses, which can cause cracks in the concrete walls, though they are constructed with acid-resistant concrete. Chimneys have smaller surface area and are slimmer than cooling towers. Their external surfaces have similar external exposures and the potential damage as cooling towers have, but their internal surfaces are usually in much smaller danger.

Due to the complexity of the structure and the stresses, cooling towers and chimneys need to be built or repaired by specialists to high engineering standard with strict control of the concrete.

Sika is for many years experienced in this and has been the preferred partner with the pioneering specialist engineers, contractors and access equipment manufacturers, producing tailored products and systems for these very specific applications:

Concrete admixtures for high performance and strength of the large scale concrete structures

Concrete repair and protection systems

Corrosion protection system for steel structures

Structural strengthening systems

The project shown on this page is the Turów Power Plant, Poland. Several towers needed to be refurbished. Sika could give expert advice for the major concrete refurbishment programs and durability assessments, which was very much appreciated. Sika supplied concrete repair and protection systems to this project.

SIKA SOLUTIONS



SIKA REFERENCES



CLEAN AND DIRTY WATER INFRASTRUCTURE

The water industry provides drinking water and waste water services (including sewage treatment) to residential, commercial, and industrial sectors of the economy. Potable water facilities must be absolute clean and watertight over long periods. It should also be easy maintainable, food safe, and harmless to health. Depending on water source, potable water in various regions differs in quality referring content of minerals, pH value, water temperature conditions and treatment of waters with chemicals by local reservoir holders. Water-holding structures, such as water reservoirs and water treatment facilities, mainly made of reinforced concrete or steel structures, are exposed to various influences.

Waster water treatment plants are highly complex and technical demanding to design and construct. The concrete or steel structures in such plants are constantly exposed to aggressive attack from the dirty water and the physical and chemical treatment procedure. Deterioration of those structures can be minimized and their durability can be improved by specifying the right protection solutions with the right design and right materials.

Since many decades Sika has been a reliable partner for contractors and engineers in the construction and repair of water infrastructure. We are experienced with the water treatment procedure and the protection of those structures, our products and systems are thoroughly tested to withstand the harsh conditions in the real environment and meet the most strict standards and regulations. We supply highly corrosion resistant solutions such as:

Concrete admixtures for high resistance and durability of concrete structures

Corrosion protection system for steel and concrete structures

Waterproofing

Chemical resistant joint sealing

Concrete repair and protection systems

Grouting

The project shown on this page is the Sindelfingen-Boblingen Waste Water Treatment Plant, Germany, where Sika supplied concrete repair mortar, concrete protection, steel corrosion protection and structural strengthening systems.

SIKA SOLUTIONS



SIKA REFERENCES



PUBLIC WATER SUPPLY, OFFENBURG, GERMANY

Waterproofing system



BRIDGE

Bridges are built in a variety of areas where the topography, ground conditions, or other existing structures and developments signify locations not otherwise suitable for conventional pathways, roads or railway construction. They are usually found in the most challenging, exposed environments – crossing ravines, around mountains, over valleys, lakes, rivers, seas or other urban buildings and structures. Due to the apparent increase in traffic frequency and design loads across our bridge structures, additional stresses and strains are constantly being imposed on them. Modern bridges are predominantly built in reinforced concrete and designed with a service life span of more than 100 years. On the other hand, recent surveys around the world have shown that the majority of existing bridges already exhibit significant degrees of degradation. Many of them are therefore in need of substantial and often urgent repair and refurbishment.

Sika has expertise in bridge construction and refurbishment because our experts are active in bridge projects for decades. If you have a problem in your project, chances are our engineers can find out what the causes are and then fix them. Our unique solutions for bridges are:

Concrete admixtures for various requirements of the bridge structures

Protection of structures, no matter concrete, steel, wood, or masonry

Structural Strengthening

Waterproofing of structures and bridge decks

Structural bonding, especially bonding of segmental bridge elements

Grouting and Fixing

Concrete refurbishment

The project shown on this page is the Second Penang Bridge, a dual carriageway toll bridge connecting mainland Malaysia with Penang Island, at a total length of 24 km, with the section over water being 16.9 km, making it the longest bridge in South-east Asia. The bridge has been built to last 120 years without major maintenance. To achieve this goal, Sika provided a concrete mix design with low chloride permeability and a thick cover, using hydrophobic impregnations and curing compounds to ensure a long life.

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RAIL ROAD BRIDGE OVER WISLA ZADUSZNIKI, POLAND

Corrosion protection for the steel bridge structure



WOODEN BRIDGE, REUSS RIVER, SWITZERLAND

Refurbishment and structural strengthening



TUNNEL

June 1, 2016 marks the official inauguration of the world's longest rail tunnel: Gotthard Base Tunnel. The 57 km-long tunnel in Switzerland is both a novelty and a remarkable achievement in tunnel engineering. Sika's front-line technologies and construction expertise played a crucial role in the successful completion of one of Europe's most important infrastructure projects. The immensely challenging quality requirements were met through the use of Sika's durable solutions for waterproofing, fire protection, coatings, and concrete and shotcrete production.

The major challenge in tunnel projects, from a geotechnical perspective is managing uncertainty and variability, from a tunneling perspective, is contract management, coordination of works and scheduling. Designwise the considerations are quality of the settlements underground, the connections and drainage pipe systems, geographical stresses, water, gas, subsidence of the building foundations there above, etc..

The history of Sika began in 1910 when the Gotthard rail tunnel running through the Swiss Alps needed a secure waterproof system. From then on, we have constantly contributed in various advance technologies in tunnel engineering:

Concrete admixtures

Fire protection

Waterproofing

Coating and more

Injection

TBM solutions

Repair and protection

We have experienced key account managers dedicated purely in tunnel projects worldwide working closely with the engineers and contractors on site. A good example is that since the start of preliminary testing of Gotthard base tunnel in 1992, Sika's employees have worked more than 210,000 hours on this project.

Swiss is the best in tunnel engineering worldwide. As a Swiss construction material company, Sika is proud to be part of it.

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Photo: © Alptransit Gotthard AG

GOTTHARD BASE TUNNEL, SWITZERLAND

Sika underground construction solutions



MINING

For more than a century, Sika is involved in the most challenging tunneling and mining projects on the globe. Looking back and profiting from this wealth of experience, the best mining practice is implemented in many regions, bringing Sika underground construction excellence to the far corners of the globe.

Today, Sika supplies construction and industrial materials for the largest and technically most complex mine developments. From the Atacama desert in Chile where the large Chuquicamata block cave mine is under construction to north Sweden where the Kiruna mine is located above the arctic circle and is today a show piece of efficient mining practice on a global scale. Sika is present on the Island of Papua, Indonesia where the Grasberg underground development is in full swing and on the verge of becoming the world's largest underground copper-gold operation.

All these projects have their own challenges and requirements. Together with its partners, Sika's experts take on these challenges and implement tailored solutions for the specific technical requirements, the climatic conditions and the logistical hurdles in these remote areas.

Sika is on the forefront when it comes to efficiency improvements in mines, speeding up mine cycle times through in cycle shotcrete solutions and optimizing the cost performance of the concrete intensive operations. With an integrated and smart, high quality product portfolio we have become a well-respected partner to bring modern day mining a step ahead.

The Sika product range for mining includes:

- | | |
|--|---------------------------------------|
| Concrete and shotcrete admixtures | Anchoring resins |
| Shotcrete accelerators | Underlayment grouts |
| Shotcrete machinery | Conveyor belt repair products |
| Fibers | Dust Sealer |
| Mine backfill admixtures | Floors and protective coatings |
| Injection and ground consolidation resins | |

SIKA SOLUTIONS



SIKA REFERENCES



GRASBERG MINE, WEST-PAPUA, INDONESIA

Sika underground construction solutions



SOLUTIONS FOR YOUR PROJECT IN A FEW STEPS

We provide integrated, fully compatible products and systems for your various construction projects, from basement to roof, in buildings and infrastructures worldwide. Scan the QR code below to open our SikaSmart City online selection guide to find expert material solutions and references.



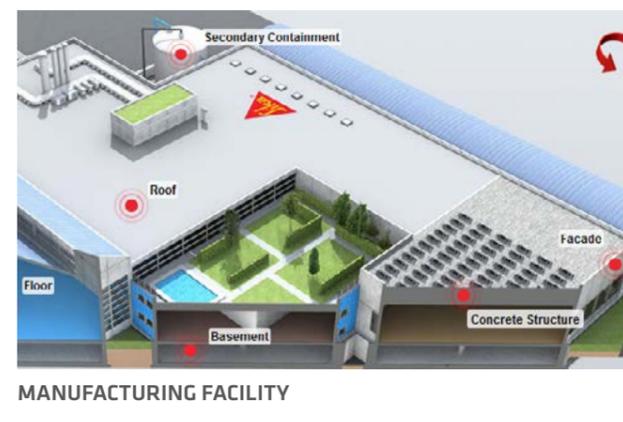
STEP 1: Select the project type in the SikaSmart city



STEP 2: Select the building element



STEP 3: Select the application



... AND MORE PROJECT TYPES

SEARCH RESULT:

You will land on pages listing the corresponding Sika systems as options for the application you need. Here are some examples of the pages.

<p>PRODUCTION / PROCESSING AREAS: EXTREME EXPOSURE</p> <p>Industrial flooring systems: For "Production- and Processing" areas in extreme exposures</p> <p>SikaFloor® PurCem HM-20 Heavy-duty, lightly textured, high chemical, mechanical and temperature resistant polyurethane cementitious hybrid screed. Nominal thickness: 6-9 mm Layers: 1-2 Characteristics and Advantages - Highly frost / blast freezing resistant (-40°C) - Heavy duty screed, high wear resistance - High chemical resistance - Thermal shock resistance - Easy cleaning (steam cleaning resistant) - Slip resistant - Color options - Low VOC, low odor</p> <p>SikaFloor® PurCem HS-21 Medium- to heavy-duty, self-leveling, smooth polyurethane cementitious hybrid screed Nominal thickness: 4.5-6 mm Layers: 2 Characteristics and Advantages - Highly frost / blast freezing resistant (-40°C) - Heavy duty screed, high wear resistance - High chemical resistance - Thermal shock resistance - Easy cleaning - Slip resistant - Color options - Low VOC, low odor</p> <p>SikaFloor® PurCem HB-22 Medium- to heavy-duty, broadcasted, medium anti-slip polyurethane cementitious hybrid screed Nominal thickness: 4.5-6 mm Layers: 2-4 Characteristics and Advantages - Highly frost / blast freezing resistant (-40°C) - Heavy duty screed, high wear resistance - High chemical resistance - Thermal shock resistance - Abrasion</p>	<p>EXPOSED ROOFS</p> <p>Systems: Exposed Roofs</p> <p>Mechanically Fastened Systems with Samafix® / Sikaplan Membranes - Mechanically fastened roofs are the most cost efficient for exposed roofing applications - The fastest installation speed is achieved with mechanical fastening - Samafix® / Sikaplan membranes for mechanical fastening have special polyester reinforcement, enabling high wind load resistance - Installation is almost not weather dependent - Mechanically fastened systems are ideal for large, lightweight metal decked structures and buildings, such as distribution and logistics centres, warehouses, supermarkets, workshops.</p> <p>Adhered Systems with Samafix® / Sikaplan Membranes - Adhered systems with Samafix® / Sikaplan Membranes are a great solution if there is a need for: - High aesthetic appearance - Freedom of design and suitability for complex roof shapes - No penetrations of the roof deck are required - These adhered systems also have additional advantages in many situations such as: - Very low noise emissions during installation - Easy refurbishment of existing bitumen roofs - Sika adhered systems are generally installed on public and residential buildings, including schools, offices, hotels, hospitals, apartments, sports centres etc. plus all types of refurbishment projects.</p> <p>Liquid Applied Membrane Systems with Sikaflex® Liquid applied systems covered by the unique Sikaflex® MTC technology provide many advantages: - Cold applied waterproofing - no flame, no heat - Seamless waterproofing completely bonded to the substrate - Waterproofing is moisture and rain resistant just 10 minutes after application - TC products with viscosity ideal for roofing applications (no need for thinners, hardeners) - Easy installation using simple rollers and brushes over even complicated shapes - High tensile strength and elasticity - Long shelf life of products - These systems are ideal for exposed roofs with large number of complicated detailing and penetrations.</p>
<p>SOLUTIONS FOR - WATERTIGHT MOVEMENT OR CONSTRUCTION JOINTS</p> <p>New construction Sika provides a variety of jointing materials to provide watertightness of joints whether movement / construction joints. For construction joints: Internally placed waterbars: Sika® Waterbar A-24 Externally placed waterbars: Sika® Waterbar AP-24 For movement joints: Internally placed waterbars: Sika® Waterbar D-26 Externally placed waterbars: Sika® Waterbar DP-24 As complementary protection of the joints, a chemical resistance sealing compound can be placed at the joint area. Typical and highly performing product to resist aggressive environment is Sikadur® PWD-3</p> <p>Renovation Works Very often in older water treatment, joints sealed with average sealant fail due to the lack of chemical resistance of these products. Instead of proceeding to the full removal of the failed joint, Sika has developed joint system that can be applied over the original failed material. The Sikadur® CombiFlex® SC system is the second generation development of the globally proven Sikadur® CombiFlex®</p>	

STEP 4: Contact our local sales and technical department to specify your systems

Please always visit your local Sika website to get your local solutions or contact our local sales and technical department to analyze your project situation and give you direct expert advice. Each project has its own requirements, Sika's experienced engineers can help you make the right decision among the options.

Added values for you:

- Standard or tailored CAD&3D Detailing drawings
- Standard or tailored BIM objects
- Onsite inspection and investigation
- Life cycle cost evaluation and comparison

SIKA AS A RELIABLE AND INNOVATIVE PARTNER IN CONSTRUCTION AND REFURBISHMENT

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 protection in the building sector and the motor vehicle industry. Sika has subsidiaries in more than 90 countries around the world and manufactures in over 160 factories.

Sika has a long track record of success as a complete system and problem solution provider on many construction and refurbishment projects. With extensive technical expertise and solid practical experience on every continent and in all types of climate and environment, Sika is a highly qualified and reliable partner for all of your projects.

DEDICATED SUPPORT

Sika has dedicated team to offer a customized service for large scale projects, such as tunnels, where there are many facets to design and specify. Bringing together experts from key areas of its business, the team simplifies the process for customers, offering one point of contact and saving valuable time and resources for you and your clients. We accompany you through all project phases. Our services include:

- Single point of contact for all project requirements
- Site investigation and analysis
- Bespoke value engineered solutions at design stage
- Performance feasibility
- Specification writing
- BIM Support
- Standard and bespoke detail drawing assistance
- Application training and on-site support
- Defined quality control procedures from production to installation
- Life cycle and sustainability Analysis
- Local support for International projects

Sika guarantees and future maintenance plans are also available in selected countries to give extra security for certain projects. We also offer follow-up support and all of the necessary technical expertise and resources worldwide.

AS AN INNOVATIVE PIONEER, Sika thinks ahead and is committed to a better environment with a sustainable and integrated product approach.

Our products and system solutions contribute very positively to the sustainability of your aviation facility. Being aware that environmental impact occurs at each stage of a product life cycle, Sika uses a Life Cycle Assessment (LCA) method according to ISO 14040 and European Standard EN15804, to provide a quantitative evaluation of the potential environmental impact of our products over their whole life cycle. Sika works to develop solutions for:

- Energy-efficiency
- Climate protection
- Material-efficiency
- Water-efficiency

All of these can contribute very significantly towards our products and your projects' sustainability.

KASPAR WINKLER
FOUNDED SIKA IN

1910

SIKA HAS PROVIDED WATERPROOFING
SOLUTIONS FOR MORE THAN

100 YEARS

THE FIRST PRODUCT - Sika®-1 -
IS STILL ON THE MARKET

EVERY YEAR SIKA SUPPLIES ENOUGH ROOF
MEMBRANES TO COVER THE

**WHOLE OF
MANHATTAN**

CORE COMPETENCIES:

**BONDING, SEALING, DAMPING, REINFORCING
AND PROTECTING LOAD-BEARING STRUCTURES**

IN BUILDING AND INDUSTRY.

SIKA HAS WORLDWIDE

**98 TECHNOLOGY
CENTERS**

EVERY YEAR SIKA FILES

**70 NEW PATENT
APPLICATIONS**

SIKA'S CLEANROOM FLOORING SYSTEMS RELEASE

**1,000 TIMES
LESS EMISSIONS**

THAN STANDARD LOW VOC SYSTEMS

WITH

84 AWARDS

IN 16 YEARS, SIKA IS THE COMPANY WITH THE MOST
CONCRETE REPAIR PROJECTS AWARDED WORLDWIDE

SIKA HAS SUBSIDIARIES IN

93 COUNTRIES

AROUND THE WORLD

SIKA HAS

**17,000
EMPLOYEES**

SIKA ACHIEVED TOTAL SALES OF

**CHF 5.49
BILLION IN 2015**

GLOBAL BUT LOCAL PARTNERSHIP



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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BUILDING TRUST

