



Concrete Repair

Solutions for Long-Term
Integrity and Durability





Concrete Repair Solutions

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Master Builders Solutions experts help you ensure durable, high quality repairs to concrete structures. By diagnosing the underlying cause of the deterioration, we develop a clear repair strategy utilizing the right products to gain long-term structural integrity and protection. Our comprehensive systems offer effective solutions to meet concrete repair challenges.

Applications

- Commercial, Institutional Buildings
- Industrial Facilities
- Stadiums and Parking Structures
- Roads, Bridges and Tunnels
- Wastewater and Water Treatment Facilities

Technologies

- Cementitious repair products which can be wet or dry spray applied, formed and poured or hand troweled that contain Integral Corrosion Inhibitors
- Embedded galvanic anodes for corrosion control/mitigation
- Liquid, surface applied migrating corrosion inhibitors
- Latex and epoxy-modified anti-corrosion coatings for rebar
- Methacrylate and epoxy binder resins for overlays, mortars and crack sealing

Rebar Corrosion Protection and Surface Preparation

MasterProtect® P 8100AP Resin and Primer
A single-component epoxy resin and metallic zinc rebar primer that actively resists corrosion by reducing anodic generation adjacent to the reinforcing steel.

MasterEmaco® P 124 Bonding Agent
A water-based epoxy/cementitious bonding agent and rebar coating recommended for bonding concrete and mortar up to 24 hours after application, and for protection against corrosion.

MasterProtect 8065/8105/8160CP Anodes
Embedded galvanic anodes which, when added to reinforcing steel in structural repairs, will corrode sacrificially to mitigate corrosion in surrounding reinforcing steel.

MasterProtect 8500CI Corrosion Inhibitor
A surface-applied clear liquid that penetrates concrete and provides a dual-phase reactive penetrating sealer and surface-applied corrosion inhibitor for steel-reinforced concrete.

Chemical Resistance

MasterEmaco T 5000
A chemically resistant repair mortar and ancillary grout that can be used in patches up to 4" thick. Repairs last longer in environments exposed to aggressive chemical attack.

Surface Repair

MasterEmaco N 420CI
A trowel grade, integrally polymer modified repair mortar with an integral corrosion inhibitor.

MasterEmaco N 423RS Repair Mortar
A fast-setting polymer-modified cementitious repair mortar for horizontal, vertical, or overhead surfaces.

MasterEmaco N 424
A general purpose, fast-setting, non-sag cement-based repair mortar for small repairs on vertical, horizontal, and overhead surfaces.

MasterEmaco N 425 Repair Mortar
A one-component, polymer-modified, silica fume enhanced vertical and overhead repair mortar with microsphere technology for improved workability. Can be placed on vertical or overhead surfaces in lifts up to 2 inches deep without forming. Cementitious mortar incorporating microscopic glass bead technology for superior finishing results and excellent workability. Structural strength exceeds 6000 psi.

MasterEmaco N 400 Repair Mortar
A two-component polymer-modified high-build, lightweight repair mortar. It is designed for repairing vertical and overhead concrete surfaces in deep lifts – up to 3" on vertical and 1 1/2" on overhead surfaces. It can be applied by hand, trowel, or low-velocity wet spraying.

MasterEmaco N 427 Repair Mortar
A low-slump, fast setting, Portland-cement-based, multi-purpose smooth repair mortar for detailed fine architectural work. It does not require the use of forms or multi-layered casting techniques.



Traffic Repair

MasterEmaco T 1060 and T 1061 Repair Mortars

Special, very rapid-setting one-component repair mortars for bridges, roadways, and pavement repairs when surface downtime should be minimized. Approved for numerous DOT projects, C-928 compliant. Available in concentrate as T 1060 and T 1061 Rapid Cements.

MasterEmaco T 1060EX and 1061EX

Rapid cement-based, pre-extended repair mortar requiring only to be mixed with potable water. Eliminates the need to source aggregate on site.

MasterEmaco T 430 Repair Mortar

A one-component rapid-strength repair mortar with extended working time, ideally suited for hot weather applications. It allows applications of epoxy coating within six hours.

MasterEmaco T 545 and T 545HT Repair Mortars

One-component concrete and anchoring mortars available in two formulations: T 545 for use in ambient temperatures below 85°F (29°C); and T 545 HT for use in ambient temperatures ranging from 85°F to 100°F (29–38°C). Both formulations provide rapid high early strength and superior bonding with virtually no drying shrinkage. They are resistant to freeze-thaw cycles and de-icing chemicals.

MasterEmaco T 310CI Repair Mortar

A one-component polymer-modified, shrinkage-compensated, flowable repair mortar with integral corrosion inhibitor for a variety of applications. Ideally suited for patching and/or resurfacing distressed horizontal concrete surfaces.

Structural Repair

MasterEmaco S 440, S 440MC and S 440CI Repair Mortars

One-component flowable, shrinkage-compensated form and pour full-depth repair mortars. Pumpable for improved productivity. Pre-extended (S 440) for larger volume placements.

MasterEmaco S 466CI Corrosion Inhibitor

One-component flowable, shrinkage-compensated structural repair concrete with integral corrosion inhibitor recommended for horizontal or formed vertical and overhead concrete repairs.

MasterEmaco S 488CI Repair Mortar

Sprayable, shrinkage-compensated, fiber-reinforced structural repair mortar with integral corrosion inhibitor recommended for vertical and overhead repair of concrete and masonry, and repairs in federally inspected meat and poultry plants. It provides high early and ultimate compressive, flexural, and bond strengths, and is sulfate resistant and freeze-thaw durable.

MasterEmaco S 210SP Shotcrete

A silica fume enhanced structural shotcrete with integral corrosion inhibitor for wet- or dry-process applications. It offers high bond strengths, low permeability and excellent resistance to damage from freeze-thaw cycles and salt scaling.

MasterEmaco S 211SP Shotcrete

A silica fume enhanced, fiber-reinforced structural shotcrete within integral corrosion inhibitor for wet- or dry-process applications. It offers high bond strengths, low permeability, and excellent resistance to damage from freeze-thaw cycles and salt scaling.

Crack Repair and Bonding

MasterEmaco ADH 1090RS Epoxy Adhesive

A two-component, 100% solids liquid epoxy bonding adhesive. It is used in areas where high early strength is required.

MasterInject 1380 Epoxy Adhesive

A two-component low-viscosity liquid epoxy adhesive for pressure-injection grouting.

MasterEmaco ADH 326 Epoxy Bonding Agent

A two-component, 100% solids liquid epoxy bonding agent designed for applications in warm environments where a long working time is needed.

MasterEmaco ADH 327 Epoxy Adhesive

A two-component 100% solids non-sag epoxy adhesive. It is used for vertical and overhead bonding and patching applications and for anchoring.

MasterEmaco ADH 327RS Epoxy Adhesive

A two-component 100% solids non-sag epoxy adhesive. It is used for vertical, overhead, and horizontal applications. It is recommended for short-term or moderate-intensity loads and application when ambient or concrete-surface temperatures are in the 32 to 50° F (0 to 10° C) range. It may also be used between 50 and 70° F (10 and 21° C) when rapid curing is required.



Master Builders Solutions

The Master Builders Solutions brand brings all of MBCC Groups 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 MBCC Group construction experts form the core of Master Builders Solutions. We combine the right elements from our portfolio to solve your specific construction challenges. We collaborate across areas

of expertise and regions and draw on the experience gained from countless construction projects worldwide. We leverage global MBCC Group technologies, as well as our in-depth knowledge of local building needs, to develop innovations that help make you more successful and drive sustainable construction. The comprehensive portfolio under the Master Builders Solutions brand encompasses concrete admixtures, cement additives, chemical solutions for underground construction, waterproofing solutions, sealants, concrete repair and protection solutions, performance grouts and performance flooring solutions.

Master Builders Solutions products for the Construction Industry:

MasterAir®

Solutions for air-entrained concrete

MasterBrace®

Solutions for concrete strengthening

MasterCast®

Solutions for manufactured concrete product industry

MasterCem®

Solutions for cement manufacture

MasterEmaco®

Solutions for concrete repair

MasterFinish®

Solutions for formwork treatment

MasterFlow®

Solutions for precision grouting

MasterFiber®

Comprehensive solutions for fiber reinforced concrete

MasterGlenium®

Solutions for high-performance concrete

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 water-reduced 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

MasterSure®

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