







Superior products, services and support across Asia Pacific and around the world

Master Builders Solutions is a global brand of advanced chemical solutions designed for applications in building projects, from new construction to maintenance, repair, rehabilitation and upgrading, for the light industry and other sectors.

The comprehensive portfolio of products marketed under the brand include concrete admixtures, cement additives, grouts, concrete repair and protection solutions, waterproofing solutions, sealants and flooring solutions.

Benefits

Reduced downtime

Master Builders Solutions offers a full range of products to enable a fast return to service, hence minimizing downtime. Many of its products such as the Ucrete flooring solution can be installed in weekends or overnight. Another example is Master X-Seed, which can achieve up to 50 percent reduction in concrete hardening time.

Enhanced health and safety

Master Builders Solutions contributes to a healthier environment for installers and building occupants through lower toxicity and VOC emissions of its products, which are also resistant to the growth of bacteria and fungi. Slips, trips and falls are another leading cause of injuries and accidents. These mishaps can be prevented by the non-skid flooring systems offered by the brand.

Global solutions – Local support

Backed by a network of production sites across over 60 countries globally, the strong presence of Master Builders Solutions in Asia Pacific offers easy and ready access to local sales and technical support. Our dedicated team of technical professionals are also on hand to help you find the best solutions, regardless of your location.

Durability

The innovative systems, customized products and expert services of Master Builders Solutions are designed to meet the highest benchmarks of performance – improving strength, durability, energy efficiency and safety – while making construction structures last longer.

Cost-effectiveness

By enhancing the durability of structures, Master Builders Solutions products provide for easy maintenance and lower maintenance costs, while preventing losses in production time due to regular maintenance or repair needs.



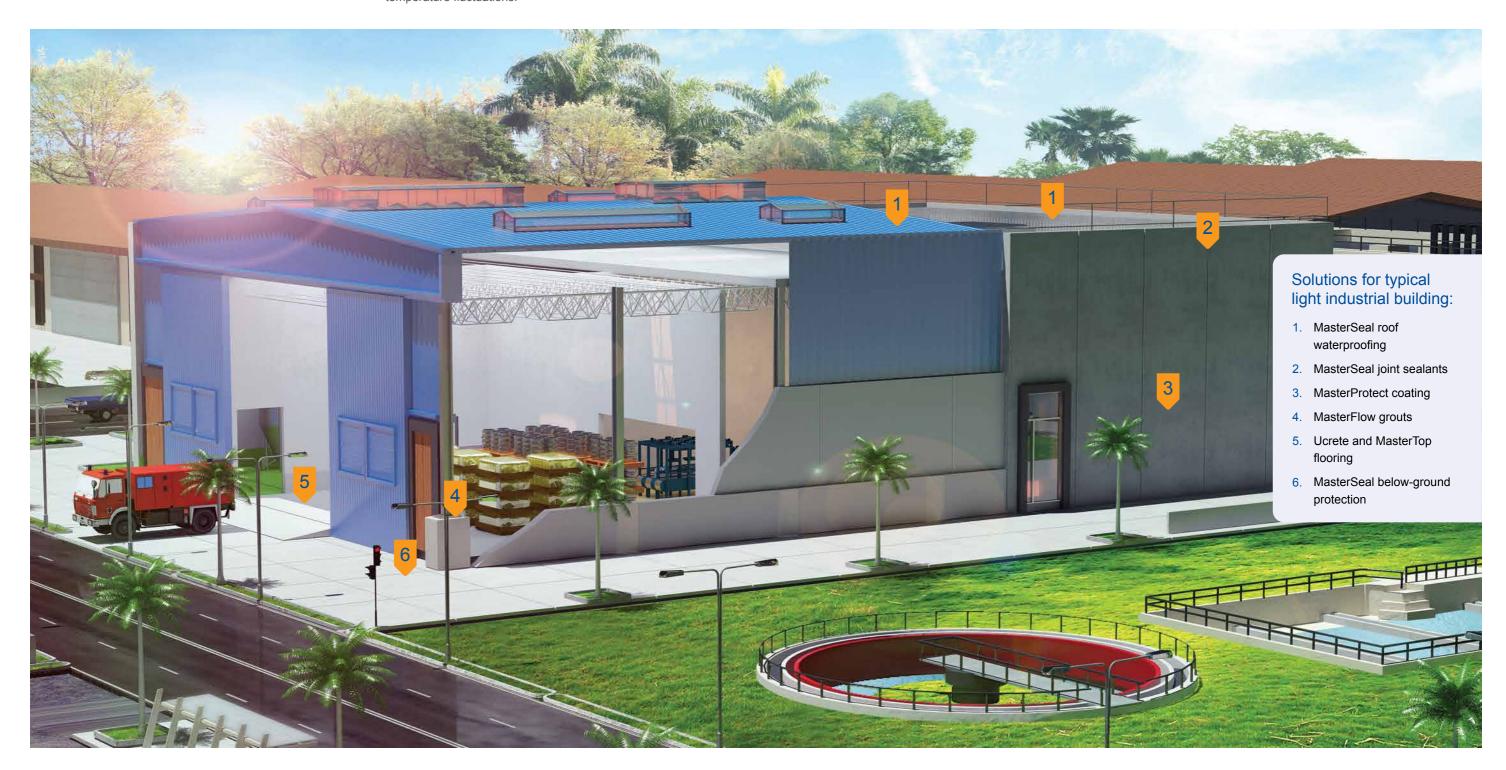
Industrial buildings and facilities

Industrial property covers a diverse range of building types from large pre-engineered steel structures to concrete masonry units. While these buildings have different functions, they are typically designed with large floor slabs, clear internal space and high bays to provide highly flexible internal layouts and optimal floor plate efficiency. For certain light industrial facilities, metal-sheet rooftops are common.

Light industrial buildings are expected to provide a structured environment for people, machineries and equipment with an emphasis on productivity. Not only do these buildings cater to the environmental requirements of their internal activities and processes, they must also be durable and resistant to harsh external conditions such as heavy rain, snow, the sun's UV radiation and temperature fluctuations.



Master Builders Solutions offers a broad variety of solutions applicable to the entire lifespan of light industrial architectures and other building types, to ensure both their outer facades and internal environments remain intact through long periods of time.



Product guide for

Good



Exterior surfaces

Facades and other exterior surfaces of industrial buildings are constantly subject to weather extremities. Along with a host of unpredictable environmental factors, surfaces must be protected to avoid regular repair and maintenance works, both below- and above-ground level, to ensure their structural integrity.

Below-ground: concrete and blockwork foundations

Concrete and blockwork foundations beneath industrial buildings are vulnerable to the aggressive attack of waterborne chemicals found in soil. If left unprotected, foundations can get damaged and cause corrosion of steel.

Master Builders Solutions provides cost-effective, high-performance solutions to deliver concrete durability by protecting below-ground foundation structures against ingress of water and corrosion and preventing premature building failures.

below-ground wa		oroofing	and p	orotectio	on		Negative waterproofing	Resistant to w	Resistant to	salts	Crack bridging	Ease of application
Product	De	Description										
MasterSeal 501		Surface applied crystalline waterproofing system for concrete and block work						√ √	6 v	6	×	///
MasterSeal HLM 5000 R	Liqu	Liquid cold-applied waterproofing membrane system				×	11	V V	✓·	//	//	
MasterProtect 1812	Pitc	Pitch extended epoxy coating					×	V v	(Vv	1	✓	√
MasterSeal 726		Self-adhesive, polymer-modified bituminous waterproofing membrane					×	11	V V	V	//	//
Product guide fo joint sealants	r	Primer free application (on most substrates)	Expansion and construction joints	External movement joints, walls and roofs	Internal movement joints	Internal floor joints / trafficable joints	Jersey barriers, precast and tilt-up	Window and door frames	Water tanks and channels	Low strength substrates	Moisture tolerance	Chemical resistant
Product												
MasterSeal NP 472		/ /	11	11	11	✓.	11	//	×	11	×	✓.
MasterSeal NP 474		11	11	✓	11	111	11	/ /	√√√ ¹	×	×	✓.
MasterSeal HY 495		11	11	//	11	✓.	✓.	✓	✓	11	11	✓.
MasterSeal CR 460		×	VV	×	11	111	×	×	×	×	×	111
Remarks: 1 = With primer												-

Roofs - metal sheets and concrete

Roof leakages give rise to water ingress problems likely to undermine the concrete building structure. Water leaks may also cause damage to raw materials, products, machinery and technical equipment. Given the same conditions, metal sheet roofs will corrode and affect the building's long-term durability, requiring costly repair. Durable, watertight and efficient solutions are provided under the Master Builders Solutions brand for both concrete and metal-sheet roofs.

Product guide for roof waterproofing		Foot traffic	For metal roofs	Ease of application	UV resistance	Crack bridging	Aesthetics	Thermal insulation
Product	Description							
MasterSeal 378 / 388	Acrylic waterproofing and solar reflective membrane	~	//	///	//	✓	//	//
MasterSeal M 640	Single component polyurethane waterproofing membrane	√ √	√ √ ²	///	VV	11	///	√√√ 3
MasterSeal 750 TPE	Synthetic waterproofing membrane of TPO	√ √	///	11	///	111	///	√√√ ³
MasterSeal M 800	Spray applied elastomeric polymer waterproofing membrane	111	√√√ ²	11	/ / /	///	///	√√√ 3
MasterSeal M 803	Spray-applied elastomeric polymer waterproofing membrane Ratio: 1 : 0.7	111	√√√ ²	44	VVV	111	111	√√√ 3

Remarks: 1 = With additional topcoat 2 = With special primer 3 = With additional insulation

Above-ground: concrete, block and masonry walls

Exposed to wind-driven rain, UV radiation and other harsh elements; building facades, especially the outer walls, are prone to wear-and-tear problems, including cracks, displacements, leaks, corrosion and deterioration. Wall coatings and joint sealants from Master Builders Solutions are formulated to protect the walls and facades of buildings, safeguard their internal environments and ensure that the productivity, comfort and safety of people working in them remain uncompromised.

| | | | |

Product guide for above-ground waterproofing and protection		Resistant to efflorescence	Anti carbonatio	Resistant to chloride ion diffusion	UV resistance	Crack bridging	Aesthetics
Product	Description						
MasterProtect 200	Flexible, decorative waterproof and protective coating for external concrete and masonry surfaces	11	11	11	11	√	11
MasterProtect 300	High-build, crack-bridging, elastomeric, protective and waterproof coating for concrete and masonry	///	111	///	///	///	///
MasterProtect H 200	Water-based silane penetrating sealer	11	//	11	///	111	×
MasterProtect H 1100	Hydrophobic impregnation based on isobutyltriethoxysilane	111	111	111	111	111	×
MasterSeal 583	Single component polymer modified waterproof coating for concrete and masonry	1	✓	✓	√	✓	✓



Interior surfaces

The interiors of industrial buildings and facilities, including the floorings, inner walls and ceilings, are routinely exposed to chemical, mechanical and thermal hazards. Such surfaces need protection in order to continue to provide an operationally efficient and safe working environment.

Floors

Factories, warehouses and other light industrial facilities require flooring that can meet the demands dictated by the ongoing activities that take place in them. Master Builders Solutions offers a diverse assortment of flooring products capable of fulfilling several operational and safety requirements for these buildings:

Product guide for flooring systems		Abrasion resistance	Impact resistance	Dust proofing	Slip resistance	Thermal shocl resistance	Hygiene and cleanabilty	Chemical resistance	Non-tainting	Electrical compatibility	Aesthetics
Product	Description 1 = 1	With anti	-slip gra	ins 2	e = Anti-s	static / D	Dissipati	ve versi	on 3	= Heav	y impact
MasterTop 100	Cementitious natural aggregate, dry-shake surface hardener	11	×	11	V	×	×	×	×	×	¥.
MasterTop 200	Cementitious iron armoured, dry-shake surface hardener	///	×	11	✓	×	×	×	×	×	✓.
MasterTop 330	Cementitious heavy duty, high strength iron aggregate topping	///	111	//	✓	×	×	×	×	×	✓.
MasterTop 410	Cementitious natural mineral aggregate, dry-shake surface hardener	//	×	//	✓	×	×	×	×	×	✓
MasterTop 1080	Solvent-based epoxy coating	✓	×	///	√ 1	×	✓	✓	×	×	//
MasterTop 1110	Water dispersed epoxy resin coating	✓	×	///	√ 1	×	✓	✓	×	×	//
MasterTop 1230	Self levelling epoxy flooring system	11	×	///	VV	×	✓	//	×	√√ ²	///
MasterTop 1324	Self levelling PU flooring system	11	✓.	111	///	×	✓	11	×	√√ ²	111
MasterTop 1912	Self levelling epoxy flooring system with Xolutec top coat	111	×	111	11	×	11	11	×	×	111
MasterTop 1913	Self levelling PU flooring system with Xolutec top coat	///	✓	///	//	×	//	//	×	×	///
Ucrete MF	Self levelling HDPU flooring system	///	111	///	√	//	///	///	///	√√ ²	11
Ucrete HFRT	Flow applied HDPU flooring system	///	111	///	//	///	///	///	///	×	11
Ucrete DP	Multi layer HDPU flooring system	111	111	111	111	111	///	111	111	√√ ²	11
Ucrete UD 200	Trowel-applied HDPU flooring system	111	111	111	111	111	///	111	111	×	11
Ucrete IF	Trowel-applied HDPU flooring system	111	111	111	///	///	///	111	111	×	11
Ucrete RG	Trowel-applied HDPU coving mortar	111	111	111	11	111	111	111	111	×	11
G	ood ✓ Better	11		Best		V.V.	(Not sui	itable	>	<

Ucrete® and **MasterTop**® flooring systems provide a wide range of solutions to meet operational and safety requirements.



Dust-proofing and abrasion resistance

Increase the durability of floorings and their resistance to abrasion that might otherwise produce a dusty environment.



Slip resistance

Provide range of surface profiles with textures to prevent slips, falls and trips to cut down occupational accidents and injuries.



Mechanical - impact resistance

Provide excellent mechanical properties to withstand the heavy impact of falling objects and prevent floor damage, work interruption and an unsafe environment.



Thermal shock resistance

Remain unaffected until temperatures of 130 degree and occasional 150 degree Celsius. Provide a range of thicknesses to protect the substrate from the enormous stresses of a thermal shock event and arrest premature failures.



Hygiene and cleanabilty

Prevent bacteria growth, while ensuring that flooring systems can be cleaned to stainless steel standards and ensure sanitation for a hygienic environment.



Chemical resistance

Withstands aggressive chemical exposure derived from operational and cleaning process thus eliminating damage and maintenance costs.



Non-tainting

Allows flooring to be laid in presence of food without altering the taste and smell in situations where expansion or repairs are required.



Electrical compatibility

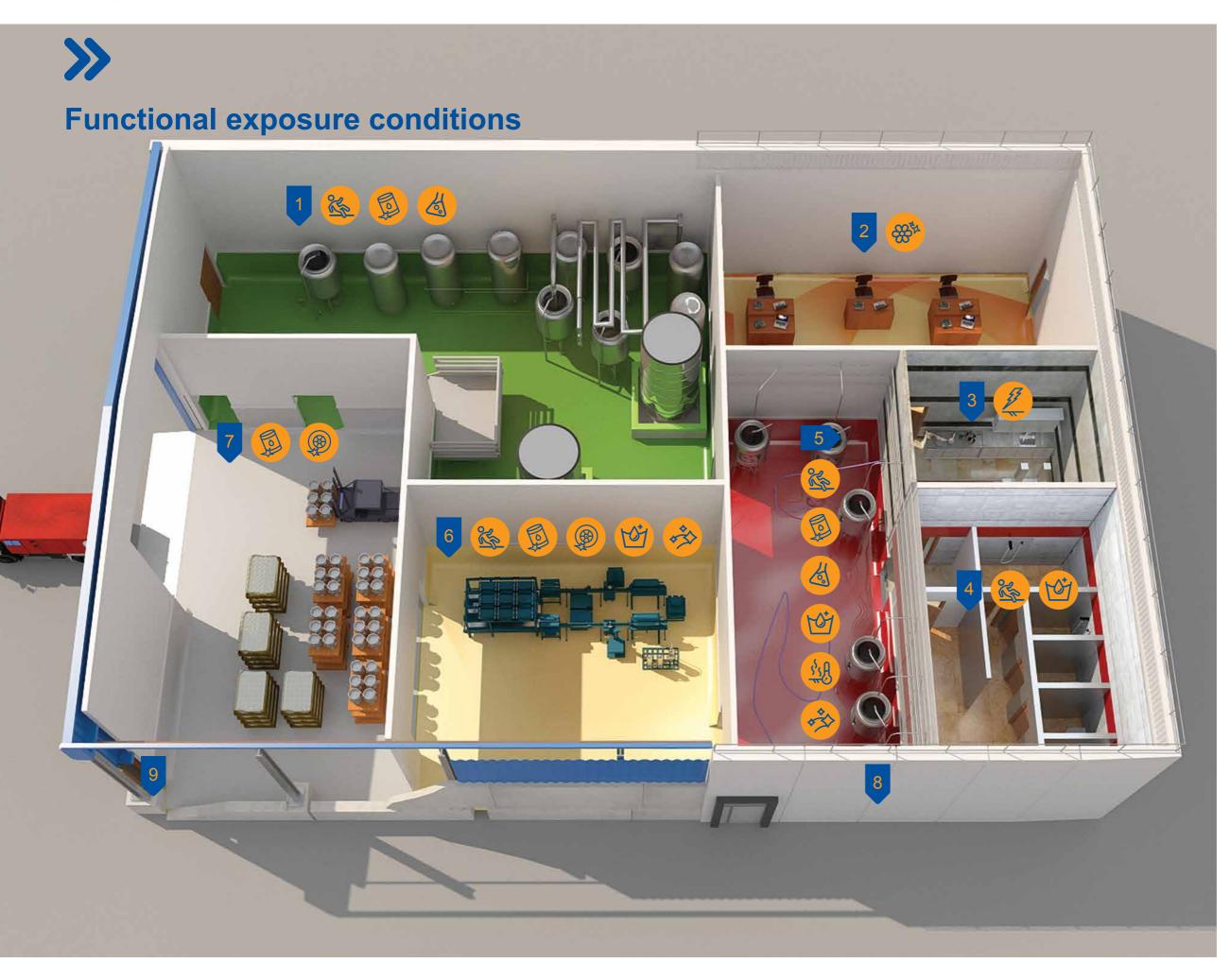
Provide antistatic and conductive properties needed to control undesired static electricity so as to prevent explosions, potential damage to electronic equipment and other safety and production repercussions.



Aesthetics

Wide range of colors and textures available to enhance the aesthetics of industrial spaces and color-indication for different operations for easy identifications and to improve efficiency.

Solutions for Light Industry





Ucrete flooring systems

Office area

MasterTop decorative flooring system

Laboratory

Ucrete anti-static flooring

Washrooms and staff lockers

MasterSeal waterproofing MasterTile adhesives and tile fixing system

Production area

Ucrete flooring systems

Packaging facilities MasterFlow grouts Ucrete flooring systems

Warehousing and delivery

MasterTop and Ucrete flooring

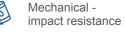
Exterior and interior construction joints

MasterSeal sealants

Structural columns grouting MasterFlow grouts

Legend:

Slip resistance



Chemical resistance

Aesthetics

Electrostatic compatibility

Hygiene and cleanabilty

Dust-proofing and abrasion resistance

Thermal shock resistance





Interior walls, coves and drains

Interior walls, coves and drains need to provide a surface to meet the functional requirements and overcome the added challenge of potentially forming joints and seams where bacteria can breed.

Flooring must have a seamless interface with drains, coves and walls to achieve a hygienic environment.





Equipment grouting

Static, reciprocating and dynamic load transfers require heavy Industrial equipment to be properly grouted in place.

Grout delivers this vital interface to protect equipment assets and ensures a smooth production process.



Wet area waterproofing

Shower rooms, kitchens and toilets are constantly exposed to water which subjects them to structural damage as well as promote an unhealthy environment and interrupt the production process.

Waterproofing membranes and tile adhesives must provide a watertight solution for structure durability and hygiene.



Product guide for interior walls, coves and drains		Seamless	Non-toxic	Anti-microbial	Thermal shock resistance	Chemical resistance
Product	Description					
MasterTop 1110	Water dispersed epoxy resin coating	111	11	×	×	√
MasterProtect 180	Solvent free high build epoxy resin coating	111	11	×	×	/ /
MasterTop WS 100 AB	Antibacterial polyurethane wall system	111	11	111	×	~
Ucrete RG	Multi component HDPU high build lining mortar	/ /	///	///	///	///

Product guide for equipment grouting		Static loads	High strength	Dynamic loads	Reciprocating loads	Chemical resistance	Fast equipment installation
Product	Description	·					
MasterFlow 100	Natural aggregate, general purpose non shrink grout	///	✓.	×	×	×	×
MasterFlow 718	Natural aggregate cementitious non shrink cementitious grout	11	11	✓	×	×	11
MasterFlow 870	Cementitious very high strength non-shrink precision grout	✓	///	///	///	×	/ /
MasterFlow 410	Flowable epoxy resin grout	✓.	111	111	111	111	111

Product guide for wet area waterproofing		Ease of application	Gypsum board	Direct tile application	Crack bridging	Fast turnaround
Product	Description					
MasterSeal 540 ¹	Flexible, polymer modified two part waterproofing coating	V	11	√ ²	✓	√
MasterSeal 583 ¹	Polymer modified single component waterproof coating	11	11	√ ²	✓	11
MasterSeal 561 ¹	Flexible polymer mastic system waterproofing	111	///	///	/ /	111

Remarks: 1 = With MasterSeal WP tapes 2 = Mortar screed required



Water management

Substantial amounts of potable water is used in the manufacturing process, while equally large volumes of effluent is generated at the same time. Safe management of both potable and effluent is important in meeting the requirements of health, safety and environmental compliance.

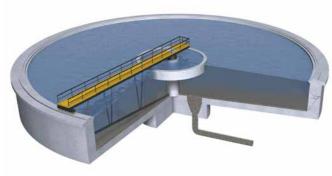
Potable water tanks and treatment

The onsite treatment and safe storage of potable water, over extended periods of time, is a basic need for many industries. Waterproofing and protection systems must ensure water tanks remain watertight and complies to potable water standards.



Non-potable tanks and waste water treatment

Wastewater infrastructures, including tanks and sewers, are exposed to harsh chemicals that can cause significant damage and create costly rehabilitation or maintenance works. While concrete is very durable, it can be susceptible to corrosion, dilapidation, cracks and erosion, leading to its structural failure and environmental contamination. Waterproofing and protective systems must safeguard wastewater treatment facilities and the infrastructure from the aggresive exposure.



Not suitable

Product guide for
water management

Good

water managen	nent	Chemic	Abrasio	Crack b (moving	Moistur	Potable	Ease of applicat
Product	Description						
MasterProtect 180	A non-toxic solvent free high build, protective epoxy coating	//	V V	×	×	11	V V
MasterProtect 1812	Pitch extended epoxy coating	11	11	×	×	×	//
MasterSeal 7000 CR	Two component protective membrane based on Xolutec	///	///	V V	///	×	///
MasterSeal M 689	Ultra fast curing, spray applied polyurea coating	111	///	111	✓	///	✓



Concrete repairs

Reinforced concrete, a primary component in many industrial structures, is prone to deterioration owing to protracted exposure to the environment and manufacturing process. It is necessary to protect and repair these structures to ensure their structural integrity, durability and safety.

Structural concrete repairs

Steel-reinforced concrete structures require protection and maintenance to prevent the onset of corrosion, which can lead to unnecessary downtime. Concrete repair and protection systems must minimize and prevent the loss of structural integrity in these structures and ensure uninterrupted operations.



Non-structural concrete repairs

Even non-structural elements can cause safety hazards and interrupt production if not prevented or properly restored. Concrete repair and protection systems must be fast and easy to apply to eliminate potential safety risks.



Not suitable

Product guide for concrete repairs

Good

		Non-s repair	Struct	Struct applie	Struct	Thickerepair
Product	Description					
MasterEmaco N 5100	Cementitious polymer modified thin layer fairing mortar	11	×	×	×	×
MasterEmaco S 5400	High-strength, shrinkage compensated, fiber reinforced, structural repair mortar	×	///	×	×	///
MasterEmaco S 466	High-strength, dual-shrinkage compensated, flowable micro concrete for concrete repairs	×	×	111	×	///
MasterEmaco T 288	Rapid setting high-strength micro concrete for trafficable surfaces	×	111	×	///	11

MasterSeal 7000 CR and MasterTop TC 941 are powered by Xolutec® – our unique technology developed for improved durability, to solve the problems of demanding environments.

Xolutec® is the result of our development work on advancing PU and PUA materials. The goal was to solve the problems of concrete and steel in demanding environments.

Xolutec® – developed by Master Builders Solutions experts – uniquely combines complementary chemistries. Optimization of the inter phase interactions between the highly crosslinked resin blocks and the separately cured inorganic elements, creates a high-density organic-inorganic material with outstanding characteristics. This network allows the enhancement of various characteristics. Xolutec® enables a wide variety of solutions with enhanced durability.

Xolutec® is very low in volatile organic compounds (VOC) and is quick and easy to apply with both spray and hand application equipment, depending on the requirements. It cures rapidly, even at low temperatures thus reducing application time and enabling fast return to service with minimal downtime.

The technology is insensitive to moisture and tolerates a wide variety of site conditions, greatly expanding the application window while reducing the potential for delays and failures.

Long maintenance cycles and lower life cycle costs significantly reduce the total cost of ownership.

Xolutec's extreme versatility and capacity to formulate a wide variety of solutions for specific requirements create a new dimension in material technology for the construction industry, including MasterSeal 7000 CR and MasterTop TC 941.

MasterTop TC 941

The innovative topcoat with exceptional cleanability and scratch resistance for hard wearing solutions.

MasterTop TC 941 is a pigmented, non solvented, two component topcoat producing a light stable, tough and durable surface with a lightly structured gloss finish that has exceptional scratch and wear resistance. It is used to provide aesthetic durable floors for industrial and commercial applications.

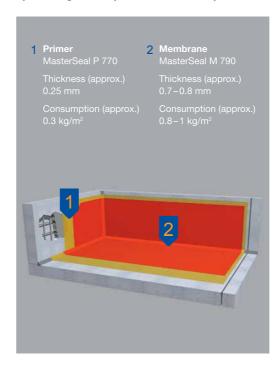


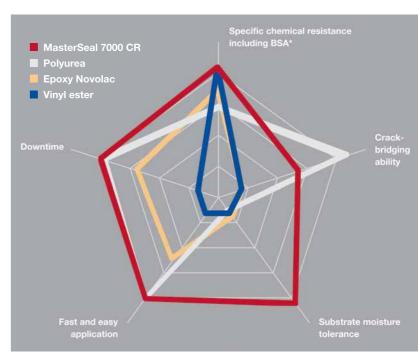


MasterSeal 7000 CR

360° Protection for Extreme Conditions

Solution for waterproofing and concrete protection system with a unique combination of application and performance properties that meet the challenges of aggressive wastewater environments. The performance-proven MasterSeal 7000 CR system significantly extends the life cycle of concrete structures.

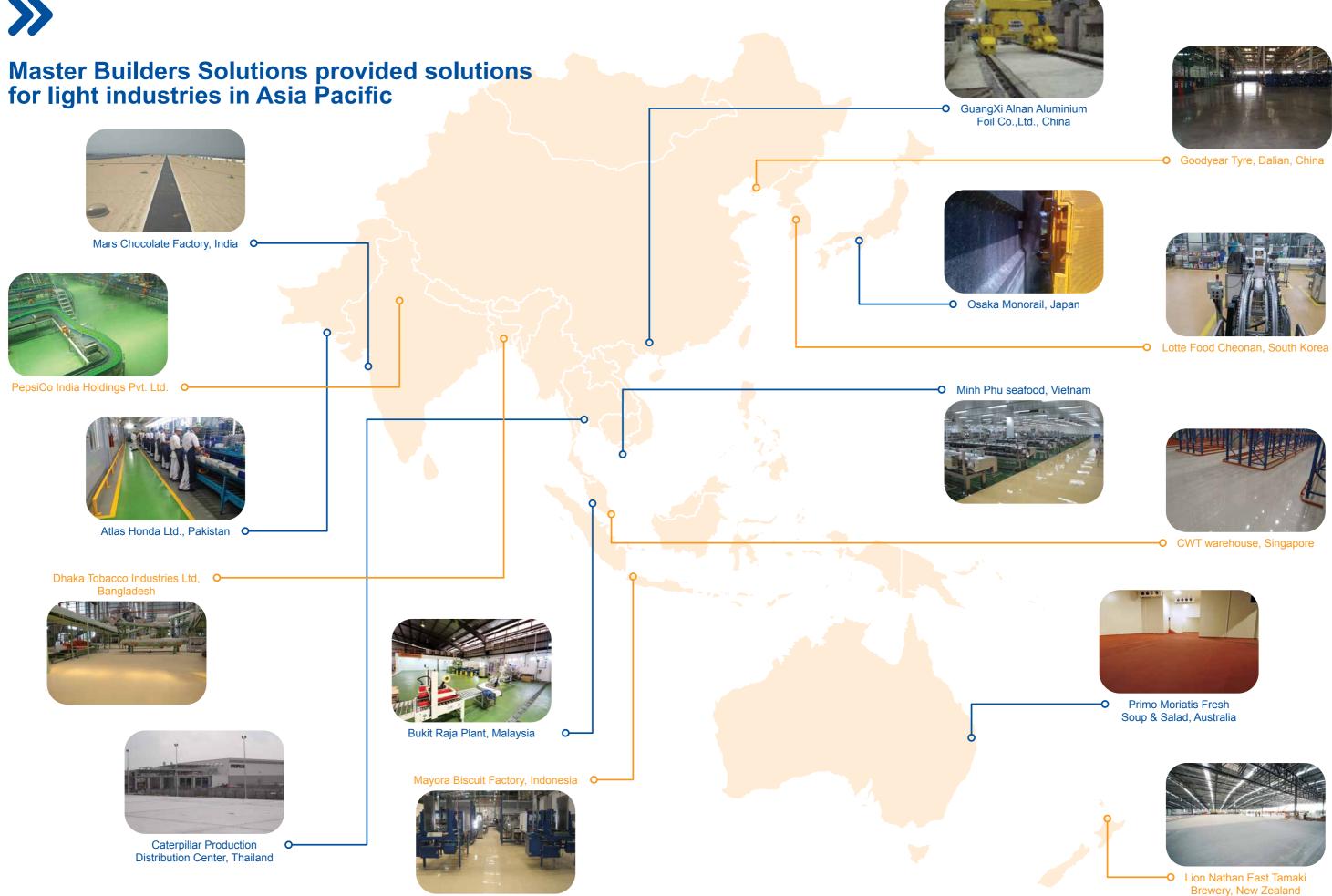




* "Specific chemical resistance" refers here to the chemical resistance to BSA and also organic acids.









Master Builders Solutions for the Construction Industry

MasterAir®

Complete solutions for air entrained concrete

MasterBrace®

Solutions for concrete strengthening

MasterCast®

Solutions for hyperplasticized concrete

MasterCell®

Density reducing admixtures

MasterCem[®]

Solutions for cement manufacture

MasterEase®

Solutions for low viscosity concrete

MasterEmaco®

Solutions for concrete repair

MasterFinish®

Solutions for formwork treatment

MasterFlow®

Solutions for precision grouting

MasterGlenium®

Hyperplasticizer formulated from state-of-art polymers for ultimate performance

MasterInject®

Solutions for concrete injection

MasterKure®

Solutions for concrete curing

MasterLife®

Solutions for enhanced durability

MasterMatrix®

Advanced rheology control solutions for self-consolidating concrete

MasterPel®

Solutions for water tight concrete

MasterPolyheed®

Solutions for high performance concrete

MasterPozzolith®

Solutions for waterreduced concrete

MasterProtect®

Solutions for concrete protection

MasterRheobuild®

Solutions for super plasticized concrete

MasterRoc®

Solutions for underground construction

MasterSeal®

Solutions for waterproofing and sealing

MasterSet®

Solutions for retardation control

MasterSuna®

Solutions for everyday concrete

MasterSure®

Solutions for workability control

MasterTile®

Solutions for tiling systems

MasterTop®

Solutions for industrial and commercial floors

MasterWeld™

Adhesives solutions for construction

MasterX-Seed®

Advanced accelerator solutions for concrete

Ucrete®

Flooring solutions for harsh environments

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