

Building solutions, building future.



a Mazrui Group Company

ur experience

Part of a diversified group with a turnover in excess of 1 Billion USD, PSS is the meeting point of technical professionals and application teams of proven experience and reputation in the field of flooring and waterproofing solutions. Our professionals have participated in the design and implementation work of many important flooring and waterproofing projects executed in recent years in GCC and Europe, taking part in forums and national and international associations, maintaining permanent contact with the main centres of technological development of flooring and waterproofing products.

PSS offers a wide range of services based on systems and next-generation products, and we are fully committed to the research and improvement of our procedures. Also engaged in a sustainable future, we are committed to environmentally friendly systems complying with GCC and European environmental regulations.

We offer to our clients a service based on quality, provided with integrity and based on our outstanding professional experience. Our strategic bet is innovation, the implementation of systems of quality and constant research into new fields. Our vocation is to be an effective collaborator from the initial phase of the project to the final installation of products and systems. We want to be your specialist in flooring, waterproofing and special applications, participating as assistants in the diagnosis and design.

Our services

Design assistance

We advise our clients on the development of their flooring and waterproofing projects, or any other special requirement to be carried out on site. At the same time we offer custom solutions for the needs of the client to meet their technical and budget requirements.

Training of prescribers Tailor-made solutions Integral execution

At the request of our customers, we organize courses for prescribers about flooring and waterproofing solutions, as well as on ad hoc specific requests by the clients.

Our specifications service allows you to design specific solutions for both new construction projects and renovations or repairs. We take care of specific design as well as implementation and adaptation of solutions to special works.

All flooring and waterproofing works that PSS performs are 100% carried out by our own experienced personnel, coordinated and directed by a technical team that monitors and controls the quality and effectiveness of the execution.

Our Know-how

PSS designs and executes its work with flooring and waterproofing products developed in collaboration with international leading building materials manufacturers. Thanks to an ongoing research process, we develop and tailor each day new products in order to improve the adaptability and efficiency of our solutions.

Choosing the right solution

Waterproofing encompasses a wide range of products and applications in a variety of industries. The end user is the key to understanding the needs of any industry and, more specifically, the performance expectations within a particular facility. If an installation meets expectations, it is successful. The difficulty is in determining those expectations.

Our commitment to the environment

At PSS we bet on the design and application of increasingly environmentally friendly products for flooring and waterproofing. Our program Be Green represents our commitment to a sustainable and secure future. An effort that we hope will contribute to create new lines of research and development in the field of flooring and waterproofing materials.

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Chno Waterproofing. Areas of application



Residential

& Commercial

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Concrete Waterproofing

It is inherent to the human being to protect from elements the buildings where it inhabits, meets or works. Perhaps the most recurrent, pervasive and devastating element is the water. Since the beginning of time men have been concerned about protecting their shelters from the action of water. Moreover, since the water has been and is an extremely valued element necessarily for life, one of the worries of the human being has been to build structures to allow water retention and accumulation.

In PSS we design and execute waterproofing works for concrete structures under water table (foundations, car parks, basements, etc) and hydraulic infrastructures (reservoirs of drinking water, plants waste water, pipelines, dams, etc.) in order to reduce to the minimum water losses and leakages. We offers a broad range of waterproofing solutions for all types of structures. Since there are many different waterproofing systems, we can support you in finding the right waterproofing solution for your needs.

PSS waterproofing systems are based on the use of special cementitious mortars of capillary crystallization and on a variety of injection waterproofing repair techniques. PSS has highly trained applicators and consultants in the field of waterproofing technologies, using only products of the highest specification. Each situation is individually assessed and the correct product is specified for its repair.

PSS Watex

PSS Watex is an integral system of waterproofing and protection of concrete structures based on the use of special mortars of capillary crystallization. The special characteristics of such products, coupled with the experience of our team makes PSS Watex system in an extremely effective solution in the waterproofing and protection of structures under water table (foundations, car parks, basements, etc).

The PSS Watex products penetrates deeply and seals concrete's capillary tracts and shrinkage cracks, becoming an integral part of the concrete. The system can be applied from either the positive or negative side and waterproofing and chemical resistance properties remain intact even if the surface is damaged.

The PSS Watex system has available also a specific range of products approved for use in contact with potable water and in sewers and sewage treatment plants, specifically designed to cope with the additional stresses caused by continuously changing degree of contamination, environmental effects, fluctuating liquid level and formation of aggressive microclimates in sealed holding tanks.

PSS Aquactive

The PSS Aquactive is a system based on hydrophobic polyurethane injection grouts which cures to a durable, closed cell polyurethane foam which is resistant to most organic solvents, mild acids, alkali, petroleum and micro-organisms. PSS Aquactive is designed to fill joints and cracks in concrete, as well as large voids in gravel layers and rock fissures. Due to its quick cure time it can also be used to stop active water leaks.

Polyurethane resins are available with substantial variation in their physical properties. Some of the polyurethanes cure into flexible foams, other polyurethane systems cure to semiflexible, high density solids that can be used to rebond concrete cracks subject to movement.

Structures built on sub grade material that have been subjected to movement by ground settlement, especially those structures constructed on unstable fine media, pose an engineering challenge for their stabilisation. Most materials traditionally used for ground stabilisation have a molecular structure which restricts their penetration into fine media. The PSS Aquactive system has a special range of resins with a water like viscosity, that is able to penetrate into voids between fine grains with a tailor made set time. The products compressive strength fulfills most geotechnical engineering requirements.



PSS Watex External Waterproofing Below ground concrete wall and slab external waterproofing

PSS WATEX BG EXTERNAL WATERPROOFING, below ground concrete wall and slab external waterproofing system supply and apply according with the following procedure: Substrate preparation by mechanical means and high-pressure water cleaning to remove laitances, curing agent residues and other impurities on the concrete surface. Application of an angle fillet with low shrinkage repair mortar at wall / floor junction. Application of two coats of special mortar of capillary crystallization, dry sprinkled on blinding concrete and spray/brush applied on vertical surfaces and over the fillet, with a total approx. coverage of 2 Kg/m².

Scope: External waterproofing of new below ground wall and slab structures subject to ground moisture or hydrostatic pressure.

PSS Watex Internal Waterproofing Below ground concrete wall and slab internal waterproofing

PSS WATEX BG INTERNAL WATERPROOFING, below ground concrete wall and slab internal waterproofing system supply and apply according with the following procedure: Substrate preparation by mechanical means and high-pressure water cleaning to remove laitances, curing agent residues and other impurities on the concrete surface. Chisel out a reglet (5 x 5 cm) along the construction joint and filling with low shrinkage repair mortar, application of an angle fillet with low shrinkage repair mortar at wall / floor junction. Application of two coats of special mortar of capillary crystallization spray/brush applied on slab and interior wall surfaces and over the fillet, with a total approx. coverage of 2 Kg/m².

Scope: Internal waterproofing of new or existing below ground wall and slab structures subject to ground moisture or hydrostatic pressure.

PSS Watex Diaphragm Walls Below ground concrete wall and slab internal waterproofing

PSS WATEX BG INTERNAL WATERPROOFING, below ground diaphragm wall and slab internal waterproofing system supply and apply according with the following procedure: Substrate preparation by mechanical means and high-pressure water cleaning to remove laitances, curing agent residues and other impurities on the concrete surface. Application of an angle fillet with low shrinkage repair mortar at wall / floor junction. Application of two coats of special mortar of capillary crystallization, dry sprinkled on blinding concrete and spray/brush applied on vertical surfaces and over the fillet, with a total approx. coverage of 2 Kg/m².

Scope: Internal waterproofing of new or existing below ground diaphragm wall and slab structures subject to ground moisture or hydrostatic pressure.







PSS Watex Construction Joints

Construction joints sealing

PSS WATEX CONSTRUCTION JOINTS, construction joints sealing system supply and apply according with the following procedure: Substrate preparation by mechanical means and high-pressure water cleaning to remove laitances, curing agent residues and other impurities on the concrete surface. Application of one coat of special mortar of capillary crystallization, brush applied along the joint. Application of an angle fillet with low shrinkage repair mortar (wall / floor junction) or chisel out a reglet (5 x 5 cm) along the construction joint and filling with low shrinkage repair mortar (horizontal & vertical joints). Application of a final coat of special mortar of capillary crystallization, brush applied, over the fillet. If structure movement is expected replace by elastic mortar.

Scope: Internal waterproofing of new or existing below ground wall and slab construction joints subject to ground moisture or hydrostatic pressure.

PSS Watex Diaphragm Wall Joints Diaphragm wall joint sealing

PSS WATEX DIAPHRAGM WALL JOINTS, diaphragm wal joints sealing system supply and apply according with the following procedure: Substrate preparation by mechanical means and high-pressure water cleaning to remove laitances, curing agent residues and other impurities on the concrete surface. Application of one coat of special mortar of capillary crystallization, brush applied along the joint. Chisel out a reglet (15 x 15 cm) along the joint and filling with low shrinkage repair mortar of capillary crystallization, brush applied, over the filled joint. If structure movement is expected replace by elastic mortar.

Scope: Internal waterproofing of new or existing below diaphragm walls joints subject to ground moisture or hydrostatic pressure.



Waterproofing capillary crystalization mortar, slurry consistency.
Angle fillet, low shrinkage mortar.

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Waterproofing capillary crystalization mortar, slurry consistency. If structure movement is expected replace by elastic mortar.

Waterproofing capillary crystalization mortar, slurry consistency.

- Reglet filled with low shrinkage mortar.
- Waterproofing capillary crystalization mortar, slurry consistency. If structure movement is expected replace by elastic mortar.

PSS Watex Expansion Joints Expansion joints sealing

PSS WATEX EXPANSION JOINTS, expansion joints sealing system supply and apply according with the following procedure: Substrate preparation by mechanical means and high-pressure water cleaning to remove laitances, curing agent residues and other impurities on the concrete surface. Chisel out a reglet (15 x 5 cm) along the joint. Application of an elastic hypalon tape fixed with a 2 component epoxy adhesive. Reglet filling with low shrinkage repair mortar or microconcrete.

Scope: Internal waterproofing of new or existing slab and walls expansion joints subject to ground moisture or hydrostatic pressure.



PSS Watex Potable Water

Potable water retaining structures waterproofing

PSS WATEX POTABLE WATER, potable water retaining structures waterproofing system supply and apply according with the following procedure: Substrate preparation by mechanical means and high-pressure water cleaning to remove laitances, curing agent residues and other impurities on the concrete surface. On vertical surfaces application of two coats of elastic mortar, approved for use in contact with potable water, with a total coverage of 6 Kg/m². On slab application of three coats of elastic mortar, approved for use in contact with potable water, with a total coverage of 9 Kg/m², including construction and expansion joints treatment and sealing.

Scope: Waterproofing of new or existing potable water retaining structures and treatment plants.



On vertical surfaces, 2 coats of elastic mortar, approved for potable water. On slab, 3 coats of

elastic mortar, approved for potable water.

PSS Watex Channels Channel waterproofing

PSS WATEX CHANNELS, concrete channel waterproofing system supply and apply according with the following procedure: Substrate preparation by mechanical means and high-pressure water cleaning to remove laitances, curing agent residues and other impurities on the concrete surface. Application of two coats of elastic mortar with a total coverage of 6 Kg/m². Including construction and expansion joints treatment and sealing.

Scope: Waterproofing of new or existing water channels.





PSS Watex Sewage Sewage treatment plants waterproofing

PSS WATEX SEWAGE, sewage treatment plant structures waterproofing system supply and apply according with the following procedure: Substrate preparation by mechanical means and high-pressure water cleaning to remove laitances, curing agent residues and other impurities on the concrete surface. On vertical surfaces application of three coats of high chemical resistance elastic mortar with a total coverage of 9 Kg/m². On slab, application of four coats of high chemical resistance elastic mortar with a total coverage of 12 Kg/m², including construction and expansion joints treatment and sealing.

Scope: Waterproofing of new or existing sewage treatment plants.



PSS Aquactive Joints / Cracks

Joint & Cracks sealing injection

PSS WATEX AQUACTIVE JOINTS injection crack and joint sealing system supply and apply according with the following procedure: Removal of all standing water. Drilling at a 45° degree angle along the joint/crack where possible to intersect joint interface halfway through the thickness of the substrate. Drilling depth should be half the thickness of the concrete. Installing mechanical injection packers and secure in place in alternate positioning from left side to right side along the joint/crack where possible with a distance between holes of 15 cm. Start injecting by an electric pump Hydroactive 1C PU Resin at the lowest pressure setting, slowly increasing the pressure until the resin begins to flow. Pressures may vary from 15 bars to 200 bars depending on the size of the crack, the thickness of the concrete and the general condition of the concrete.

Scope: Joints and crack sealing with high hydrostatic pressure

PSS Aquactive Diaphragm Wall Joints Joint & Cracks sealing in diaphragm walls

PSS WATEX AQUACTIVE DIAPHRAGM WALLS injection crack, joint sealing system supply and apply according with the following procedure: Removal of all standing water. Drilling at a 45° degree angle along the joint/crack where possible to intersect joint interface halfway through the thickness of the substrate. Drilling depth should be half the thickness of the concrete. Installing mechanical injection packers and secure in place in alternate positioning from left side to right side along the joint/crack where possible with a distance between holes of 25 cm. Start injecting by an electric pump Hydroactive 1C PU Resin at the lowest pressure setting, slowly increasing the pressure until the resin begins to flow. Pressures may vary from 50 bars to 200 bars depending on the size of the crack, the thickness of the concrete and the general condition of the concrete.

Scope: Big leakages in diaphragm walls under high hydrostatic pressure.





PSS Aquactive Soil High strength soil stabilisation.

PSS WATEX AQUACTIVE SOIL injection crack, joint sealing system supply and apply according with the following procedure: Determination of the suitability of the soil to be grouted, full study of the situation and the characteristics of the soil prior to commencing the injections. Installation of the injection tube (sleeve port pipe /strainer pipe) to the planned depth. Injection with Hydroactive 1C PU Soil Resin controlling withdrawal of the injection tube at predetermined depths and time intervals. Continuing the injection following prior steps to ensure overlap with previously injected areas.

Scope: Soil stabilization even in presence of high flows of water.



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Roofing

Roof waterproofing coating is very important. Roofs are not just visual features; they fulfill the crucial role of protection. Be it a classic flat roof or a dome roof, every roof structure has a unique character. Being the highest point in a building, they take a battering from the elements and leaking is common after a few years. PSS offers liquid-applied Polyurethane & Polyurea waterproofing systems for roof coating with long-term protection for simple, detailed or complicated roof structures.

Exposed areas like roofs, balconies, terraces, walkways, loggias, the roofs of underground car parks used as plazas and outdoor seating areas can be decorated also with our decorative waterproofing system, which offers long-term protection against decay, and on the same time provides a beautiful environment for those that use it the waterproofed surface year after year.

Roofing Liquid-applied waterproofing Systems

PSS Elastop

PSS Elastop is the technologically advanced, premium liquid polyurethane waterproofing system that offers guaranteed long lasting results. It can be used as a new flat roof coating, but also for repair or renewal. It can also be applied to any sort of roof.

The PSS Elastop system consists of different products, dependant on the roofs characteristics. When applied, it forms seamless membrane without joints, resistant to water, heat and frost and to root penetration. It is water vapor permeable and provides excellent thermal, weather and UV resistance. It also provides high sun reflectivity, contributing to thermoinsulation. It can be used for pedestrian and vehicular traffic and remains flexible over a temperature span of -40oC to +90oC.

PSS Decoflex

Waterproofing, crucial for the life of the building, don't need to look boring! Professional, long lasting waterproofing can be done in such a way that the waterproofed surface is decorative, contributing to the value of the properties. Exposed areas like roofs, balconies, terraces, walkways, loggias, the roofs of underground car parks used as plazas and outdoor seating areas can be decorated with the PSS Decoflex system. The finishing color, pattern and texture can be chosen from a palette of colors, meeting every landlord, tenant or architects decorative demand.



Roofing Liquid-applied waterproofing Systems

PSS Elastop PU

Polyurethane liquid-applied membrane for waterproofing

PSS ELASTOP PU, liquid membrane waterproofing system supply and apply according with the following procedure: Substrate preparation by mechanical means and high-pressure water cleaning to remove laitances, curing agent residues and other impurities on the concrete surface. Application of a priming layer onto the prepared surface with a 2-component waterbased epoxy resin, flash point > 90°C, free of nonylphenol, with a consumption approx. 150 g/m². First coating layer application with a 1-component PU liquid membrane, with a consumption approx. 1 Kg/m². Second coating layer with a 1-component PU liquid membrane. 1 Kg/m².

Scope: Waterproofing coating for protection of: Tiles, gypsum and cement boards, polyurethane insulation foams, bathrooms, verandas and balconies, roofs, light roofing made of metal or fibrous cement, asphalt membranes, EPDM membranes,

PSS Elastop Polyurea

Polyurea liquid-applied membrane for waterproofing high traffic resistant

PSS ELASTOP POLYUREA, liquid membrane waterproofing system supply and apply according with the following procedure: Substrate preparation by mechanical means and high-pressure water cleaning to remove laitances, curing agent residues and other impurities on the concrete surface. Application of a priming layer onto the prepared surface with a 2-component waterbased epoxy resin, flash point > 90°C, free of nonylphenol, with a consumption approx. 150 g/m². Application by hot spray of a coat of a 2C aliphatic polyurea membrane, with a consumption approx. 2 Kg/m².

Scope: Waterproofing coating for protection of: Tiles, gypsum and cement boards, polyurethane insulation foams, roofs, light roofing made of metal or fibrous cement, car parks and stadium stands.





PSS Elastop Polybit Polyurethane-bitumen liquid-applied membrane for waterproofing

PSS ELASTOP POLYBIT, liquid membrane waterproofing system supply and apply according with the following procedure: Substrate preparation by mechanical means and high-pressure water cleaning to remove laitances, curing agent residues and other impurities on the concrete surface. Application of a priming layer onto the prepared surface with a 2-component waterbased epoxy resin, flash point > 90°C, free of nonylphenol, with a consumption approx. 150 g/m². Application of a coat of a 2C aliphatic polyurethane-bitumen membrane, with a consumption approx. 2,5 Kg/m².

Scope: Waterproofing coating for protection of: Gypsum and cement boards, roofs, light roofing made of metal or fibrous cement, car parks and stadium stands, asphalt membranes, EPDM membranes.



Roofing Liquid-applied waterproofing Systems

PSS Polybit Bridge Deck

Bridge deck waterproofing

PSS ELASTOP POLYBIT BRIDGE, liquid membrane bridge deck waterproofing system supply and apply according with the following procedure: Substrate preparation by mechanical means and high-pressure water cleaning to remove laitances, curing agent residues and other impurities on the concrete surface. Application of a first coat of a 2C aliphatic polyurethane-bitumen membrane, with a consumption approx. 1 kg Kg/m². Application of a second coat of a 2C aliphatic polyurethane-bitumen membrane, sprinkled with clean dry quartz sand Ø 1- 1.5 mm (approx. 1,5 kg/m²), with a consumption approx. 1 kg Kg/m².

Scope: Bridge decks.



PSS Decoflex PU Polyurethane decorative liquid-applied membrane for waterproofing

PSS DECOFLEX PU, decorative liquid membrane waterproofing system supply and apply according with the following procedure: Substrate preparation by mechanical means and high-pressure water cleaning to remove laitances, curing agent residues and other impurities on the concrete surface. Application of a priming layer onto the prepared surface with a 2-component waterbased epoxy resin, flash point > 90°C, free of nonylphenol, with a consumption approx. 150 g/m². First coating layer application with a 1-component PU liquid membrane, with a consumption approx. 1,5 Kg/m². Second coating layer with a 1-component PU liquid membrane, sprinkled with colored dry quartz sand (approx. 1,5 kg/m²), with a consumption approx. 1 kg/m². Application of a transparent protection aliphatic PU Top Coat with a consumption of 400 gr/m².

Scope: Decorative waterproofing coating for protection of: gypsum and cement boards, bathrooms, verandas and balconies, roofs.

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PSS Decoflex Polybit Polyurea-bitumen decorative liquid-applied membrane for waterproofing

PSS DECOFLEX POLYBIT, decorative liquid membrane waterproofing system supply and apply according with the following procedure: Substrate preparation by mechanical means and high-pressure water cleaning to remove laitances, curing agent residues and other impurities on the concrete surface. Application of a priming layer onto the prepared surface with a 2-component waterbased epoxy resin, flash point > 90°C, free of nonylphenol, with a consumption approx. 150 g/m². Application of a coat of a 2C aliphatic polyurea-bitumen membrane, with a consumption approx. 1,5 Kg/m². Application of a second coat of a 2C aliphatic polyurea-bitumen membrane, sprinkled with colored dry quartz sand (approx. 1,5 kg/m²), with a consumption approx. 1 kg Kg/m².

Scope: Decorative waterproofing coating for protection of: gypsum and cement boards, bathrooms, verandas and balconies, roofs.



A successful Waterproofing Project

Waterproofing, because it is so difficult to access, should have a design life as long as that of the building. With so many opportunities for damage, incorrect design, or poor execution, waterproofing systems can fail well before their time. When this happens, architectural investigation is needed to determine the location and cause of the leak, the extent of the damage, and the appropriate remedy.

Water infiltration doesn't fix itself. While it can be a major undertaking to properly identify and correct faulty waterproofing, it is far worse to adopt a patch-it-and-hope-for-the-best attitude. All too often, even well-meaning attempts at treating the symptoms of waterproofing failure serve only to trap or redirect moisture, compounding the problem. Until the waterproofing deficiency is resolved, the problem will only get worse.

Waterproofing encompasses a wide range of products and applications in a variety of industries. The end user is the key to understanding the needs of any industry and, more specifically, the performance expectations within a particular facility. If an installation meets expectations, it is successful. The dificulty is in determining those expectations.



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be green