YOUR TRUSTED PARTNER IN SPORT FACILITIES CONSTRUCTION

BUILDING TRUST

CONTENT

STADIUMS & ARENAS TODAY

HUBS OF COMMUNITY AND GROWTH

Stadiums and arenas with innovative architecture foster community engagement, cultural expression, economic growth, and local pride.

BUILDING MATERIALS: DURABILITY, SAFETY, SUSTAINABILITY, AND COMFORT

Long-term durability, safety, sustainability and user comfort are important considerations for constructing stadiums. Key applications such as concrete admixtures, structural strengthening materials, flooring, roofing, waterproofing, and concrete protection play a critical role in fulfilling these requirements and extend the life span of the structures.

TECHNICAL SUPPORT: SOLVING DESIGN AND EXECUTION CHALLENGES

Partnering with an experienced building materials provider is essential for architects and engineers. Technical support from planning to application helps overcome design challenges and ensures smooth and correct execution, minimizing the risk of construction failures and ensuring optimal performance.

SIKA: A RELIABLE PARTNER IN SPORT FACILITY CONSTRUCTION AND REFURBISHMENT

Sika is a trusted business partner with a proven track record in stadium projects worldwide. With decades of expertise, Sika provides a full range of products and systems – a one-stop shop for all building and refurbishment needs from basement to roof. With solid knowhow and innovative approach, Sika offers solutions that meet the highest standards, ensuring your stadium project's success.

SOLUTIONS FOR BUILDING CONCRETE STRUCTURE

Concrete: Strength & Versatility

Precast and in-situ concrete, is essential for stadium construction, offering strength, durability, and design flexibility.

Precast and in-situ concrete are essential for stadium construction, offering unmatched strength, durability, and design flexibility. They form the robust structural foundation of a stadium while enabling innovative and adaptable design possibilities.

With a wide range of innovative admixtures and additives to enhance concrete quality, workability, performance, and longevity, Sika provides cost-effective solutions that meet national and international standards.

In addition, to enhance efficiency and minimize failures, Sika offers a range of apps to support customers throughout the concrete production process. These tools assist with aggregate analysis, mix design calculations, life cycle assessments (LCA), sensors, and quality control, ensuring optimal performance and precision.

Typical Application	Sika Solutions	Main Characteristics / Advantages
Water Reducing Admixtures	Sika® ViscoCrete®	Highly efficient superplasticizer based on polycarboxylate
	Sika® Viscoflow®	Workability enhancing admixture
Set Controlling Admixtures	Sika® Retarder®	Strong retarding effects. Set retardation > 24 h possible dependent on the placing conditions and mix design
	SikaRapid®	Significant early age strength increase during the setting or hardening phases
Durability Enhancing Admixtures	Sika® Control SRA	Strong reductions in concrete shrinkage (up to 40% is possible)
	Sika® Control AER	Capability to control defined properties of air bubbles, to improve workability and frost resistance
	Sika® Control WT	Water resisting admixture
	Sika® Control PerFin	Concrete surface improver
	Sika® FerroGard®	Admixtures allowing prevention or significant reduction of reinforcement corrosion
	SikaFume®	Silica fume based, for significant improvement in strength and durability
Concreting Essentials	Sika® Separol	Mould release and separating agent.
	Sika Fiber	Micro / macro synthetic fibers
	Sika® Antisol®	Liquid curing agent
	Sika® Stabilizer Pump	Pumping agent

CORINTHIANS ARENA

Location: Sao Paulo, Brazil
Construction year: 2014

Project Requirements

The combination of in-situ and precast construction for the reinforced concrete grandstand structures and decks required high concrete workability to be maintained, often for extended periods.

Sika Solution

After extensive trials, Sika® ViscoCrete® Technology was chosen as the ideal solution. It was used throughout the entire project, providing high-performance superplasticisers to meet the varied concrete applications and requirements.

SOLUTIONS FOR BASEMENT WATERPROOFING

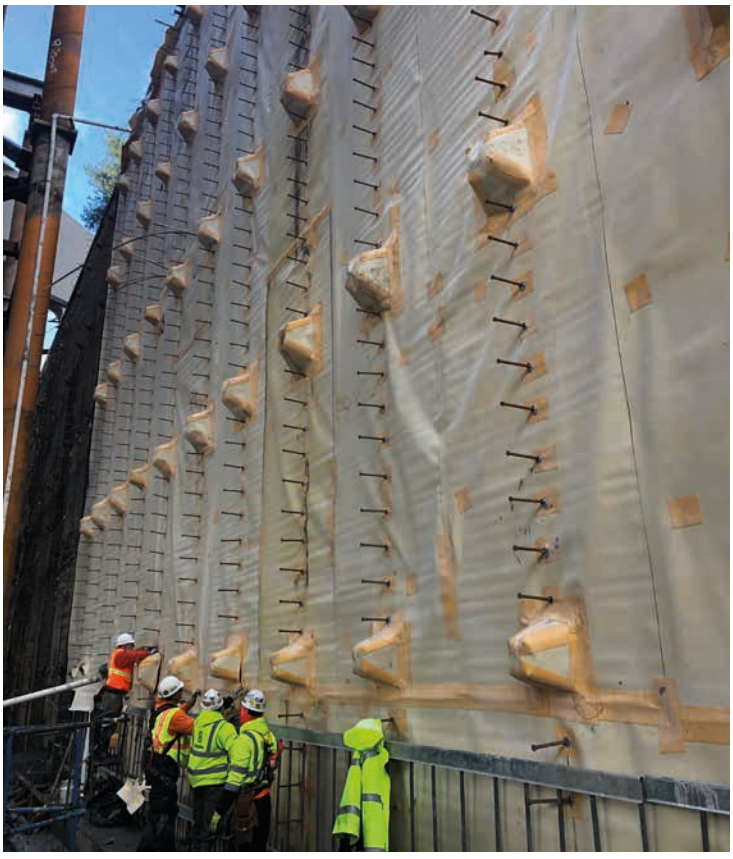
Long term dry & secure

Effective waterproofing ensures that the basement remains dry and secure, safeguarding parking and storage areas, electrical systems and other below grade rooms.

With reliable waterproofing solutions, basements and below-ground stadium structures gain improved comfort and expanded usage possibilities. These solutions not only reduce the total cost of ownership but also significantly enhance the structure's durability throughout its lifespan.

Sika offers a comprehensive range of technologies and systems for below-ground waterproofing. This includes highly flexible membrane systems, liquid-applied polymeric membranes, watertight concrete admixtures, joint waterproofing systems, waterproofing mortars and coatings, as well as injection sealing grouts.

Typical Application	Sika Solutions	Main Characteristics / Advantages
Below-grade Installations and Parking Areas	SikaProof® A+	FPO/TPO sheet membrane for pre- and post-applied fully bonded below ground waterproofing
	SikaShield® W	Polymer modified bituminous membrane which is fully bonded to the concrete substrate by a special modified cement-based adhesive, the SikaShield® W1
	SikaShield® E80	Self-adhesive, fully bonded, 1,5 mm thickness, SBS modified bituminous membrane for post-applied below ground waterproofing
Watertight Joint Sealing	Sika Waterbar®	Waterstops for construction and expansion joints, based on elastomeric materials, PVC / FPO
	Sika Waterbar® FB-125	Flexible, fully bonded internal hybrid waterstop (FPO based), that prevents any lateral water underflow
	SikaFuko®	Re-injectable injection hoses for construction joints and as back-up waterproofing systems
	SikaSwell®	Range of hydrophilic profiles and sealants for sealing construction joints and around penetrations
	Sikadur-Combiflex®	Multi-purpose waterproof sealing tape system suitable for joints, cracks and terminations



CLIMATE PLEDGE ARENA

Location: Seattle, USA

Project Requirements

The arena is unique in that most of it is underground. This is a key characteristic of the arena and was meant to be retained as part of the renovation. This meant that below ground waterproofing would be a key design element.

Sika Solution

SikaProof® A+ pre-applied system and SikaProof® P-1201 post-applied system resulted in a project solution that saved a significant amount of time on site with simplifying installation, joint detailing and detailing around complex geometries and a superior performing membrane in cold weather that remains flexible.

SOLUTIONS FOR STANDS & BLEACHERS

Durability & Protection

In open stadiums, proper waterproofing of the stands is essential to prevent water damage and extend the structure's lifespan. This protection also safeguards critical areas beneath the stands, ensuring a safe and reliable environment for all users.

Given the partially open nature of many stadiums, it's crucial to prevent water ingress in areas like stands, terraces, vomitories, locker rooms, and other vulnerable spaces.

Sika's liquid-applied membranes (LAM) are highly elastic and flexible polymeric systems, typically based on polyurea. These membranes are applied to concrete surfaces by hand or spray, providing excellent protection for even the most complex geometries and shapes.

Typical Application	Sika Solutions	Main Characteristics / Advantages
Waterproofing of Stands & Bleachers	Sikalastic® M 811	High performance hybrid polyurea based, spray applied waterproofing membrane
	Sikalastic® M 689	High performance pure polyurea based, spray applied waterproofing membrane
	Sikalastic®-8800	High performance pure polyurea based, spray applied waterproofing membrane.
UV resistant Topcoat	Sikafloor®-359 N	Two-part polyurethane, though-elastic, UV resistant, colored topcoat
Watertight Joint Sealing	Sikaflex® PRO-3 Purform®	Heavy-duty, high-strength sealant for floor joints with 100% movement capability (and lot of stadium references), ±50% movement capability
	Sikaflex® PRO-3 Purform® PowerCure	Boostered version of Sikaflex® PRO-3 Purform® for cases where quick curing is required
	Sikadur® Combiflex®	Multi-purpose waterproof sealing tape system suitable for joints, cracks and terminations

HISTORIC OLYMPIC STADIUM AMSTERDAM

Location: Amsterdam, The Netherlands

Project Requirements

The project involved the removal of the existing damaged coating and the application of a UV-stable, crack-bridging system with anti-slip properties.

Sika Solution

Sikalastic®-830N hybrid polyurea membrane was spray-applied at a thickness of approximately 1.5 mm. After curing, Sika® Concrete Primer, broadcasted with quartz sand, was applied. Finally, Sikafloor®-359 N, a UV-resistant top coat, was applied using an airless spray.

SOLUTIONS FOR FLOORS

Safety & Aesthetics

High-quality floor finishes not only ensure safety and improve comfort but also elevate aesthetics, creating an inviting and visually appealing environment for both spectators and staff.

Sport fields, stadium terraces, and other floors must be durable, able to withstand external weather conditions, temperature variations, mechanical wear, and abrasion, while also contributing to the overall ambiance and aesthetics.

Sika has extensive global experience in providing resin and cement/polymer-based flooring solutions, as well as wood floor bonding, tailored to the diverse needs of stadium spaces such as kitchens, restaurants, lounges, VIP suites, storage and logistics areas, car parks, fitness centers, and sanitary facilities.

Typical Application	Sika Solutions	Main Characteristics / Advantages
Storage/Logistics/Food Areas	Sikafloor® MultiDur	Water dispersed epoxy / epoxy based floor coating for smooth floors
	Sika® Ucrete®	Food stuff compliant systems
Multi-storey & Underground Car Parks	Sikafloor® MultiDur	Multi-purpose Epoxy flooring systems with high abrasion and impact resistance
	Sikafloor® MultiFlex	Polyurethane based, protective deck waterproofing and wearing surfaces with high abrasion resistance and crack-bridging properties
Training & Fitness Rooms	Sika ComfortFloor®	Decorative comfort floor, meets Indoor Air Quality standards
Commercial Areas / Restaurants	Sika ComfortFloor®	Smooth, low VOC decorative comfort floor, noise-absorbent and sound insulating properties, meets Indoor Air Quality standards
	Sikafloor® DecoDur	Multi-purpose, decorative Epoxy flooring systems
	Sikafloor® Terrazzo systems	Decorative Terrazzo systems – epoxy or cementitious flooring systems
Terraces / Spectator Areas	Sikafloor® MultiDur	Multi-purpose Epoxy flooring systems with high abrasion and impact resistance
	Sikafloor® MultiFlex	UV and mechanically resistant coating systems, good cleanability, waterproof protective systems
Changing rooms / Wet rooms	Sika ComfortFloor®	Comfortable, flexible, foot warm, seamless, meets Indoor Air Quality standards
Sport Floors	Pulastic® range	Pulastic® sports floor systems
Wall Coatings	Sikagard® Wallcoat systems	High solids or water borne resin coatings for all types of wall protection, from decorative treatments to special hygienic requirements
Floor Cover Bonding	SikaBond®-151	Elastic wood floor adhesive for engineered wood and small solid planks
	SikaBond®-130 Design Floor	Luxury vinyl tile (LVT) and PVC flooring adhesive

ZUIDERPARK

Location: The Hague, The Netherlands
Construction year: 2017

Project Requirements

The old football stadium of ADO The Hague in the Zuiderpark is now a location for sports, exercise and education.

Sika Solution

Pulastic® Elite Performance 65 XLS has been chosen. This system is specifically aimed at a very high training intensity and competitive performance at the top sports level.

SOLUTIONS FOR FAÇADES

Fresh Look, Vibrant Colors & Temperature Control

A stadium's façade not only enhances functionality but also defines its architectural identity, creating a welcoming and impressive atmosphere for spectators.

Vibrant colors and smooth finishes can significantly elevate the aesthetic appeal, while temperature control ensures a comfortable environment. Durability and protection from external elements are essential for maintaining a modern and impressive look for the entire structure.

Sika offers a wide range of mortars and renders for leveling, smoothing, and finishing façades, available in various colors and textures. Our portfolio includes solutions under the SikaWall® and SikaMur® brands, ensuring both aesthetic and functional excellence.

Typical Application	Sika Solutions	Main Characteristics / Advantages
Façades Offices/ Hospitality Areas etc.	Sikatherm® external wall insulation	Broad range of EWI / EIFS / ETICS solutions to thermaly insulate, finish and protect the areas from overheating in summer, and loosing indoor heat in the winter periods - saving energy
Façade/Wall Coatings	SikaWall® façade coatings	Acrylic and Silicate based coatings for decorative finishing of exterior walls/façades made from cement or lime render or masonry
Weather Barriers	SikaWall® and Sikagard® weather resitistive barriers	Liquid-applied WRB's for air- and weather barrier on façades – behind external wall insulation systems or ventilated facades
Hydrophobic Impregnation (EU) / Penetrating Sealers (US)	Sikagard® range	Silane and siloxane based hydrophobic impregnations to repel water on mineral façades (renders, masonry, concrete), maximum penetration and higher, more durable protection
Façade Panel Bonding	SikaTack® Panel system	Adhesive system with tenacious adhesion on a variety of substrates and permanent elasticity allowing panel accommodation due to natural differential movement of the building

VECTOR ARENA

Location: Auckland, New Zealand
Construction year: 2007

Project Requirements

A fully-bonded façade system was required to achieve a smooth, elegant finish with no visible fixings on the surface.

Sika Solution

Sika provided the SikaTack® Panel system, selected for its proven track record in adhesive bonding technology and its relevant certifications. This system met the project's demands for both aesthetics and structural integrity.

SOLUTIONS FOR ROOF WATERPROOFING

Durable, Protective, Essential.

In covered stadiums, the roof plays a crucial role in protecting spectators and athletes from harsh weather, ensuring events can continue in any climate.

Stadium roofs must be not only waterproof and durable, capable of withstanding external exposure and physical stresses, but they must also meet the architect's design vision in terms of shape, form, colour, and overall aesthetics.

Sika is the global leader in roof waterproofing technologies, offering high-quality solutions such as PVC and FPO-based sheet membranes, as well as liquid applied membranes utilizing Sika's advanced Polyurethane Moisture Triggered Chemistry (MTC).

TARGET CENTER ARENA
Location: Minneapolis, United States
Construction year: 2009

Project Requirements

The existing EDPM roof on the sports arena was to be replaced with a durable and light-weight roof which not only provides shelter to the National Basketball Association's Minnesota Timberwolves and their fans, but it also features vegetation designed to attract the endangered Karner Blue Butterfly. The new green roof is designed to capture 0.9 inches of rain before run-off occurs, and is expected to prevent an estimated one million gallons of storm water from creating a combined sewer overflow problem and draining into the Mississippi River each year. The project Size was 134,500 square feet.

Sika Solution

Sarnafil® G476 waterproofing membrane and adhered EnergySmart Roof® using 60 mil Sarnafil® G410 membrane in white.

Typical Application	Sika Solutions			Main Characteristics / Advantages
	Product	Technology	Application	
Exposed Roofs	Sikaplan® G / Sikaplan® VG	PVC	Mechanically fastened	Highly flexible membrane allows for easy application; White-coloured membranes reduce air conditioning costs by reducing heat transmission into the building
	Sikaplan® SGK	PVC	Adhered	Highly flexible membrane allows for easy application; Increased resistance to damage through wind uplift
	Sarnafil® S 327	PVC	Mechanically fastened	Proven membrane performance; Superior fire- and exellent tear strength resistance
	Sarnafil® G 410 / Sarnafil® G 410 Felt	PVC	Adhered	Proven membrane performance; Superior fire resistance and exellent dimensional stability
	Sarnafil® TS 77	FPO	Mechanically fastened	High durability and long service life; White-coloured membranes reduce air conditioning costs by reducing heat transmission into the building; Increased resistance to damage through wind uplift
	Sarnafil® TG 76 FSA	FPO	Adhered	High durability and long service life; Self-adhereing membrane improves application speed; Solvent free
	Sikalastic®-625N	1C PU	Roll, brush, airless sprayer	Easy to apply, moisture trigger curing, durable, UV and color stable basecoat/topcoat
Gravel Ballasted / Green / Utility Deck Roofs	Sikaplan® SGmA	PVC	Loosely laid	Highly flexible membrane allows for easy application; Increased resistance to root penetration
	Sarnafil® TG 66	FPO	Loosely laid	High durability and long service life; Increased resistance to root penetration
	Sikalastic®-835 I	2C PUA Pure	Hot spray equipment	Very fast curing, robust and durable, solvent free, engineered pure polyurea
	Sikalastic®-851 R	2C PUA Hybrid	Hot spray equipment	Very fast curing, robust and durable, solvent free, cost- effective hybrid polyurea
	Sikalastic®-702	2C PUA Hybrid	Squeegee, roll, trowel	Solvent free, hand applied polyurea, no machine required, very elastic
	Sikalastic®-701	2C PU Hybrid	Roll, brush, airless sprayer	For light pedestrian deck, chemical resistant, abrasion resistant, UV and color stable topcoat
	Sikalastic®-701 SF	2C Polyaspartic	Roll, brush, airless sprayer	Solvent free, chemical resistant, abrasion resistant, UV and color stable topcoat for pedestrian decks

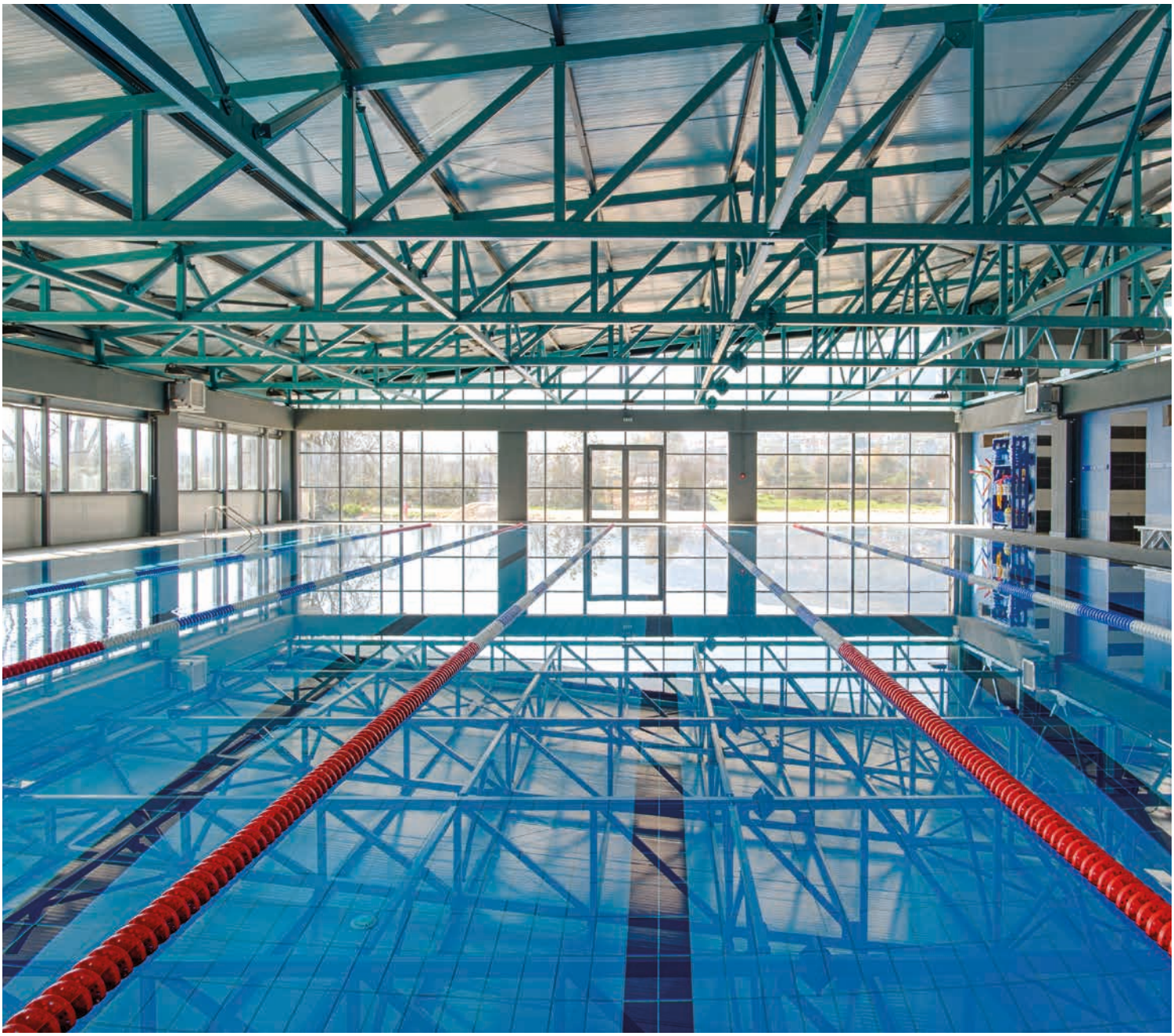
SOLUTIONS FOR TILE SETTING

Infinite Possibilities of Creativity

A vast array of shapes, textures, and colors in various sizes can be combined in nearly infinite ways to meet all possible needs and requirements.

From decorative tiled surfaces to highly functional tiled wall and floor finishes, tiling is one of the most popular surface finishing techniques used to enhance the appearance and functionality in any different area of the stadium.

For different area requirements and tile types, Sika provides comprehensive solutions for proper tile installation, including waterproofing, tile adhesive, grout, and sealant.



Typical Application	Sika Solutions	Main Characteristics / Advantages
Storage/Logistics/ Food Areas	SikaCeram® tiling solutions	Most durable hardwearing solutions for tile installation on floor and wall, incl. tile adhesives, tile grouts and waterproofing under tile solutions
Commercial Areas / Restaurants	SikaCeram® tiling solutions	Most durable hardwearing solutions for tile installation on floor and wall, incl. tile adhesives, tile grouts and waterproofing under tile solutions
Terraces / Spectator Areas	SikaCeram® tiling solutions	Most durable hardwearing solutions for tile installation on floor and wall, incl. tile adhesives, tile grouts and waterproofing under tile solutions
Waterproofing of Wet Rooms and Locker Rooms (under tiles)	SikaTop® Seal	2-component flexible waterproofing slurry mortars, hand or spray applied
	Sikalastic®	1-component flexible waterproofing slurry mortars, hand or spray applied

EPIRUS SPORT CENTER

Location: Ioannina, Greece

Project Requirements

Different application fields: Additives for mortar production, repair and protection products, waterproofing systems, tile adhesives, grouts, and sealants. Solutions for pools must withstand permanent immersion in chlorinated water as well as contraction and expansion stresses.

Sika Solution

Waterproofing:
Sikalastic® 1K, SikaSwell® S-2, and Sika® SealTape.

Tile Fixing and Grouting:
SikaCeram®-243 Ultra Flex. For tile grouting, the cementitious SikaCeram® CleanGrout and epoxy-based SikaCeram® StarGrout.

SOLUTIONS FOR FIRE PROTECTION

Life Protection & Structural Integrity

Fire protection in stadiums is crucial for ensuring safety, preventing fire-related hazards, maintaining the stadium's integrity and safeguarding both lives and infrastructure.

Passive fire protection is designed to prevent the spread of fire by containing it within defined compartments. This approach minimizes damage and, more importantly, provides people in other areas enough time to evacuate safely.

Sika offers comprehensive solutions for fire-resistant construction in various types of buildings, including:

Commercial, public, residential buildings, steel structures, and more. Sika's fire-resistant mortars, sealants, fillers, and backing materials for linear seals, as well as solutions for penetration seals, enable the construction of safer buildings and infrastructure.

Typical Application	Sika Solutions	Main Characteristics / Advantages
Passive Fire Protection	Sikasil®-670 Fire	UV-resistant, 4-hour rated fire-resistant sealant for linear seals up to 50 mm width, ±25% movement capability
	Sikaflex®-400 Fire	4-hour rated fire-resistant sealant for linear seals up to 50 mm width, ±25% movement capability
	SikaSeal® Penetration Seal Range	Fire-rated systems such as collars, wraps, boards, etc. for penetrations, sealing pipes and cables, ventilation ducts
	Emshield® DFR2	Impregnated foam seal with silicone cover, ±50% movement capability, 2-hour fire rating (UL 2079), up to 100 mm joint width
	SikaSeal®-641 Fire Coating	Fire-resistant coating for electrical cables

QUEENSLAND COUNTRY BANK STADIUM

Location: Townsville, Australia

Project Requirements

Provide both fire rated and construction joint sealants for nominated areas in western lift shafts and stair wells. Construction sealant was required for joints between precast elements forming the seating of the stadium.

Sika Solution

Sikaflex®-400 Fire and Sikaflex® Construction AP provide high quality and cost-effective solutions meeting relevant standards required for the project.

SOLUTIONS FOR JOINT SEALING & GLAZING

Watertightness & Energy Efficiency

Sealing joints prevents leaks, enhances energy efficiency, and improves structural integrity. They also contribute to the overall aesthetic appeal and comfort of the venue

For stadium facades, as well as joints on terraces and floors, even in areas with high mechanical and chemical exposure, sealants ensure watertightness and improve climate control within the building. They seal in and around complex details and connection joints, helping to meet the special architectural and aesthetic requirements of stadiums.

Sika provides a full range of elastic weathering-resistant joint sealants with high movement capability and UV resistance. Our current product range reflects more than 60 years of joint sealing experience, with products based on Polyurethane (PU), Hybrids (STP) and Silicone. We also offer all the necessary ancillary products, such as cleaners and primers.

Typical Application	Sika Solutions	Main Characteristics / Advantages
Floor Joints	Sikaflex® PRO-3 Purform®	Heavy-duty, tough, high modulus sealant for floor and wall joints with high movement capability (ASTM C920 Class 50, ISO 11600 Class 25 HM, EN14188-2 Class 35)
	Sikaflex® PRO-3 Purform® PowerCure	Accelerated version of Sikaflex® PRO-3 Purform® for cases where rapid use of the joint is required
Concrete and Masonry Joints	Sikaflex® Construction Purform® / Sikaflex®-1A Plus Purform® / Sikaflex® PRO Purform®	Low modulus polyurethane joint sealant for movement and connection joints. High movement capability (ASTM C920 Class 50, ISO 11600 Class 25 LM)
Glass and Metal Facades and Structural Glazing	Sikasil®-705	Low modulus silicone joint sealant for movement and connection joints. High movement capability (ASTM C920 Class 50, ISO 11600 Class 25 LM)
	Sikasil® SG-500	UV-resistant, fast-curing adhesive sealant for factory bonding of glass elements
	Sikasil® SG-20	UV-resistant adhesive sealant for on-site structural glazing
Expansion Joints	Emseal® DSM System	Impregnated foam seal with silicone cover for joints up to 100 mm joint width. High movement capability
	Emseal® SJS Seismic Joint System	Impregnated foam seal with silicone cover for joints up to 400 mm joint width. High movement capability
Panel Bonding	Sikaflex®-118 Extreme Grab	1-component adhesive, interior panel bonding without the need for temporary fixation, instant grab
Installation	Sikaflex®-111 Stick & Seal	Adhesive sealant with superior adhesion, fixation of cable channels, etc. without the need to drill holes
Interior Insulation Panel Bonding	Sikaflex®-111 Stick & Seal	Adhesive sealant with superior adhesion, fixation of light-weight sound-insulation panels
Gap Filling	Sika Boom®-580 Fix & Fill	High-expansion fix & fill foam for gun application
Sanitary Facilities	SikaSeal®-175 Bath & Tiles	Low-odor, neutral-cure silicone sealant with mold-resistance

LANDSCHAFTSPARK DUISBUG-NORD

Location: Duisburg, Germany
Construction year: 2021/2022

Project Requirements

The joints needed to withstand pedestrian traffic, potential punctures, and the action of cleaning machines. A particular challenge was the joint width, which exceeded standard dimensions, ranging from two to four centimeters.

Sika Solution

The joints were renovated using the high-performance sealant Sikaflex® PRO-3 Purform®, which offered low notch sensitivity and high tear propagation resistance.

SOLUTIONS FOR CONCRETE REPAIR & STRENGTHENING

Bringing Structures to new Life

Concrete repair and strengthening in stadiums are essential for maintaining structural integrity, ensuring safety, and preventing deterioration. These measures extend the facility's lifespan, enhancing its durability and reliability.

Careful and sympathetic repair of reinforced concrete stadium structures can be achieved using Sika's complete range of repair products and custom repair solutions, tailored to meet various requirements.

When necessary, structural strengthening with carbon fiber composites has been used worldwide for almost 20 years, with a proven track record and numerous stadium strengthening references.

To increase the durability of exposed concrete surfaces, Sika provides a full range of protective hydrophobic impregnations and coatings.

For stadium construction involving precast concrete elements, Sika offers a comprehensive range of structural epoxy adhesives and grouts for bonding, anchoring, fixing, and grouting these units into position.

Typical Application	Sika Solutions	Main Characteristics / Advantages
Steel Reinforcement Corrosion Protection	Sika MonoTop®-1010 / SikaEmaco® P 5000 AP	1-component cement-based product providing high resistance to water and chloride penetration
	SikaTop® Armatec® -110 EpoCem®	3-component, high performance corrosion protection primer based on expoy-cement-technology
	Sika® FerroGard®-5xx Patch	Sacrificial anode to prevent "Halo" effect (corrosion adjacent to the repair) – connected to rebar during patch repair
	Sika® FerroGard®-3xx Duo	Anode with initial current applied to it – for stronger cathodic protection
Repair Mortar	Sika MonoTop® / SikaEmaco®	High performance cement-based repair mortars for hand and machine applications
Protective Coating	Sikagard®-675 W / Sikagard®-320	Waterproof acrylic resin based protective coatings for concrete, excellent carbonation barrier
	Sikagard®-5500	Highly elastic, crack bridging, waterproof protective coating for concrete, excellent carbonation barrier
Corrosion Inhibiting Impregnation	Sika® FerroGard®-903 Plus	Surface applied corrosion inhibitor allowing cost effective extension of the service life against carbonation
	Sikagard®-8500 CI	Surface applied, dual phase corrosion inhibitor for long-term protection against both carbonation- and chloride-induced corrosion
Hydrophobic Impregnation	Sikagard®	Silane and siloxane based hydrophobic impregnations to repel water on concrete and other mineral façades
Structural Bonding	Sikadur®-31+ (thixo) Sikadur®-32+ (bonding bridge)	2-C high performance epoxy-based adhesives for the structural bonding of concrete, steel, glass, stone, wood and other materials.
Structural Strengthening	Sika® CarboDur® (plates)	Strengthening systems based on structural epoxy resins, carbon fibre and other composite materials
	SikaWrap® (fabrics)	Used for the restraint and strengthening of reinforced concrete structures

CASSELL COLISEUM

Location: Blacksburg (VA), United States

Project Requirements

A steel-framed structure built in 1961 required concrete restoration due to spalling concrete and rust staining. The appearance also needed improvement.

Sika Solution

The repair process involved removing all unsound concrete, applying SikaTop® Armatec-110 EpoCem® for anti-corrosion and bonding, using SikaTop® and Sika MonoTop® mortars to replace damaged concrete, and applying Sikagard® for a protective, decorative anti-carbonation coating.

SOLUTIONS FOR ANCHORING & FASTENINGS

Secure Connection

Modular construction and the combination of different materials and prefabricated elements require the use of specific anchors and fastenings.

In stadiums, aside from structural elements, a wide range of components requires anchoring to ensure safety, stability, and functionality. These include seating, roof and façade elements, lighting and sound systems, scoreboards, safety elements (such as handrails and guardrails), and mechanical and electrical equipment.

Sika's chemical anchors are ideally suited for high-load applications, as the resulting bond is often stronger than the base substrate material itself.

Grouting materials provide solid support under base plates, post-fixing, filling bedding joints in precast concrete sections, and filling and sealing cavities, gaps, or voids.

Typical Application	Sika Solutions	Main Characteristics / Advantages
Grouting	SikaGrout®	Cementitious grouting products with shrinkage compensation and high strength development
	Sikadur®	High performance precision grouts based on epoxy resins, low shrinkage, high durability and excellent mechanical strengths, used to secure critical equipment for proper alignment and transmission of static and dynamic loads
	SikaFlow®	High performance precision resin grouts based on various chemistries for high durability and excellent mechanical strengths, used to secure critical equipment for proper alignment and transmission of static and dynamic loads
Anchoring	Sika AnchorFix®	Anchoring adhesives based on various chemistries for many kinds of anchoring and fixing applications, secures high durability in different substrates

MUNICIPAL STADIUM WROCŁAW

Location: Wrocław, Poland
Construction year: 2011

Project Requirements

The façade and roof structure needed to be anchored into the reinforced concrete foundations surrounding the base of the stadium. Additionally, the joints between the precast concrete elements of the walls, floors, terraces, and stairways needed to be securely and durably watertight.

Sika Solution

SikaGrout®-4N, a polymer-modified, expansive, cement-based grout, was selected to grout the steel support structures and their holding-down bolts into the reinforced concrete foundations.

The Sikadur-Combiflex® SG Joint Sealing system was used to seal the joints between the precast reinforced concrete units in the structure.

SIKA – THE GLOBAL LEADER

In the Construction & Refurbishment of Stadiums & Arenas

Sika is a specialty chemicals company with a leading position in the development and production of systems and products for sealing, bonding, damping, reinforcing, and protecting in the building sector and motor vehicle industry. Sika provides a single source for integrated and compatible solutions from basement to roof.

110 YEARS OF EXPERTISE

Our reputation for quality and reliability is virtually unmatched and is illustrated through a comprehensive portfolio of problem-solving products that have been employed for many years in a diverse range of applications. Whether we are waterproofing your basement or your roof, protecting your floors and wall, sealing your skyscraper or your car, or working with you on your building, you will see why we are renowned for Building Trust.

WORLDWIDE PRESENCE FOR CUSTOMERS

Sika has a long track record of success as a complete system and problem solution provider on many sport facility projects all around the world. With extensive technical expertise and solid practical experience on every continent and in all types of climate and environments, Sika is a highly qualified and reliable partner for all of your projects. Sika has highly professional technical and sales teams to support our customers and their clients. These teams include qualified engineers and technicians with expertise in all of the relevant technologies and applications, together with technical service engineers that have extensive practical installation and on-site training expertise to help ensure that the work is completed correctly and is 'right the first time.'

WHAT MAKES SIKA SUCCESSFUL IS THE COURAGE FOR INNOVATION

Sika's long history of innovation has led to unparalleled success in becoming a recognized global technology leader. The company nurtures and develops an international network of scientists, partners, suppliers, and customers. We provide intelligent solutions using the most advanced technologies, service, and unique expertise. Sika has a worldwide network of 21 Global Technology Centers which take the lead in long-term research programs and the development of new innovative solutions. To meet local markets' specific needs and requirements, new products and systems are also developed across the 19 Regional and 64 Local Technology Centers.

MORE PERFORMANCE – MORE SUSTAINABLE

Innovation in Sustainable Solutions is an integral part of Sika's innovation strategy. Creating value-added products based on both higher performance and sustainability benefits is the key objective of the Sustainability Portfolio Management (SPM) approach.

WORKING WITH SIKA

Sustainability – Sika's commitment to our product development and your project includes Life Cycle Assessments (LCA) according to ISO 14040 and EN15804. Sika has clear targets for achieving a sustainable future in all aspects of our business.

Compatibility – a system approach to ensure long term performance.

Simplicity – Buildability to ensure successful installation without complications.

Dependability – Sika's commitment to suitability and quality ensure long term performance for the intended use.

Flexibility – The range of products and systems we manufacture allows the right choice for the project as well as opportunities for value engineering at the design stage.

Support – Unrivalled technical and practical support throughout the project cycle.

SIKA AT A GLANCE

- 33,000+ employees
- 100+ countries
- 400+ plants worldwide
- 3,800+ patents

Which all means that you are collaborating with a global market leader who will work with you, using our experience and expertise to arrive at the best solutions for your project, wherever it is.

PROJECT SUPPORT

Health & Safety
Safe products. H&S taken into account in design proposals

Single Source Supplier
Integrated solutions. Single point responsibility

Objective Approach to Specification
Wide range of solutions enables objectivity in our proposals

Market Leading, Quality Products
Use the best to achieve best value for the client

Buildability & Compatibility
Design for ease of installation and problem free connections and details

BIM Objects
BIM objects and CAD details to assist design & implementation

Maximizing Value
Design for value, not lowest material cost

Risk Management
Knowledge of international Standards, quality solutions and use of best practice leads to lower risks. Getting it right first time

Single Point of Contact
Time and cost saving, integrated design and compatibility

Time and Cost Saving Solutions
Integrated systems, reducing interfaces and multiple areas of use, all contribute to meeting budget and programme.

Life Cycle Sustainability Analysis
BREEAM and LEED led projects benefit from our solutions

Support through the project cycle
Technical and practical support throughout design, construction and after sales service

EARLY ENGAGEMENT TO ACHIEVE BEST VALUE

TECHNOLOGIES FOR SUSTAINABLE CONSTRUCTION

Showcasing Sustainable Practices

Sustainable stadiums and arenas set a positive example for communities, businesses, and other industries, demonstrating the viability and benefits of prioritizing sustainability in development projects.

Megatrends such as CO_2 reduction, urbanization, e-mobility, ease of design, and lightweight construction are reshaping economies, businesses, and lifestyles. Environmental changes and a growing population require cleaner energy and better-functioning cities.

These forces are driving the demand for intelligent construction materials and smart mobility systems to ease congestion.

Sika provides energy-efficient systems, high-yield products, long-durability systems, and materials with low embodied carbon that enhance the sustainability of projects in demonstrable and measurable ways.

Concrete Admixtures

Sika® ViscoCrete® improves flowability during concrete production by reducing the water content due to its absorption behavior. The reduction in water leads to a higher structural density and reduced porosity in the cement structure.

- Reduced water demand: Up to 35% water reduction per cubic meter of concrete.
- Increased efficiency and durability: +25% higher final mechanical properties.

Concrete Repair

Sika MonoTop® 4012 is a high-performance and sustainable one-component, ready-to-mix mortar for concrete repair and protection. It contains fly ash as a supplementary cementitious material (SCM)..

- Reduced carbon footprint
- Reduced dust formation
- Meets LEED v4 requirements

Basement Waterproofing

SikaProof® A+ is an innovative, fully bonded sheet membrane system for damp-proofing and waterproofing in basements and below-ground structures.

- Easier and faster application: No need for welding or heat, and no maintenance required
- Resource efficiency: Less material per m^2 and lower energy consumption, with net gains of 220 MJ per m^2
- Lower carbon emissions: Net gains of 4 kg CO_2 per m^2

Floor Finishing

Sikafloor®-2510 W is a multifunctional 5-in-1 product that can be used as a primer, scratch coat, roller coat, self-leveling coat, or sealer

- Low odor and VOC emissions: AgBB, EC1+ certified.
- Lower use of materials: Resource-saving
- Durable and highly mechanical resistant: The floor lasts long
- Sustainable packaging: Using bluemint® recycled tinplate

Tiling

SikaCeram®-290 StarLight is a high-yield, flexibilized, low-dust tile adhesive with sustainable raw materials for the thin and medium-bed method up to 15 mm layer thickness of class EN 12004 C2 TE S1

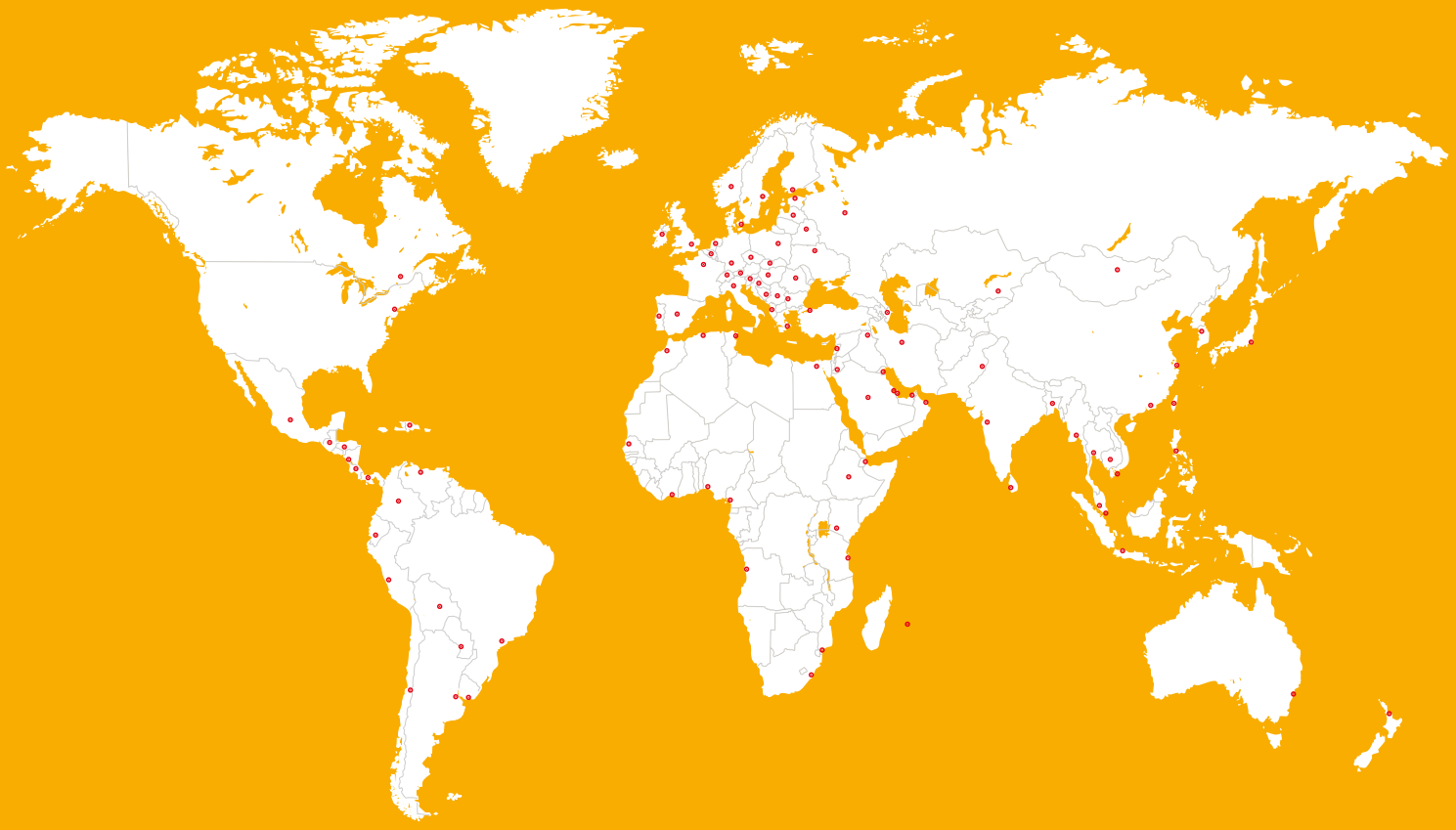
- Reduced CO_2 footprint per square meter
- Low dust formation during handling
- Direct contribution to LEED v4 credits

Sealing Joints

Sika® Waterbar® FB- 125 is a hybrid waterstop with a rough textured surface based on flexible polyolefin (FPO). When fully embedded in cured concrete, it provides a fully bonded, durable watertight seal that prevents any lateral water underflow.

- Reduced CO_2 footprint per linear meter
- No heat welding required: No odor of PVC fumes and less energy used
- Packaging: Up to 40% less packaging foil used, with more material supplied per pallet compared to traditional PVC products

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.

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