



Seamless Decorative Terrazzo

Design by Imagination



Content

3. Introduction
4. Features & Benefits
5. Fields of Application
6. Green Terrazzo
7. United States Green Building Council
8. MasterTop® DTZ System Build-Up
9. MasterTop® DTZ Standard Matrix Examples & References
10. MasterTop® DTZ Divider Strips



Introduction

Terrazzo flooring has a long & rich history that dates back over 1,500 years. Terrazzo from the Italian word for terrace is one of the original recycled products created by Venetian construction workers utilizing marble chips from marble slab production to create a decorative finish on residential terrace floors.

Today terrazzo flooring continues to provide the ultimate in durability and low maintenance, typically lasting the life of the building. The combination of beauty, durability and low maintenance has led to a renaissance in the use of terrazzo over the past decade. The demand for terrazzo is increasing in many markets, from performance driven institutions such as schools, airports, and hospitals; to the designer driven markets of retail and commercial buildings. Terrazzo is the ultimate choice when evaluating finishes on a life cycle basis.

Master Builders Solutions recognizes the benefits of terrazzo flooring and have developed the MasterTop® DTZ floor system utilizing re-cycled glass, marble & granite fillers. With a complete range of excellent products from one supplier, Master Builders Solutions takes into account all the necessary requirements to produce a stunning terrazzo floor finish.





Features & Benefits

Indestructible

MasterTop DTZ Terrazzo by Master Builders Solutions stands alone as a premier flooring system. This virtually ageless flooring material is composed of marble chips or other aggregates set within a matrix of a binding medium, such as epoxy or cement. Terrazzo floors in some parts of Europe are still in use and still as attractive, centuries after their installation.

Adaptable

MasterTop DTZ Terrazzo's flexibility of application, vast color selection and compatibility with other materials make it a leading choice for new construction as well as renovations. The look of MasterTop DTZ Terrazzo enhances other materials; glass, wood, metal, masonry or synthetic.

Colorful

MasterTop DTZ Terrazzo's color choices are unlimited. The broad spectrum of natural marble and glass aggregates combine to give architects, designers and builders an enormous range of color possibilities. Terrazzo can be matched to most RAL colors to achieve a high visual impact.

Original

MasterTop DTZ Terrazzo is a poured-in-place system and can achieve the most imaginative of design possibilities. Through the creative use of divider strips, color, texture and dimension - our highly skilled installation contractors can perfectly interpret any pattern or design.

Sanitary

MasterTop DTZ Terrazzo is easy to clean and maintain because it is seamless. It is ideal for hospitals, restaurants, supermarkets and anywhere sanitary conditions are of paramount concern.

Safe

MasterTop DTZ Terrazzo can comply with any safety concern. Fireproof, non-slip, and sanitary. MasterTop DTZ Terrazzo has important safety advantages that should be taken into consideration when planning any application.

Comfortable

Terrazzo, according to U.S. Bureau of Standards (Report No. BMS 14) has, for all practical purposes affecting human fatigue, no less "give" under the foot, than wood, asphalt, tile or even regular inlaid linoleum.

Economical

Terrazzo is the most cost-efficient flooring material available. It offers the beauty and elegance of solid marble and granite at a fraction of the cost. Because terrazzo doesn't wear out like tile or need replacement every few years like carpet, it truly is the economical flooring alternative.





Fields of application



- Hotels
- Health Care Facilities
- Educational Institutions
- Libraries
- Museums
- Corporate HQ's
- Retail Centers
- Government Buildings
- Transportation
- Stadiums
- Entertainment
- Convention Centers

Health Care facilities need a floor rugged enough to withstand the rolling and foot traffic that a major hospital incurs. Often hospital owners want to make a statement and need a floor in its main common areas and corridors to compliment its floor to ceiling artistic design. The unlimited color palette and ability to create free form shapes and patterns can help define different sections and provide direction clues to visitors.

Library trolleys can be quietly pushed over MasterTop DTZ as there are no grout joints in this flooring. The long life of MasterTop DTZ helps minimize costs associated with renovations for these public service facilities.

Today's office buildings have limitless varieties of design themes, both inside and outside. One creative strategy that doesn't vary, however, is how entryways must always be clean and inviting. Because the lobbies of today's larger office buildings undergo a continuum of extensive, heavy foot-traffic on a daily basis, it's obvious the flooring material must not just be pretty.... but, pretty much indestructible.

Durable and easy-to-maintain, a MasterTop DTZ Terrazzo floor is the ideal choice for the lobbies of today's office buildings.

Highly decorative, a professional MasterTop DTZ Terrazzo installation will last as long as any building in which it appears. The most ancient of all floor coverings, it is enduring...and, endearing.





Green Terrazzo

Environmental Impact

The construction industry focuses on the environmental impact on most construction materials. The evaluation encompasses many elements which may be weighed on a scale of importance. These elements include the longevity of the material, the composition, maintenance, recycled content, embodied energy and the environmental impact.

Durability

Sustainable construction is at the centre of green construction. Terrazzo floors have an outstanding record of durability dating back thousands of years. The floors will typically last the life of the structure.

Low Maintenance

Thin-set epoxy terrazzo floors have extremely low maintenance costs. Annual stripping and resealing can utilize environmentally friendly water-based products. Routine maintenance includes dry and damp mopping, with an occasional spray buffing. In comparison, carpet requires energy intensive daily vacuuming and periodic steam cleaning.

Composition and Embodied Energy

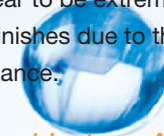
MasterTop DTZ is composed of naturally occurring aggregates, recycled glass and epoxy binders. The binder constitutes approximately 25%-30% of the volume of the terrazzo floors; the remainder of the floor is composed of aggregates, pigments and fillers. Initial life cycle assessments of embodied energy appear to be extremely favorable compared to other floor finishes due to the longevity and low energy usage for maintenance.

VOC Off-Gassing and Indoor Air Quality

MasterTop DTZ is composed of zero VOC materials. MasterTop DTZ exhibits little or no off gassing over the life of the cured floor. The non-porous, cleanable terrazzo finish does not support microbial growth, nor allow moisture to accumulate, helping to maintain a mold-free environment with improved indoor air quality.

Local Sourcing

MasterTop DTZ utilizes whenever possible locally sourced material. The terrazzo floors are cast in place on site minimizing postconsumer waste and transportation costs. By comparison, much of the marble, granite & natural stone floors laid in the Gulf is manufactured overseas and imported.





United States Green Building Council

“Leadership in Energy and Environmental Design”

MR Credit 1.2 Building Reuse

Maintain Interior Nonstructural Elements (1 point Possible)

Terrazzo floors typically last the life of the structure. In many renovation projects, the original terrazzo flooring has been restored to its original condition following inexpensive repairs and refinishing. Refinishing of MasterTop DTZ can be combined with the reuse of other areas like walls, doors & ceiling systems to achieve 50% re-use.

MR Credit 4

Recycled Content Credit (2 points possible)

MasterTop DTZ allows for incorporation of recycled glass as well as stone or marble that has been salvaged & re-crushed & sieved for the terrazzo trade. One point is granted for 10% recycled content & a second point for an additional 10% (20% total) of the total value of the recycled materials on the project. A floor containing 100% recycled glass would contain 75% by volume of recycled product. Aluminium strips may also contain recycled metal.

MR Credit 5

Regional Materials (2 points possible)

One point is awarded if 10% of the project building material is extracted, harvested or recovered, as well as manufactured within a 500 mile radius of the project and the calculation is based on the cost of raw materials. MasterTop DTZ is produced from raw materials mainly sourced from the region, within 500 miles of the factory. A second point can be awarded because the total percentage of the cost of Regional materials is greater than 20%.

IEQ Credit 4.3

Low-Emitting Materials - Flooring Systems (1 point possible)

MasterTop DTZ is based on 100% solids with zero VOC content.

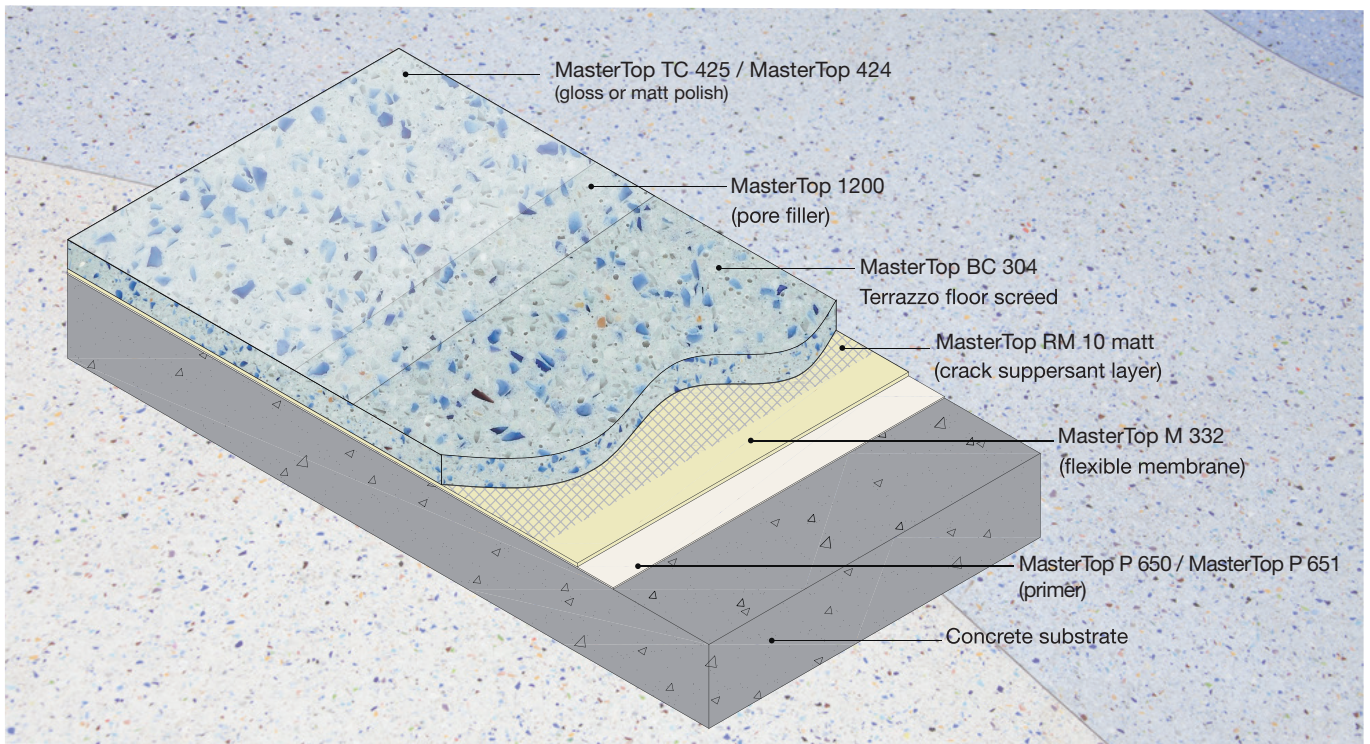
ID Credit 1

Innovative in Design (1 point possible)

MasterTop DTZ can potentially gain additional points under the Innovation and Design category for innovative performance in Green Building categories not specifically addressed by LEED. Extensive use of MasterTop DTZ as a predominant floor material can potentially result in an installation with a Life Cycle Analysis that exceeds that of other floor materials. Overall, on typical projects, MasterTop DTZ terrazzo can realistically contribute to 5 LEED credits: MR Credit 4 (2), MR Credit 5 (2), IEQ Credit 4.3 (1). On a case by case basis, MasterTop DTZ may also be able to contribute to MR Credit 1.2 (1), and in extreme cases ID Credit 1 (1) for a total of 7 points.



MasterTop DTZ: Thin-set epoxy terrazzo system build-up



Terrazzo Matrices

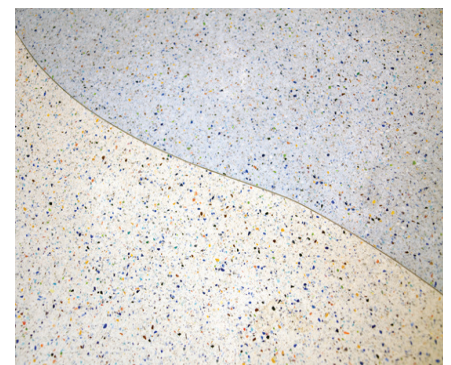
The special aggregates in terrazzo flooring are the primary ingredient of the terrazzo design mix, typically representing 70% of the floor system.

The Aggregate Size

MasterTop DTZ matrices follow the North American NTMA guidelines. Aggregates used are graded by number according to size in conformity with industry standards adopted by aggregate crushers. The aggregates that pass through the screen are based and sold as the particular size.

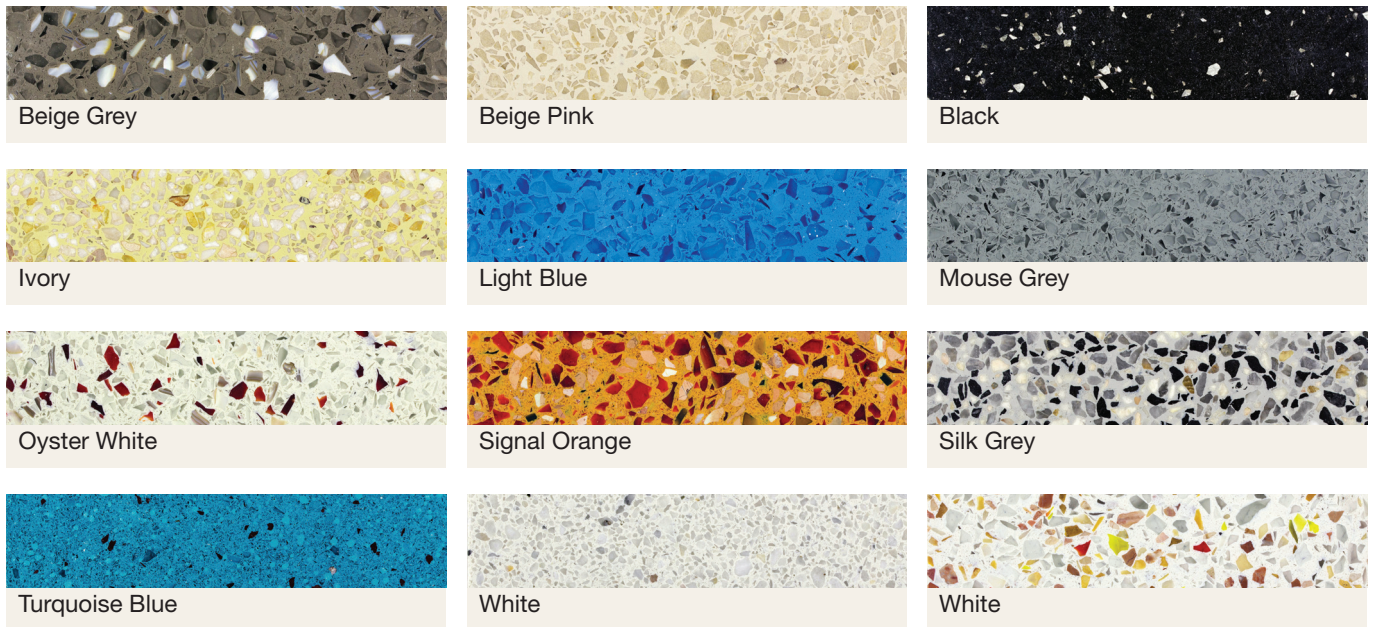
Terrazzo composed of #0 to #2 aggregates are referred to as Standard matrices. While patterns utilizing #3 and above are referred to as Venetian matrices.

Aggregate Size Chart			
Size #	Passes Screen	Retained on Screen	
Size # 0	1 mm	3 mm	Standard
Size # 1	3 mm	6 mm	
Size # 2	6 mm	10 mm	
Size # 3	10 mm	12 mm	Venetian





MasterTop DTZ: Standard Matrix Examples



The above colour plate represents typical finishes that can be achieved with a combination of standard sized aggregates. Different background colours can be chosen to good effect to change the appearance of the same matrix.

Please note: Applied colours may vary to these examples shown due to the printing process. For physical colour samples or alternative matrix designs and colours please consult with your Master Builders Solutions representative.

References

PROJECTS	COUNTRY
Children's Oncology Hospital, Cairo	Egypt
Villa in Gouna, Cairo	Egypt
Diabetic Hospital, Kuwait City	Kuwait
Ras Gas Tower Main Lobby Area, Doha	Qatar
Hamad Hospital, Doha	Qatar
Tabouk University, Main Lobby Area,	Saudi Arabia
Chevron Oil Company Control Rooms & Corridors, Jubail	Saudi Arabia
Sanko Park Shopping Center, Istanbul	Turkey
Optimum Shopping Center, Istanbul	Turkey
Forum Shopping Center, Istanbul	Turkey
Jebel Dhanna Hotel Resort, Main Lobby, Jebel Dhanna	UAE
IT College, Sharjah	UAE
Sorbonne University, Main lobby & Corridors, Abu Dhabi	UAE
Master Builders Solutions Training Room, Dubai	UAE
Cleveland Clinic, Abu Dhabi	UAE
Military Hospital, Sharjah	UAE
Sorbonne University, Abu Dhabi	UAE
Brighton College, Abu Dhabi	UAE



Divider Strips

Master Builders Solutions supplies divider strips as well as all the other components included in a terrazzo floor. We have taken the initiative to supply a line of divider strips specifically designed and manufactured for the terrazzo industry.

Why use Divider strips?

Divider strips are commonly used in terrazzo flooring to serve two basic needs: form & function. For thin-set epoxy terrazzo, the common divider strips are an "L" type manufactured in white zinc alloy, aluminum or brass.

Form



Aesthetically, divider strips are often the skeleton to the terrazzo floors design, offering architects and interior designers the ability to create custom designs and patterns. Divider strips may simply serve as a transition between colours or they may be bent on the job site to form intricate design, logo artwork and lettering. The thickness and metal of the divider strip may also be varied to compliment the flooring's design. The divider strip can be as apparent or discrete as your design requires.

Function



The primary function divider strips offer is to control cracking in terrazzo flooring topping. Typically divider strips are placed in areas where an architect or engineer believes the floor may crack. Instead of cracking in the panel or design of the flooring, the topping will crack along the divider strip joint. Some common areas where dividers strips are found are detailed overleaf.

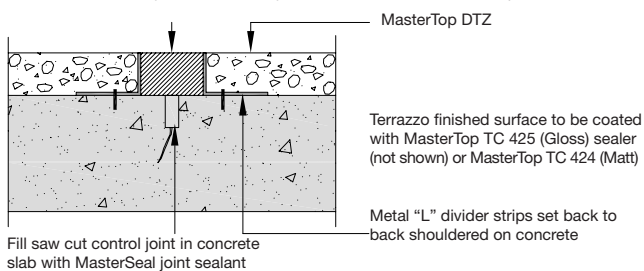
Support

As a one stop shop for all your terrazzo supply, Master Builders Solutions offers a comprehensive range of divider strips and terrazzo matrices in a wide range of colours. For more information on divider strips offered by Master Builders Solutions please contact your local Master Builders Solutions representative.



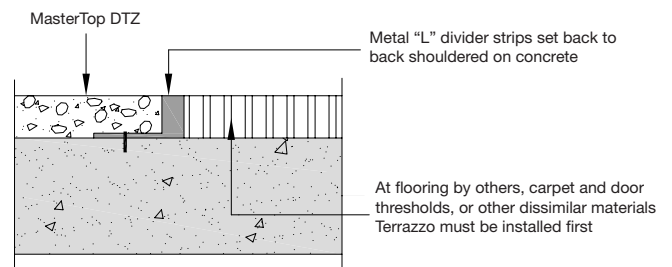
Control Joint Strips

"L" type strip is positioned adjacent to the joint
5 mm minimum control joint-MasterSeal joint sealant between divider strips



Termination Joint Strips

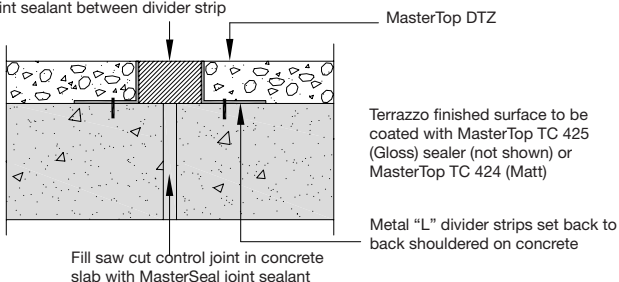
"L" type strip is positioned adjacent to dissimilar flooring or at door thresholds



Expansion Joint Strips (Isolation Joint)

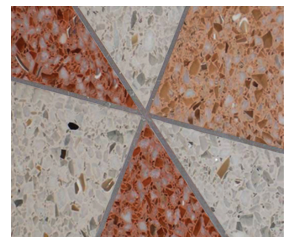
Two separate "L" type strips are positioned back to back with minimum of 5mm (13/64") width between

5mm (13/64") minimum control joint-MasterSeal joint sealant between divider strip



Divider Strip Sizes

10 mm x 1.6 mm	"L" - Aluminium
10 mm x 1.6 mm	"L" - Zinc
10 mm x 1.6 mm	"L" - Brass
10 mm x 3 mm	"L" - Aluminium
10 mm x 3 mm	"L" - Zinc
10 mm x 3 mm	"L" - Brass
10 mm x 6 mm	"L" - Aluminium
10 mm x 6 mm	"L" - Zinc
10 mm x 6 mm	"L" - Brass
12 mm x 3 mm	"L" - Zinc
12 mm x 3 mm	"L" - Brass





Master Builders Solutions

Master Builders Solutions

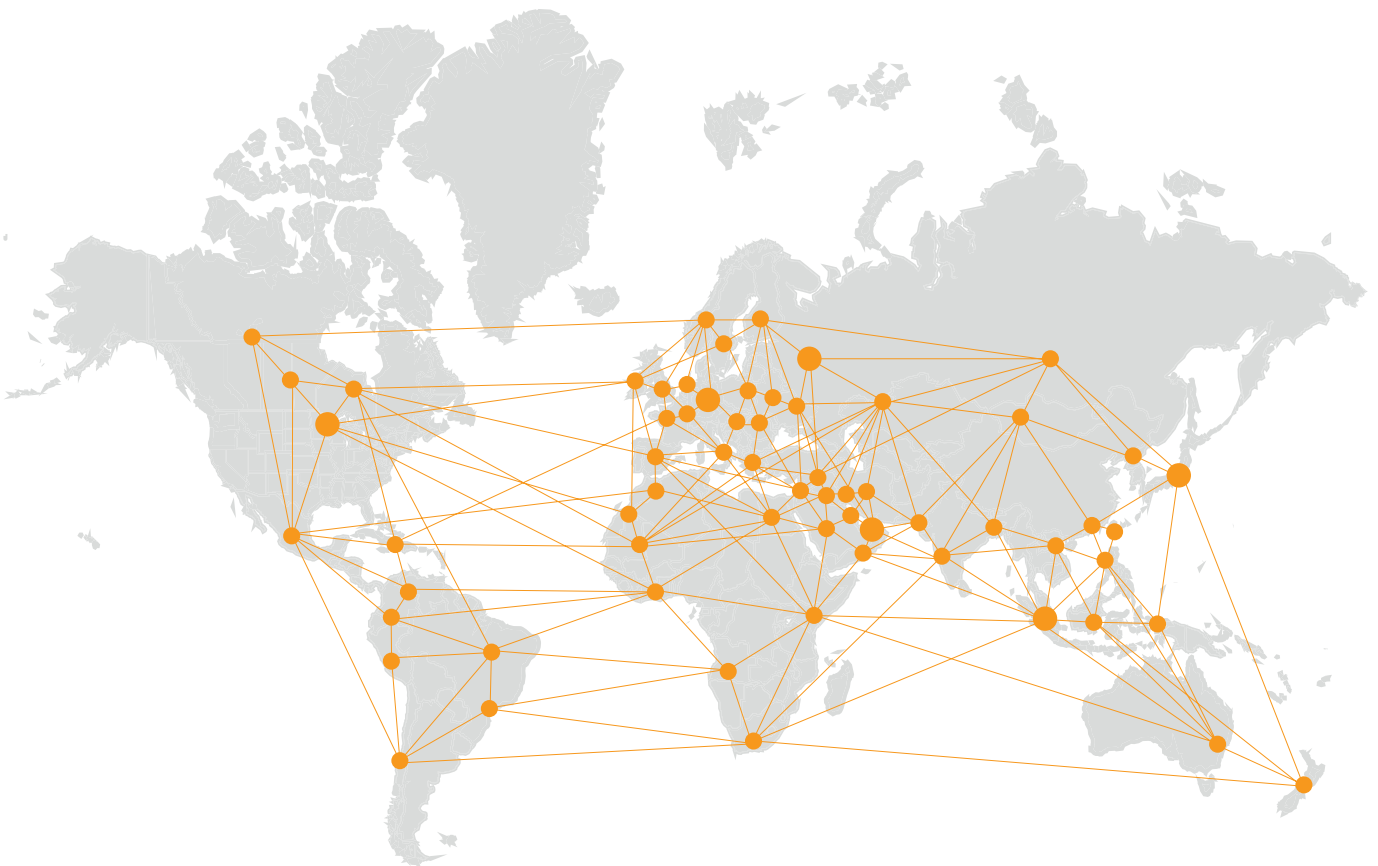
The Master Builders Solutions brand brings all of expertise together to create chemical solutions for new construction, maintenance, repair and renovation of structures. Master Builders Solutions is built on the experience gained from more than a century in the construction industry.

The know-how and experience of a global community of construction experts form the core of Master Builders Solutions. We combine the right elements from our portfolio to solve specific construction challenges. We collaborate across areas of expertise and regions and draw on the experience gained from countless construction projects worldwide. We at Master Builders Solutions leverage global technologies, as well as our in-depth knowledge of local building needs, to develop innovations that help make more successful and drive sustainable construction.

Market leading products are developed from technically advanced formulations, optimized for the harsh environmental conditions found in the Middle East.

Our Comprehensive Portfolio

- Concrete admixtures
- Cement additives
- Chemical solutions for underground construction
- Waterproofing solutions
- Sealants
- Tile fixing systems
- Concrete repair and protection solutions
- Performance grouts
- Performance flooring solutions
- Wall systems
- Fire protection systems





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

MasterCell®

Density reducing admixtures

MasterCem®

Solutions for cement manufacture

MasterEase®

Solutions for low viscosity concrete

MasterEmaco®

Solutions for concrete repair

MasterFiber®

Comprehensive solutions for fiber reinforced concrete

MasterFinish®

Solutions for formwork treatment

MasterFlame®

Passive fire protection system

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

MasterTile®

Solutions for tiling systems

MasterTop®

Solutions for industrial and commercial floors

MasterWeid™

Adhesive Solutions for construction

MasterX-Seed®

Advanced accelerator solutions for concrete

Ucrete®

Flooring solutions for harsh environments

Contact Information

Egypt

MBS Construction Chemicals Egypt (S.A.E)

Head Office: Business Park A, Building A1, Cairo Festival City, Ring Road, New Cairo, Egypt

Hotline: 15560, Phone: +202 2128 7800, Fax: +202 2128 7801

www.master-builders-solutions.com/en-eg



15560



Legal Entities - Middle East & Africa

Algeria

www.master-builders-solutions.com/fr-dz

U.A.E.

www.master-builders-solutions.com/en-ae

Kenya

www.master-builders-solutions.com/en-ke

Morocco

www.master-builders-solutions.com/fr-ma

Near East

www.master-builders-solutions.com/en-ae

Nigeria

www.master-builders-solutions.com/en-ng

Oman

www.master-builders-solutions.com/en-ae

Saudi Arabia

www.master-builders-solutions.com/en-sa

South Africa

www.master-builders-solutions.com/en-za