# **SOLUTIONS** BAGGED SPECIALTY CONCRETE

# **INFRASTRUCTURE**

## **RESTORATION & PROTECTION**

Grouts & Mortars Injection resins FRP Reinforcement Joint materials Waterproofing, coatings and membranes





## **DIVISION OF LAFARGE CANADA SINCE 2023**

## **BMQ Solutions is a leading provider of Innovative Concrete Solutions in Eastern Canada.**

With over two decades of experience, BMQ Solutions' products cater to diverse projects, ensuring superior concrete performance and solidifying Lafarge Canada's position as a global leader in the Canadian market.



## **ADVANCED CONCRETE SOLUTIONS**

BMQ Solutions redefines the construction landscape with our latest innovation -specialized bagged ready-mixed concrete. Simply add water for instant, hassle-free use. Complementing our commitment to advancing concrete solutions, this product stands as a aiding contractors, architects, and engineers in achieving their project goals.

Supported by our robust technical service and ongoing research, BMQ Solutions leads in addressing concrete deterioration challenges. Our tailored solutions for severe wear, corrosive environments, and degradation factors demonstrate our unwavering support for sustainable infrastructure.

Experience the future of concrete solutions with BMQ SOLUTIONS - where innovation meets efficiency, tailored for infrastructure. commercial, and industrial applications.

## INFRASTRUCTURE

Products designed to repair and protect concrete infrastructure in: • Bridges, Tunnels and Dams • Parking garages and building envelopes • Potable water and wastewater

- Transportation industry (road, rail, airports & seaway)

## COMMERCIAL

Products designed for the repair and protection of concrete in various commercial

- applications: Commercial flooring & institutional flooring Parking structures
- Patios and balconies
- Ramps and walkways
- Building facades
- INDUSTRIAL

Products designed for the repair & protection of concrete structures in:
Pulp & paper, petrochemical and chemical plants
Mining, metallurgy sites and metal

- <u>Hvdroelectric</u>, nuclear or other types of power generating stations
- Industrial wastewater treatment structures

## WHY CHOOSE BMQ SOLUTIONS?

Our customers appreciate more than just our outstanding products. They rely on the consulting services, technical support and training provided by our BMQ Solutions' team!

- Tried & Tested Methods and Materials, for long-term performance
- Fast Lead Times We keep your downtime to a minimum
- Support From Day 1, to develop a project strategy
- Help With Product Selection to match your specific performance characteristics
- Technical Documentation, to ensure optimal use of your BMQ Solutions product
- Technical Advice on the jobsite and in the office, our team will be there for you
- On-Site Supervision, so you can rely on the expertise of our team
- Direct Communication; You and a BMQ Solutions rep will stay in touch throughout the project

Our commitment extends beyond project completion; we're devoted to guiding you before, during, and after your project.

Count on us to provide tailored solutions and expert answers, ensuring a smooth journey from start to finish.

# **INFRASTRUCTURE** SOLUTIONS FOR CONCRETE STRUCTURE

This brochure showcases cutting-edge products designed for the protection and restoration of concrete infrastructures, ensuring longevity and resilience for critical projects.

## RESTORATION

BMQ Solutions' concretes, grouts, and mortars stand out in various industrial infrastructure projects across Canada, offering a permanent repair for concrete. Specifically crafted for heavy industrial applications, the STRUCTUROC and SOLHYDCRETE lines excel in tasks such as repairing floors, columns, walls, as well as reconstructing ramps, gutters, and base pads, addressing the diverse needs of projects, both large and small.

## PROTECTION

After restoring infrastructure concrete to its original structural integrity, safeguarding its surface from potential deterioration is paramount, **AREYOU** especially in the challenging environments of the industrial sector. **READY FOR THE** BMQ Solutions offers specialized products and systems, meticulously SUSTAINABLE SOLUTION? designed for this critical protection phase.







**BMO Solutions -**Innovative products for concrete repair, protection and rehabilitation.

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## **INFRASTRUCTURE**



## BMQ SOLUTIONS

## **SOLHYDFLOW GROUT-6% SF**

#### **Portland Base Cementitious Precision** Non-Shrink Grout

SOLHYDFLOW GROUT - 6% SF is a nonshrink, portland cement based grout that contains 6% of silica fume and other material. It is intended for precision machinery, equipment and base plate grouting applications.

## USES

For use in precision grouting applications where a fluid consistency non-shrink grout is required.

## **TYPICAL USES**

- Supporting compressors, pumps, motors, generators, paper making machinery baseplates and soleplates • Columns and machinery baseplates
- Rails
- Structural and non-structural building members, wall panels, beams, columns, etc.
- Anchor bolts, bars, rods
- Reinforcing bars or rods

## COVERAGE

A 22.7 kg (50 lb) bag of SOLHYDFLOW GROUT - 6% SF mixed with 4.25 L of potable water will yield 12L (0.43 ft<sup>3</sup>) of grout mixed at a 60 second flow on the cone @ 21°C (70°F) [ASTM C-939-87]. For applications where thickness of grout will be greater than 50 mm (2"), add up to 6.8 kg (15 lb) of 10 mm (3/8") washed, clean, dry stone per 22.7 kg (50 lb) bag of SOLHYDFLOW GROUT - 6% SF.

• Grout: Non-shrink, precision

# **STRUCTUROC H**

# High Strength Rapid Setting Mortar for Horizontal Repairs

STRUCTUROC H is a rapid setting, high STRUCTUROC H is a rapid setting, high early strength repair material that requires only the addition of water to produce a fast, permanent repair for concrete. STRUCTUROC H is dimensionally stable and forms an integral bond with the existing concrete to restore its structural integrity. STRUCTUROC H is designed for horizontal repairs and can be placed at thicknesses ranging from 5mm up to 300mm in a single lift. This product car be extended with up to 50% of clean pea gravel to produce a rapid setting concrete

## **USES**

Repair of spalled and damaged concrete floors due to wear, abrasion, temperature and other damage factors.

## TYPICAL USES

- Repair of concrete walls
- Repair of bridge decks
- Industrial concrete floor repair • Parking decks and ramps
- Repair of concrete bases

## COVERAGE

Yields 12L when mixed with 2.3L of potabl water that will cover approx. 1m<sup>2</sup> (11 ft<sup>2</sup>) at a thickness of 10mm. This product when extended with 50% (10mm) pea gravel wi vield 16 liters of volume.

#### PACKAGING 22.7 kg (50 lb) polyethylene bags or plastic pails

**CATEGORY/APPLICATION** • Mortar: Horizontal,

MTQ approved



## **YOUR CANADIAN CONSTRUCTION** PARTNER

For over two decades, BMQ Solutions has been a key player in the Canadian construction scene. Our concrete products have been essential to maintenance and repair projects in various sectors, including underground transit systems, mine sites, wastewater treatment centers, and highway and bridge infrastructure. Additionally, professionals in the restaurant industry and commercial and industrial flooring applications benefit from our innovative solutions.

## **OBJECTIVES**

BMQ SOLUTIONS is committed to designing, manufacturing, and offering products for the repair, rehabilitation, and protection of concrete. **Our primary** objective is to provide materials and methods that not only meet but exceed the needs of our clients, ensuring longterm solutions for superior concrete performance.

## **GUIDING PRINCIPLES**

Originally developed for construction industry professionals, BMQ Solutions' products are backed by unparalleled technical support, a committed sales force, and an innovative research and development department. We are committed to assisting and supporting the efforts of contractors, architects, and engineers who utilize and recommend our solutions for the successful realization of their projects.

## **CORE PURPOSE**

Our core purpose is clear: to offer products and solutions for addressing complex concrete deterioration issues. The BMQ Solutions team possesses the expertise to identify various sources of concrete problems and deterioration, including severe wear, corrosive chemical environments, and other specific factors.

# **USES**

and other damage factors.

## **TYPICAL USES**

- Parking decks and ramps

#### • Repair of concrete bases

• Repair of balconies

## COVERAGE

Yields 12L when mixed with 2.3L of potable water that will cover approx. 1m<sup>2</sup> (11 ft<sup>2</sup>) at a thickness of 10mm. This product when extended with 50% (10mm) pea gravel wi vield 16 liters of volume.

#### PACKAGING 22.7 kg (50 lb) polyethylene bags or plastic pails

• Mortar: Horizontal, MTQ approved

3MQ Solutions | INFRASTRUCTURE

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## **INFRASTRUCTURE**

## **STRUCTUROC H** ULTRA

# High Strength Rapid Setting Flowable Mortar for Horizontal Repairs

STRUCTUROC H ULTRA is a rapid setting structure integrity. STRUCTUROC H ULTRA is a rapid setting, high early strength repair material that requires only the addition of water to produce a fast, permanent repair for concrete. STRUCTUROC H ULTRA is dimensionally stable and forms an integral bond with the existing concrete to restore its structural integrity. STRUCTUROC H ULTRA is designed for horizontal repairs and can be placed at thicknesses ranging from 3mm up to 100mm in a single lift. This product can be extended with up to 50% of clean pea grave to produce a rapid setting concrete.

Repair of spalled and damaged concrete floors due to wear, abrasion, temperature

- Repair of concrete walls • Repair of bridge decks Industrial concrete floor repair

**CATEGORY/APPLICATION** 

## **STRUCTUROC V**

#### High Strength Rapid Setting Mortar for Vertical Repairs

STRUCTUROC-V is a cement based, one component, polymer modified, high strength, shrinkage compensated rapid setting repair mortar. It is designed for vertical and overhead concrete repairs to produce superior bond, tensile and flexural strength. STRUCTUROC V is able to be placed and sculpted to proper shape in one operation for thicknesses from 5mm (1/4") to 50mm (2").

## USES

All vertical or overhead repairs.

## **TYPICAL USES**

- Bridges
- Tunnels
- Multi-Level parking structures
- Parapets
- Clarifiers
- Viaducts
- Reservoirs
- Dams
- Column and Beam Repairs

## COVERAGE

A 22.7kg bag of STRUCTUROC V will yield approximately 12.7L and cover  $1.95m^2$  at a 5mm thickness.

# PACKAGING

22.7kg (50lbs) bags

#### CATEGORY/APPLICATION • Mortar: Vertical/Overhead

• Repair Mortars

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## **INFRASTRUCTURE**





## **SOLHYDCRETE AN**

#### High early strength self-consolidating concrete – fast, long-lasting repair

SOLHYDCRETE A.N. is a self-consolidating concrete that offers high early strength, prolonged working time and improved placeability to produce a fast, permanent repair for concrete. SOLHYDCRETE A.N. is dimensionnally stable and forms an integral bond with the existing concrete to restore its structural integrity. SOLHYDCRETE A.N. can be placed at thicknesses ranging from 40mm to 400mm in a single lift.

## USES

Deep permanent concrete repairs requiring a fast turn around.

### **TYPICAL USES**

- Repair of concrete pads and supports
- Rebuilding concrete pump bases
- Repair of concrete bridge structures • Fast repair of concrete walls, columns and bases in industrial applications

## COVERAGE

SOLHYDCRETE AN is packaged in 25kg (55lbs) bags. Yields 12.5 L when mixed with 2.62L of potable water (10.48% by weight of dry mix) that will cover approx.  $1m^2(11 \text{ ft}^2)$  at a 10mm thickness.

#### PACKAGING 25kg (55lbs) bags

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#### CATEGORY/APPLICATION

- Concrete: High-performance, Concrete: Self-compacting, MTQ approved
- Repair Mortars

## **SOLHYDCRETE SCC-03**

#### High performance self consolidating Concrete Repair Material

SOLHYDCRETE SCC-03 is a high performance self-consolidating concrete that offers prolonged working time and improved placeability to produce a permanent repair of concrete. SOLHYDCRETE SCC-03 is dimensionally stable and forms an integral bond with the existing concrete to restore its structural integrity. SOLHYDCRETE SCC-03 can be placed at thicknesses ranging from 12 mm to 300 mm (1" to 12") in a single operation.

## **USES**

SOLHYDCRETE SCC-03 is placed in a indoor or outdoor formwork for partial or full depth repair of concrete slabs, beams, columns, soffits and walls.

## TYPICAL USES

- Parking garages, balconies, walkways, elevated slabs, slabs on grade or underground slabs Bridges and overpass repairs
- Structural repairs for tunnels and dams
- Vertical, horizontal or overhead structural repair

## COVERAGE

SOLHYDCRETE SCC-03, is packaged in 25 kg (55 lbs) bags that yield 13 L (0.46 ft<sup>3</sup>) when mixed with 2.5 liters of clean, potable water.

PACKAGING 25kg (55lb) bags

#### CATEGORY/APPLICATION

• Concrete: Self-compacting

• Repair Mortars

# **BMQ SOLUTIONS' PRODUCTS LINE**

#### **CONCRETE SOLUTIONS**

For all your concrete needs, the BMQ Solutions team offers a variety of products, including high-performance, all-purpose, self-compacting, and self-leveling concrete.

#### **VERSATILE GROUTING**

Whether for commercial, industrial, or infrastructure projects, BMQ Solutions provides an array of grouts, including precision, epoxy-based, MTQ-approved, and post-tensioned cable grouts.

#### **DIVERSE MORTAR**

With over 20 years of experience, BMQ Solutions offers more than twenty mortar types, featuring prolonged handling time, fast-setting formulations, migrating corrosion inhibitors, and high-temperature resistance.

#### **INJECTION RESIN/CRACK REPAIR**

BMQ Solutions' injection resins and crack repair options boast features like low viscosity, vertical application, guick-setting, and impressive expansion equal to 15 times the initial volume.

#### **TAILORED FLOORING**

Our range of BMQ Solutions flooring products caters to both commercial and industrial applications, offering decorative coatings, safety lines, functionnal coatings, and more.

#### SEALERS AND COATINGS

To shield concrete, masonry, and stone from the elements and graffiti, BMQ Solutions manufactures high-quality sealants and coatings, many of which are MTQ approved.

#### ACCESSORY PRODUCTS

BMQ Solutions' accessory products encompass aggregates, additives, bonding agents, waterproofing materials, and more. Explore our product sheets or reach out to discuss your project.

#### **MTQ APPROVED**

BMQ Solutions produces a range of concrete materials rigorously tested by the Ministère des Transports du Québec's Laboratoire des chaussées (Roadway laboratory).

single operation.

# **USES**

columns, soffits and walls.

## **TYPICAL USES**

- underground slabs
- Bridges and overpasses repairs • Structural repairs of tunnels and dams
- structural repair

# COVERAGE

## PACKAGING 25 kg (55 lb) bags

## **CATEGORY/APPLICATION**

- MTQ approved

## **INFRASTRUCTURE**

## **SOLHYDCRETE SCC-06**

#### High-Performance Self-Consolidating Concrete

SOLHYDCRETE SCC-06 is a high performance self-consolidating concrete offering prolonged workabilityand improved spreading ability to produce permanent concrete repairs. SOLHYDCRETE SCC-06 is dimensionally stable and forms an integral bonc with the existing concrete to restore its structural integrity. SOLHYDCRETE SCC 06 can be placed at thicknesses ranging from 25 mm to 450 mm (1" to 18") in a

SOLHYDCRETE SCC-06 is placed in indoor and outdoor formwork for partial o

- Parking garages, balconies, walkways, elevated slabs, slabs on grade and
- Vertical, horizontal and overhead

SOLHYDCRETE SCC-06 is packaged in 25 kg (55 lbs) bags or buckets that yield 13 L (0.4 $\tilde{c}$ ft<sup>3</sup>) when mixed with 2.5 L of clean, potable

• Concrete: Self-compacting,

• Grouting Applications

## SOLHYDCRETE **SCC-10**

#### High performance self consolidating Concrete Repair Material

SOLHYDCRETE SCC-10 is a high performance self-consolidating concrete that offers prolonged working time and improved placeability to produce a permanent repair of concrete. SOLHYDCRETE SCC-10 is dimensionally stable and forms an integral bond with the existing concrete to restore its structural integrity. SOLHYDCRETE SCC-10 can be placed at thicknesses ranging from 25 mm to 450 mm (1" to 18") in a single operation.

## USES

SOLHYDCRETE SCC-10 is placed in indoor and outdoor formwork for partial or full depth repair of concrete slabs, beams, columns, soffits and walls.

## **TYPICAL USES**

- Parking garages, balconies, walkways, elevated slabs, slabs on grade and underground slabs
- Bridges and overpass repairs
- Structural repairs for tunnels and dams
- Vertical, horizontal and overhead structural repair

## COVERAGE

SOLHYDCRETE SCC-10, is packaged in 25 kg (55 lbs) bags that yield  $13 L (0.46 \text{ ft}^3)$  when mixed with 2.6 liters of clean, potable water.

# PACKAGING

25kg (55lb) bags

## CATEGORY/APPLICATION

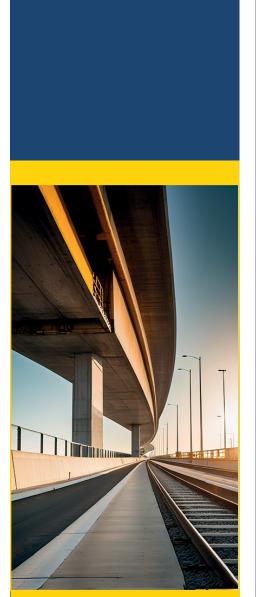
• Concrete: Self-compacting, MTQ approved

• Grouting Applications

## **INFRASTRUCTURE**







# Very fast setting repair mortar for stopping active water leaks

SOLHYDPLUG is used to stop active water leaks and to seal cracks to enable crack injection work for plugging water leaks in concrete walls or structures, repairs to prefabricated concrete pipes and structures, plugging leaks and perform substrate repairs in pipes and manholes, as well as for fast repairs and return to service of water treatment infrastructure.

## USES

SOLHYDPLUG is used to stop active overhead repairs.

#### TYPICAL USES

- Bridges
- Tunnels
- Multi-Level parking structures
- Parapets
- Clarifiers
- Viaducts
- Reservoirs
- Dams
- Column and Beam Repairs

## COVERAGE

A 22.7kg pail of SOLHYDPLUG will vield approximately  $1m^2(11 pi^2)$  at a thickness of 10 nm per bag or pail..

#### PACKAGING 22.7kg (50lbs) pail

Available in 4 set times:

- 45 seconds
- 3-5 minutes
- 5-10 minutes

#### **CATEGORY/APPLICATION**

- Crack repair, Mortar: Fast-setting
- Repair Mortars

# **SOLHYDWELD** LOW PRESSURE

Two-component epoxy injection resin

SOLHYDWELD LOW PRESSURE is designed for crack injection on slab or microcracks to restore the tructural integrity of cracked concrete structures for parking garage structures, cracked concrete floor slabs, concrete base pads, loose or detached floor tiles and large concrete surfaces with many cracks where pressure injection is not practical.

## USES

Designed to restore the structural integrity of cracked concrete when width of the crack is medium to large. SOLHYDWELD LOW PRESSURE are also used when the presence of water in the crack requires the use of a resin system with good water displacement capabilities.

## **TYPICAL USES**

- To weld cracks in hydro electric dam structures
- Primary and secondary containment reservoirs
- To weld cracked concrete base slabs such as subway system base slabs
- All cracked concrete structures where access for capping is not possible
- All cracked concrete structures where water or dampness is present

## COVERAGE

Estimating the required volume of material will depend on the type of structure to be injected. BMQ Solutions recommends contacting an approved applicator for a more precise evaluation of the quantities required.

PACKAGING 15L pre-measured units

#### **CATEGORY/APPLICATION**

- Injection resin / Crack repair, MTQ approved
- Epoxy injection





SOLHYDSEAL 100 is a 100% active hydrophobic silane monomer solution which penetrates deep into the concrete or masonry substrate to create a hydrophobic layer within the matrix as well as on the surface. SOLHYDSEAL 100 is a single component, solvent free, low V.O.C. materi which can be applied on all siliceous materials. This can be performed in a humic environment as well as in low temperatures

## USES

## TYPICAL USES

- masonry structures

# COVERAGE

## PACKAGING 20 liter pails and 205 liter drums

## CATEGORY/APPLICATION

- MTQ approved,

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## INFRASTRUCTURE

## **SOLHYDSEAL 100**

# 100% active hydrophobic silane monomer solution

With its capacity to penetrate deepl<sup>,</sup> into the concrete or masonry matrix SOLHYDSEAL100 remains effective during many years. Its deep penetration protects structures against weathering, ultraviole rays and abrasion. SOLHYDSEAL 100 wil greatly reduce the effects of corrosion o he structure while mitigating the spread of deterioration caused by alkali-aggregate eactivity and alkali-silica reactivity.

• Protection of bridge and overpass

- Protection of ramps and bridge decks • Protection of parking slabs
- Protection of all other concrete or

Best results are obtained on a concrete surface at a rate of 5.5m<sup>2</sup> / liter. Building envelops require an application rate of 5m<sup>2</sup> / liter. Actual yield will vary depending on the porosity of the substrate. Tests are recommended. Product is available in 20 liter pails or 205 liter

• Coatings & Waterproofing

## SOLHYDSEAL **AQUA 40**

#### Waterproof sealant for concrete and masonry

SOLHYDSEAL AQUA 40 is a clear waterbased penetrating, breathable water repellent for use on exterior exposed concrete surfaces and most masonry elements. Once applied it will not change or discolor the surface appearance.

## USES

to impart solutions for acid rain deterioration, efflorescence, chloride ion penetration so as to minimize and prevent corrosion caused by water, de-icing salts and other alkali attacks in concrete. This breathable sealer will penetrate the surface and protect against freeze-thaw related damage.

## **TYPICAL USES**

- Bridges
- Viaducts
- Tunnels
- Pedestrian Walkways
- Parking Decks
- Sidewalks
- Concrete pavements

## **COVERAGE**

On a concrete surface; best results are obtained at a rate of 4.9 m2/liter. One-laver building envelope of 4.9 m2/liter. Actual vield will vary depending on the porosity of the substrate. Testing is recommended.

## PACKAGING

20 liter pails and 205 liter barrels

#### CATEGORY/APPLICATION • MTQ approved,

Waterproofing

• Coatings & Waterproofing

## **REDEFINING CONSTRUCTION WITH SUSTAINABLE INNOVATIONS**



At BMQ Solutions, we're not just a company - we're architects of progress, champions of innovation, and dedicated partners. Today, our commitment to a brighter, net-zero future leads us as a proud division of Lafarge Canada, collaborating with clients to revolutionize construction for the betterment of people and the planet.

BMQ Solutions introduces hassle-free bagged ready-mixed concrete, aligning with our core purpose to address concrete deterioration issues with eco-friendly practices. Our specialized products combat

various concrete problems, prioritizing performance and environmental sustainability.

Dedicated to ensuring long-term concrete performance, BMQ Solutions offers cutting-edge, sustainable products. Our Advanced Hydration Technology (THA) integrates calcium aluminate and Portland cement, reducing residual moisture by at least 3%, enabling rapid flooring installation, shortening construction cycles, and enhancing durability.

Our 100% Quebec-manufactured, VOC-free products aid in achieving LEED certifications and reduce our ecological footprint. Aligned with Lafarge Canada's vision, BMQ Solutions leads in sustainable construction solutions. Through continuous innovation, we're committed to creating a more sustainable and resilient future.

Choose BMQ Solutions, the unrivaled leader in sustainable construction solutions, and join us in reshaping the future. Together, let's build a world where progress, sustainability, and prosperity converge seamlessly.

#### MSSION VALUES PASSION **Deliver solutions &** So that our work remains the basis concrete products of our balance and our well-being, adapted to and not an obligation or a duty. specific needs. NITCH N Being our word and delivering on our promises. 2RD: That everyone lives his passion with satisfaction. 0 PROSPERING Creating value for the benefit of all. Through ingenuity, ADAPTABLEN we innovate to Demonstrate flexibility in all types of situations. deliver solutions.

LAFARGE.CA/EN/BMQ-SOLUTIONS

# Let's talk about your ideas



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