



# Master Builders Solutions Construction Chemicals





# Master Builders Solutions

Master Builders Solutions is MBCC Group brand of advanced chemical solutions for construction. The Master Builders Solutions brand is built on the experience gained from more than 100 years in the construction industry. The comprehensive portfolio under the Master Builders Solutions brand encompasses lasting solutions for new construction, maintenance, repair and renovation of structures: concrete admixtures, cement additives, chemical solutions for underground construction, waterproofing solutions, sealants, repair & protection solutions, performance grouts, tiling solutions and performance flooring solutions.

The Master Builders Solutions brand is backed by a global community of construction experts. To solve our customers' specific construction challenges from conception through to completion a project, we combine our know-how across areas of expertise and regions and draw on the experience gained in countless construction projects worldwide. We leverage global technologies, as well as our in-depth knowledge of local building needs, to develop innovations that help make our customers more successful and drive sustainable construction. For more information please visit [www.master-builders-solutions.com/en-za](http://www.master-builders-solutions.com/en-za)





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## About MBCC Group

The MBCC Group is one of the leading suppliers of construction chemicals and solutions worldwide and has emerged from the carve-out of the former BASF Construction Chemicals business from BASF Group. We offer innovative and sustainable products and solutions for the construction industry across different sectors, such as buildings, structures, underground construction, new construction, as well as for renovation. Our strong brands Master Builders Solutions®, PCI®, Thermotek®, Wolman®, Colorbiotics® and Watson Bowman Acme® are well established in the marketplace. With our innovations, we address sustainability challenges in the industry. MBCC Group consists of approximately 70 legal entities worldwide and is home to around 7,500 construction experts in over 60 countries.

## Our presence and role in the Gulf Region

By anticipating needs and analyzing complex problems, we are able to develop customized solutions to solve challenges and meet the requirements of every project.

Master Builders Solutions Construction Chemicals LLC, Dubai, is the Regional Headquarters for the Middle Eastern & African markets. With joint efforts with office in Oman and distributors in Bahrain and Kuwait Master Builders Solutions has developed an enviable reputation on the quality of its products and services in the Gulf Region. It was the first company to achieve OHSAS 18001 health and safety management standards and is also certified to meet the requirements of ISO 9001 and ISO 14001.

As infrastructure develops rapidly around us we have a crucial role to play in assisting project teams. We offer sound technical advice to clients, consultants, contractors and architects from specification support at design phase right through to site support to ensure successful project completion.



# Master Builders Solutions - from Products to Successful Projects

With our brand **Master Builders Solutions** we are offering complete solutions that are possible, thanks to our professional Research and Development specialists and that include the support of our Technical Services Team.

## Research and Development

With very strong bonds with the Technical specialists in all relevant countries, our fully recognized Research and Development Team lays the foundation for the long-term success of our customers.

Through constant work in new technologies and products and as part of Master Builders Solutions' comprehensive global R&D network, they develop solutions for the regional challenges including the diverse climate and standards requirements. Our experts' full dedication in combining Master Builders Solutions technologies with in-depth knowledge of the local market results in the right solutions for today and tomorrow's construction industry.

## Technical Services Team

Master Builders Solutions has a GCC Technical Services Team that provides technical expertise and recommendations throughout the different project stages. Being the largest team of its kind in the region, they mitigate the possibilities of application failure thus allowing our customers to meet their project deadlines. In addition to recommendations and testing, their site visits include mock-up installations.

To ensure the correct application of our products, the Technical Services Team conducts applicator trainings both on site and at our Master Builders Solutions Training Center and issues their corresponding certification. This Team is also accountable for organizing interesting workshops and seminars for customers on new technologies and applications.







# Sustainability

Master Builders Solutions' innovative systems, customized products and expert services are designed to meet or exceed the highest benchmarks of performance – improving strength, durability, energy efficiency and safety, while making construction more economical, enduring and beautiful. Master Builders Solutions takes a holistic approach to helping our customers construct high-performance structures with increased commercial, environmental and social values. The Master Builders Solutions portfolio contributes to sustainable development in the following ways:

- Lowering heat island effect and reducing emissions
- Contributing to greater energy efficiency and reduced utility costs through improved insulation and lower lighting requirements
- Preserving resources through the use of recycled and renewable materials and products that enhance the durability of structures
- Reducing risk exposure through solutions that save labor, enable faster construction and save customers money
- Providing solutions that support water conservation
- Contributing to a healthier environment for installers and building occupants through lower toxicity and VOC emissions as well as products resistant to the growth of bacteria and fungi
- Improving safety with skid-resistant and seismic solutions

As an example of our analytical technologies designed to limit resource consumption and emissions, Green Sense® Concrete system utilizes specially formulated admixtures combined with a unique mixture optimization service that requires considerably less



supplementary cementitious materials, thus reducing the waste of products slated for landfills and CO<sup>2</sup> emissions in the production of concrete.

As a founding member of the Emirates Green Building Council, we are committed to develop green building principles for protecting the environment in the United Arab Emirates. Moreover, we were the first company in Dubai to achieve OHSAS 18001. Based on our global expertise, we are not only committed to provide our customers with customized solutions but to continually innovate in the field of sustainable construction.



# Admixtures

Master Builders Solutions is recognized as the global leader in the field of Admixture Systems and has been working closely with customers for over a century to provide intelligent solutions for every stage of the construction cycle. The Admixture Systems business specifically helps customers in the ready-mix, precast and manufactured concrete products.

Admixture Systems from Master Builders Solutions have been the leading driver of the concrete industry through several innovation cycles, while creating breakthroughs with state-of-the-art technology such as MasterGlenium®.

We have developed innovative products for various concrete applications, including high-performance concrete, high-strength concrete, self-compacting concrete, durable concrete, waterproof concrete and a host of other solutions to meet market needs. With our innovative product range, concrete becomes easier to place and finish. This allows a continuous and efficient construction process in high temperatures. Additionally, admixtures are able to accelerate or delay the hardening of concrete and increase final strength and durability.

We address key issues for the construction industry in:

## Durability

Our state-of-the-art admixtures – MasterGlenium, MasterPolyheed® and MasterRheobuild® – have unique water-reducing properties and allow the use of optimized quantities of supplementary cementitious materials (e.g. slag, fly ash, micro silica). These help in achieving greater durability for critical structures through reduction of permeability, water absorption and resistance to chloride and sulphate attack. Appropriate admixture specialties such as MasterLife® range further enhance the durability of concrete.



## Workability

MasterGlenium or MasterPolyheed in combination with MasterMatrix® can be used effectively to produce self-compacting concrete that eliminates the need for vibration and reduces manpower, while achieving high-quality concrete with an excellent finish. Our capabilities to bring innovative solutions to the challenges faced by the concrete industry makes Master Builders Solutions the ideal partner for producers and designers alike.



# Underground Construction

With our global underground construction team, we are a world leader in the provision of reliable, customer oriented solutions focused on your needs in the tunneling and mining industries. We recognize that your success is underpinned by our ability to deliver solutions that meet or exceed your critical needs.

For more than 15 years Master Builders Solutions has been the only construction chemicals company in the Middle East to provide dedicated underground construction expertise. By accompanying you from the start of your project and understanding the issues that are important to you, our locally based UGC specialists contribute to your success. They are on hand around the clock and support you with product training and quality control, helping you with specialist technical advice and trouble shooting.

## Sprayed Concrete

For lower health risks and less environmental impact during production than dry mixtures, our wet mix permanent sprayed concrete tunnel linings provide state-of-the-art single shell structures with time and cost reductions in comparison to conventional tunnel designs.

## Injection

Pre-injecting the ground with microcement is an economical approach to avoid unexpected water ingress, while post-injection may be required for soil stabilization or even structural repairs. Master Builders Solutions offers a complete range of high performance chemical injection products and technical support.

## TBM

Our innovative total solution approach makes TBM drives more successful, even in highly challenging ground conditions. Master Builders Solutions has the largest range of products and services available for TBM tunneling, suitable for TBM projects of all sizes, including those with the largest diameters and 4 bar water pressure.

## Waterproofing

Master Builders Solutions' innovative spray applied waterproofing membrane, applied in a sandwich construction between sprayed / cast concrete shells, provides excellent bonding between membrane and concrete to facilitate single shell linings and eliminate potential water paths.

## Fire Protection

In a tunnel fire, a thermal barrier prevents explosive concrete spalling without loss in strength of structural concrete or decreased reinforcement tensile strength. High production rates, an even finish and controlled minimal thickness make the cementitious sprayed thermal barrier MasterRoc® FP1350 ideal for both new build tunnels and existing tunnel linings with limited available space.

## Service

Our global presence supports seamless technology and service transfer for international contractor and design teams. Master Builders Solutions' professional, technical and site support for products and application are recognized as the best in the tunnel construction and mining industry.







## Repair and Protection Systems

Master Builders Solutions has formulated a range of systems conforming to local and international standards that meet the rigorous demands of property owners, contractors and the ever changing climatic conditions and environmental pollutants encountered during the construction and repair of concrete structures.

Our repair and protection solutions help extend concrete structure's lifespan with safe and proven products that have been developed with the understanding of the chemistry behind the process of concrete degradation. The correct and timely maintenance of concrete structures is essential to guarantee they reach their designed lifespan. However, when deterioration does occur, a repair methodology should be applied taking into consideration both the environment and the causes of the damage to the structure.

Master Builders Solutions' range of MasterEmaco® repair mortars are formulated to resist cracking and to be compatible with the parent concrete of the structure. MasterEmaco products deliver excellent performance due to our understanding of the chemistry involved in the hardening of cementitious products and the incorporation of the latest advances in hydration control. Master Builders Solutions combines these advanced repair products with MasterProtect® anti carbonation coatings, protective coatings and passive cathodic protection to create systems that help to reinstate the building's original design



characteristics and prevent further degradation. Our portfolio also includes sound solutions for rehabilitation of wharves, bridges, roads, tunnels, buildings as well as sewers and water retaining structures.

Master Builders Solutions Polymer based injection resin systems are designed for the repairing and sealing of cracks in concrete. Our MasterInject® epoxy resins for structural crack repair are often used in conjunction with our MasterBrace® or MasterEmaco products. The MasterInject polyurethane and MasterSeal® acrylic injection resins are chosen for the control of active water infiltration and are used in conjunction with our MasterSeal waterproofing products.





# Waterproofing Solutions

## One of the most critical challenges

facing concrete structures today is moisture penetration. Interior or exterior, above or below grade, unprotected structures suffer from water-induced damage, including deterioration and corrosion caused by alkalis, salts, acids and mold. Liquid-applied high performance membranes and cementitious coatings offer long-lasting protection against the most damaging conditions.

Our waterproofing portfolio includes cementitious-based polymer-modified waterproofing products and PVC membranes. Master Builders Solutions' knowledge of polyurethane and polyurea chemistry has created MasterSeal flexible and tough spray applied membrane systems. Spray applied and very fast curing means that the structure can be waterproofed quickly thus speeding up construction. MasterSeal systems have the benefit of being cold applied, avoiding the odor and fire risk of hot works, and are ideal for vertical surfaces due to its easy application also in complex surfaces.

Our specific solutions are ideal for water management structures such as reservoirs, dams and wastewater and desalination plants, and they also deliver an excellent performance in underground construction, car parks, roofing and building structures.

These solutions help increasing efficiency and saving resources with the following:

- **Managing water scarcity while water demand is increasing**  
Waterproofing saves water by preventing losses due to leaks
- **Protecting the environment through sustainability**  
Waterproofing in infrastructure and industry prevents pollution of ground water
- **Improving health**  
Safe potable water supply with certified Waterproofing membranes
- **Preventing obliteration of dry region**  
Waterproofing of irrigation channels safeguards water supply
- **Conserving public and private assets**  
Waterproofing protects valuable assets from water damage and consequential loss





## Performance Flooring Solutions

Master Builders Solutions develops and markets durable and attractive industrial and commercial flooring using cementitious, epoxy and polyurethane resin technologies. Our competence in flooring and protective coatings is based on many years experience gained across the world in a variety of climatic and service conditions. We have specified, manufactured and supplied millions of square meters of performance flooring globally for an international client base.

Our MasterTop® product range offers cementitious, epoxy and polyurethane-based flooring systems for decorative or industrial use. The MasterTop cementitious floors applied at the time of concrete installation are ideal for situations where the floor will be subject to high traffic loads or abrasive environments.

The MasterTop epoxy floor range includes general purpose to highly chemically resistant floors for industrial environments. The MasterTop polyurethane range includes decorative and durable architectural and commercial flooring systems with choice of color, texture and performance properties. MasterTop DTZ is a hard wearing highly decorative epoxy terrazzo floor covering used in public space areas subject to high volumes of rolling wheels and foot traffic. It provides the ultimate in low maintenance and durability,

typically lasting the life of the structure. It is composed of zero VOC naturally occurring aggregates, recycled glass and an epoxy binder, utilizing wherever possible locally sourced materials.

Master Builders Solutions' world leading Ucrete® floors are the choice of the chemical and food and beverage manufacturers worldwide due to their high resistance to chemicals, heat and superior wear characteristics. Ucrete, a heavy duty polyurethane cement hybrid has superior chemical resistance and being water based can be applied onto damp substrates. Their fast curing characteristics and ability to be disinfected to the same level as stainless steel has made them the floor of choice for food manufacturers globally. MasterTop and Ucrete are acknowledged internationally as the benchmark for industrial flooring systems.





## Sealants

The integrity of a structure is often only as good as the sealants used wherever two surfaces are joined together. Formulated with high performance elastomers, joint sealants ensure outstanding weatherproofing and protection against the most aggressive conditions. From self-leveling, non-sag, chemical and water-resistant, to color-matching, the right sealants will stand the test of time – beautifully.



## Performance Grouts



Precision grouts are flowable construction materials used for structural stabilization and load transfer. Master Builders Solutions offers a complete line of cementitious and polymer based materials for precision grouting of machinery.

The MasterFlow® range of precision grouts has evolved through over 80 years of innovation and product development. The engineering demands on grouts of load transmission, dimensional stability, durability and toughness combined with ease of application have been the driving forces behind our development. MasterFlow epoxy based grouts were developed to meet the need of fast return of the equipment to service even in areas of chemical exposure.

MasterFlow grouts have continued to evolve, providing the engineer with the vital link between equipment and foundation for all types of construction.

# Expansion Control Systems

Watson Bowman Acme is the recognized innovator in the design, development and manufacture of expansion joint control systems for the construction industry. Wabo® brand specializes in the area of mechanical expansion joints and bridge bearings.

Expansion Joints deliver an excellent performance in heavy duty bridges, warehouses and car parks – a comprehensive offer also including column guards, wall guards and loading bay fenders – as well as in the lighter duty residential and commercial buildings. These are made to suit the application conditions and performance requirements. Wabo Expansion Joints not only bring the highest quality solutions to the most complex problems but are aesthetically pleasing and blend easily with the surroundings.

Wabo also offers a range of bridge bearings that are available in elastomeric or pot versions and can also be supplied to meet the design input criteria of loading, movement and rotation.



**wabo®**





## Project References

Every construction project is different and poses unique challenges for our customers. From the tallest building in the world – the comprehensive portfolio of products and services under the Master Builders Solutions brand continues to break statistical records in construction.

- Using the MasterGlenium® Sky high-level water-reducing admixture, we pumped concrete 691 meters high using only one concrete pump to make the world's tallest building, Burj Khalifa, Dubai.
- The region's largest international department store, Yas Mall (Abu Dhabi) counts with 100,000m<sup>2</sup> of tiling adhesives by Master Builders Solutions.
- Every existing civil engineering structure in Bahrain has our products including bearings, expansion joints, grouts, repair materials and various other products.

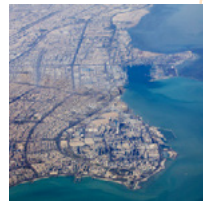


### Radisson Blu Renovation

With continuous support of the Technical Services Team, Master Builders Solutions was involved in the renovation of the Radisson Blu Hotel, providing a single source supplier solution



### Al Hamra Firdous Mixed Use Complex



### Sabah Al Ahmad Sea City



### Greg Norman Golf Course at The Wave

Master Builders Solutions provided 50,000m<sup>2</sup> of waterproofing PVC membranes for the Greg Norman golf course lakes at The Wave.



### The Grand Mosque

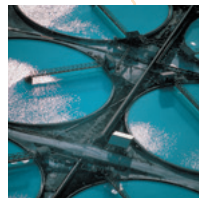
The tile adhesives for mosaic tiles on the mosque dome.



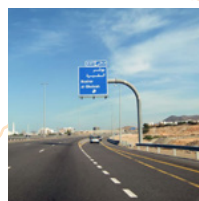
### Qurum City Centre



### Seeb Wastewater Project



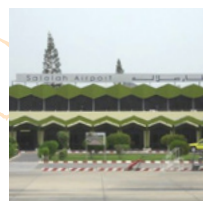
### Salalah Reservoirs



### Muscat Expressway



### Sur Road



### Salalah International Airport



### Megabody Workshop at Ghala

KUWAIT

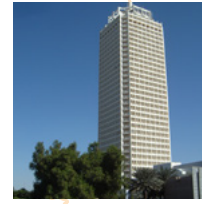
BAHRAIN

UNITED ARAB  
EMIRATES

OMAN

**Burj Khalifa**

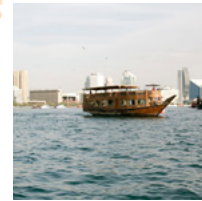
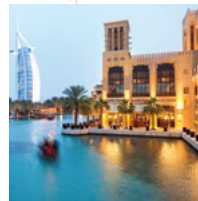
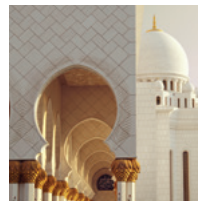
The tallest building in the world. Beyond the limits, Master Builders Solutions pumped concrete to a world record height of 600m.

**Dubai World Trade Centre**

Our floor Ucrete was installed in the kitchens of the WTC and has shown an impeccable performance for more than 10 years.

**Dubai Metro**

Master Builders Solutions engineered and supplied a range of cementitious and epoxy grouts for the longest driverless metro line in the world

**Burj Al Arab****Dubai Marina****Emirates Towers****Mall of Emirates****Dubai Creek****Business Bay****Madinat Jumeirah****Jebel Ali Free Zone & Port****Dubai International Airport****Sheikh Zayed Grand Mosque****Bahrain bridges and interchanges**

Every existing structure in Bahrain has Master Builders Solutions products including bearings, expansion joints, grouts, repair materials and various other products.

**Four Seasons Hotel**

Master Builders Solutions products were used extensively for Waterproofing, Concrete Repair, Grouting and Sealing applications, together with a large supply of Performance Flooring Coatings.





# Master Builders Solutions for the Construction Industry

## **MasterAir®**

Complete Solutions for air entrained concrete

## **MasterBrace®**

Solutions for strengthening and structural adhesives

## **MasterCast®**

Solutions for the manufactured concrete product industry

## **MasterEase®**

Solutions for low viscosity concrete

## **MasterEmaco®**

Solutions for concrete repair

## **MasterFiber®**

Comprehensive solutions for fiber reinforced concrete

## **MasterFinish®**

Solutions for formwork treatment

## **MasterFlow®**

Solutions for precision grouting

## **MasterGlenium®**

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

## **MasterInject®**

Solutions for concrete injection

## **MasterKure®**

Solutions for concrete curing

## **MasterLife®**

Solutions for enhanced durability

## **MasterMatrix®**

Advanced rheology control solutions

## **MasterPolyheed®**

High-performance superplasticizer

## **MasterPozzolith®**

Solutions for water-reduced concrete

## **MasterProtect®**

Solutions for concrete protection

## **MasterRheobuild®**

Superplasticizer for concrete

## **MasterRoc®**

Solutions for underground construction

## **MasterSeal®**

Solutions for waterproofing and sealing

## **MasterSet®**

Solutions for set control

## **MasterSuna®**

Superplasticizer for problematic aggregates

## **MasterTop®**

Solutions for industrial and commercial floors

## **Ucrete®**

Flooring solutions for harsh environments

## Regional Office

### South Africa

MB Construction Chemicals Solutions (Pty) Ltd  
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Midrand, Johannesburg, South Africa  
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## Legal Entities - Middle East & Africa

### Algeria

[www.master-builders-solutions.com/fr-dz](http://www.master-builders-solutions.com/fr-dz)

### Egypt

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### Near East

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### Saudi Arabia

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### South Africa

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### United Arab Emirates

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