



DIVISION OF LAFARGE CANADA SINCE 2021

BMQ delivers innovative on-site solutions across Eastern Canada, including the greater areas of Montreal, Ottawa & Toronto, and many more locations.

BMQ's cutting-edge solutions and top-tier products are integral elements that enhance Lafarge Canada's innovative portfolio, solidifying its role as a global leader within the Canadian market.





DECADES OF EXPERIENCE

Established in Canada in 1979, BMQ has been at the forefront of mobile solutions, offering innovative RMX concrete products meticulously crafted for a myriad of applications. From bolstering transportation infrastructure and erecting commercial edifices to fortifying industrial facilities, BMQ caters to a diverse array of needs. Whether you're embarking on repairs, retrofits, new construction, fast-track projects, or even responding to emergency repairs, we've got you covered.

A TRUSTED PARTNER

Port authorities, airport management, bridge overseers, Ministries of Transportation, railroad operators, power plant managers, dam operators, and a range of heavy industries have all experienced the BMQ difference. Our track record is adorned with a tapestry of successful projects, firmly cementing our reputation as a reliable partner.

SETTING NEW STANDARDS

BMQ works with the client to provide an industry leading turnkey solution that stands head and shoulders above the competition. We excel in conceptualizing bespoke mix designs tailored to meet the most arduous construction challenges.

HOME TO EXCLUSIVE INNOVATIONS

BMQ proudly holds the exclusive mantle of being the supplier and manufacturer of UHPC Ductal, CHRONOMax, and ADHEMax products. Your quest for solutions ends here! Our streamlined, all-in-one solution is at your disposal, facilitated by a fleet of mobile mixer trucks that effectively transform any site into a fully operational RMX plant. Say goodbye to the days of traditional cement bags, towering aggregate heaps, and small mixers. With BMQ, the manufacturing process is not just reliable and precise; it's also durable and environmentally responsible.

Experience the future of concrete solutions with BMQ, where innovation meets efficiency and reliability in one seamless package.

WHETHER YOU BUILD NEW OR FROM EXISTING, EXTEND YOUR PROJECT'S SERVICE LIFE.

Exclusive supplier and manufacturer of UHPC **Ductal**, as well as unique **CHRONOMax** and **ADHEMax** products, BMQ has the solution for you!

- BMQ **simplifies jobsite** operations
- Ultra-high performance solutions
- Sustainable extend service life and build with zero waste
- Reopen a structure to any traffic as fast as 3 hours after pouring
- Improve the mechanical performance of new or existing structures
- Access to hundreds of in-situ mixes
- RMCAO and BNQ certified solution
- Only pay for what you use

BMQ exceeds the standards of other volumetric players in the market by offering unique mix designs, including:

ductal, ADHEMax & CHRONOMax

MAIN FEATURES

- Advanced, high-performance product offering
- Highly sustainable, increasing the service life of your structure while building with zero waste
- Superior mechanical properties with outstanding durability
- Rigid quality control
- Accelerate project schedule
- Accurately meter quantities

BUILDING APPLICATIONS

- Parking structures
- Accelerated membrane application
- Fire, blast or ballistic protection
- Balconies, ramps, stairs, outdoor slabs
- Architectural elements
- Cladding and building envelop
- Column jacketing

TRANSPORTATION APPLICATIONS

- Overlays, Link Slabs
- Fast Track repairs
- Expansion Joints, Spall Repairs



BMQ, mobile mini-plants for high-performance concrete.

READY FOR THE SUSTAINABLE SOLUTION?

CHRONOMax^M

Rapid strength for fast and long lasting results

PRODUCT OVERVIEW

Are you facing tight project schedules, emergencies, or rapid road repairs? Look no further.

CHRONOMax mixes are calcium sulfoaluminate binder-based concrete blends, meticulously designed for rapid construction needs. Our series comprises CHRONOMax Standard, CHRONOMax LX (latex), and CHRONOMax SC (self-compacting).

RAPID STRENGTH DEVELOPMENT

CHRONOMax stands out with its lightning-fast compressive strength development. In just 3 hours, it reaches 20 MPa, allowing swift re-openings and accelerated project progress. Apply membranes after 8 hours for unparalleled efficiency.

VERSATILITY UNLEASHED

Our calcium sulfoaluminate binder-based mixes cater to a wide array of applications, from structural work and emergencies to road repairs. Produced on-site to your exact requirements using our BMQ volumetric mixer truck, they align seamlessly with tight schedules, limited spaces, and sustainability standards.

CHRONOMax Standard:

Where speed is critical. With an astounding compressive strength of 20 MPa achieved in just 3 hours, CHRONOMax Standard ensures rapid project development. Reopenings, work accelerations, and membrane applications are possible within 8 hours, empowering you to take control of your project timeline.

CHRONOMax SC (Self-Compacting):

Streamlined efficiency. Enjoy all the benefits of the Standard mix, with the added advantage of selfconsolidation. Reduced labor requirements make CHRONOMax SC the go-to choice for quick and hassle-free concrete placement and finishing.

CHRONOMax LX (Latex-Enhanced):

Durability combined with speed. CHRONOMax LX combines the swiftness of the Standard mix with the exceptional durability and ultimate bond strength of latex. Perfect for a wide range of structural repair applications, this mix adheres seamlessly to all elements, ensuring long-lasting results.

YOUR TIME-ESSENTIAL SOLUTION

When time is of the essence, CHRONOMax Concrete Mixes are your trusted allies.

Whether you opt for the Standard, SC, or LX variant, you can count on unmatched speed, efficiency, and reliability.

Don't let time constraints hold you back - choose CHRONOMax and accelerate your success today!

PROPERTIES

CHRONOMax Standard:

- 20 MPa in 3 hours (Ambiant temperature 20°C)
- Strength available from 35 to 50 MPa
- Extremely fast curing time
- Excellent durability with a chloride ion permeability <1000 coulombs @ 56 days

CHRONOMax^{SC}:

- Includes CHRONOMax entry-level properties
- Self compacts into complex forms
- Flow 675±50 mm

CHRONOMax^{LX}

- Latex modified² to improve bond strength on properly prepared and sound substrate
- Protects steel bars
- Rapid membrane application, within 72 hours, including 1 day wet cure and 2 day dry cure, due to impermeability and quick drying nature of latex concrete
- Excellent bond strength tested by pull out methods according to ACI. Ministry of Transportation and CSA-ACNOR.
- 20 MPa @ 3 hrs
- 35 MPa to 50 MPa @ 28 Days
- Exceptional durability with a chloride ion permeability <1000 coulombs @ 91 days
- Scaling: 0,10 kg/m² at 56 cycles
- Freeze Thaw: RDM > 90% at 300 cycles
- Bond strength (CSP 7) > 2.0 MPa

APPLICATIONS

CHRONOMax entry-level:

- Road work
- Airport runways
- Concrete pavement
- Heavy industrial

CHRONOMax^{sc}:

- Suited for areas of congested rebar
- No vibration required
- Improve finish aesthetics
- Ease of placement

CHRONOMax^{LX}.

- Overlays
- Heavy industrial
- Transportation infrastructure
- Commercial and institutional buildings

FEATURES & BENEFITS

- Fast track work
- Emergency repairs
- Extremely fast curing time
- 20 MPa in 3 to 4 hours (Ambiant temperature of 20°C)

¹ Limited to sound parts of the elements. ² Latex: Using exclusively styrene butadiene latex to meet or exceed specifications from FHWA (Federal Highway Administration), AASHTO (American Association of State Highway and Transportation Officials), and ACI (American Concrete Institute).

ADHEMax

The mix that sticks

PRODUCT OVERVIEW

Introducing ADHEMax, the game-changing solution for concrete structure repairs that's redefining industry standards. Say goodbye to the demanding, expensive, and risky nature of traditional repairs, and embrace a new era of efficiency, durability, and unmatched performance.

THE MIX THAT STICKS

The ADHEMax line is a groundbreaking innovation in concrete repair technology. Comprising latexmodified concrete mixes with a choice of 5% or 15% latex content, these mixes are built upon the solid foundation of Portland cement, offering unrivaled durability and extraordinary bond strength to a wide array of substrates.

SEAMLESS BONDING. MINIMAL DEMOLITION REQUIRED

With an adequate surface roughness (ICRI CSP 7 or higher) in addition to a clean and saturated, surface dry (SSD) substrate, ADHEMax offers an innovative solution. Thanks to our advanced formula, we can achieve a robust bond with any concrete substrate, ensuring a monolithic and durable repair. This translates to an extended service life of your structure and savings over its life-cycle.

PROVEN DURABILITY

With a track record of over 30 years on some projects, ADHEMax requires minimal maintenance, ensuring your investments stand the test of time.

EXCEEDING STANDARDS

When it comes to bond strength, ADHEMax is in a league of its own. With a remarkable bond strength of over 2 MPa, it surpasses industry standards by a substantial margin. Compare this to the ACI (American Concrete Institute) standard of 1.7 MPa, the MTO (Ministry of Transportation from Ontario) requirement of 1.3 MPa, and the CSA (Canadian Standards Association) stipulation of 0.9 MPa, and it's clear that ADHEMax is setting a new benchmark for excellence.

RAPID APPLICATION

Get your projects back on track quickly with ADHEMax's rapid application and the option to apply a membrane after just 72 hours.

CHOOSE ADHEMAX FOR SUCCESS

Say goodbye to costly, time-consuming repairs. Choose ADHEMax for efficient, lasting results.

Your success starts here.

PROPERTIES

- Compression (CSA A23.2-9C) 35 MPa
- Air content 2% to 8%
- Air content hardened (%) (ASTM C 457) 2% to 8%
- Bonding (CSA A23.2 6 B) > 1.3 MPa
- Exceptional durability with a chloride ion permeability <1000 coulombs @ 91 days (1 day of humid cure, 90 days in
- Slump 170±30 mm

APPLICATIONS

- Repair structural elements
- Floor topping
- Overlay
- Highway ramps, overpass structures & road repairs

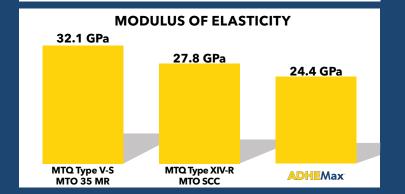
FEATURES & BENEFITS

- Provides exceptional durability with an expected service life extension exceeding 30 years
- Minimal concrete demolition required
- Option to use other mixes with same truck loads
- Fast curing and drying allows to accelerate application of membranes and other overlay material
- Reduce curing time requirement
- Pumpable
- Freeze thaw resistance
- Excellent bond strength to any substrate
- Cost effective
- Time efficient

WHY AIR CONTENT?

ACI 548.31R_9 Durability // 4.1.3.2.1 Air content-

Unlike conventional concrete, the addition of an air entraining agent is not required in PMC for resistance to freezing and thawing. The latex provides this protection, as some air is entrained by the latex and water during the mixing process. ACI 548.4 has a maximum air content of 6.5%, but not a minimum. LMC does not have the air-void system necessary to pass ASTM C666/C666M (temperature range of -18° C to +4° C [0° F to 40° F]); however, more than 30 years of experience has shown that resistance to freezing and thawing is not a problem with LMC for reasons discussed previously.



ductal

High-strength concrete designed for performance

PRODUCT OVERVIEW

Ductal® is a high-strength concrete that is revolutionizing construction. As an ultra-high performance fiber-reinforced concrete (UHPFRC), it delivers an astonishing compressive strength of 120 MPa at 28 days or more. Beyond sheer strength, Ductal® offers unparalleled durability, crack control, and flowability, setting it apart from conventional concrete.

THE DUCTAL® EDGE

Ductal® leads the world in ultra-high performance concrete (UHPC) products, thanks to its innovative blend of high-performance cementitious matrix and high-strength fibers. This results in a unique combination of attributes, including exceptional strength, durability, crack control, and flowability.

STRENGTH MEETS VERSATILITY

Ductal® excels in multiple domains, from superior compressive, tensile, and flexural strengths to high abrasion resistance and relative impermeability. It's the ideal choice for bridges, roads, civil structures, and creative architectural projects with stringent requirements for energy efficiency and aesthetics.

ENGINEERING EXCELLENCE

Ductal® Structure outperforms in structural applications where mechanical strength, resilience, and longevity matter most. Its flowability and self-consolidating consistency make it perfect for congested areas. Ductal® redefines the boundaries of construction, from infrastructure projects to architectural innovations, elevating performance to new heights. Choose Ductal® for groundbreaking construction achievements.

PIONEERING THE FUTURE

In a world where innovation drives progress, Ductal® emerges as a game-changer, redefining the possibilities for new construction projects, accelerated bridge construction, structural retrofits, overlays, enhanced capacity, durability, repairs, and more.

BUILDING TOGETHER

Ductal® represents a revolution in the world of concrete. It's not just a material; it's a catalyst for innovation and excellence in construction. Elevate your projects to new heights with Ductal®, where strength, durability, and aesthetics converge to redefine what's possible in the world of construction materials.

Your vision, our concrete - together, we build the future.

PROPERTIES

- Self-consolidating
- Density: 2,400 kg/m3 (+/- 10 kg/m3)
- Working Time: 90 minutes
- Time of Setting, ASTM C191*: 4 hours
- Compressive Strength, ASTM C39*

12 h	40 MPa
12 h (with applied heat)	80 MPa
24 h	80 MPa
48 h	95 MPa
72 h	110 MPa
7 days	124 MPa
28 days	144 MPa
56 days	150 MPa

- Tensile Strength (28 Days), ASTM C496: 5.5 MPa
- Flexural Strength Ratio (Pp/P1), ASTM C1609: 1.4
- Modulus of Elasticity (28 Days), ASTM C469*: 45 GPa
- Long-term Shrinkage (90 Days), ASTM C157*: <500
- Chloride Ion Penetrability (56 Days), ASTM C1202* (without fibers): <100 coulombs (negligible)
- Freeze-Thaw Resistance (300 Cycles), ASTM C666A*: RDM >98 *as modified by ASTM C1856

APPLICATIONS

- Closure pours between precast elements
- Links slabs and expansion joint headers
- Beam end and bearing encasements
- Column and abutment jacketing
- Protection of hydraulic and marine structures
- Slender precast elements

FEATURES & BENEFITS

- Extended service life in the range of 100 years
- High level of durability against abrasion and environmental
- Very low permeability to liquid and chloride ingress
- High mechanical strengths
- High level of ductility
- Excellent crack control





EFFICIENCY UNLEASHED: Discover BMQ's Volumetric Mixer

THE ON-SITE SOLUTION

Simplify job site operations with highquality materials and ready-to-use mixes from BMQ, the exclusive supplier of UHPC Ductal and innovative CHRONOMax and ADHEMax products. Experience the power of BMQ's durable solutions, allowing structures to reopen to traffic in just 3 hours after pouring.

All this is made possible thanks to the volumetric mixer whose illustration below shows how it works.

Enhanced Material Storage

Each concrete ingredient (sand, stone, cement, water, and admixture) is stored separately for precise control. (1) Open bins store sand and stone, while (2) a closed, watertight bin houses

(3) Water is conveniently supplied through an auxiliary tank, and (4) integrated admixture tanks ensure easy access.

Streamlined Control Setup

After loading the storage bins, the operator selects the ideal mix design for the pour. (5) The sand and stone gate adjusts to the correct position, and precise flow rates for admixture and water are set.

Efficient Concrete Production

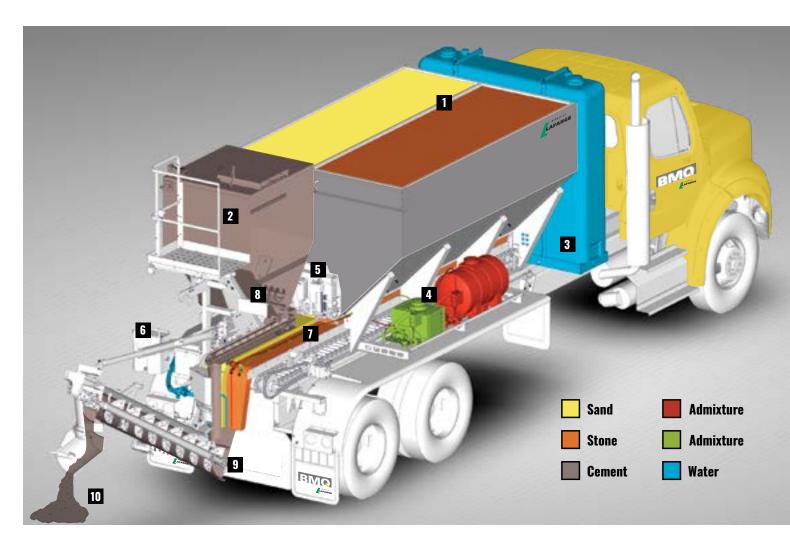
(6) Initiating the process with a single button press, the operator sets the production in motion. (7) The materials flow beneath the «strike off» gates as they exit the respective bins. They then pass under the cement bin and seamlessly enter the mixing auger. (8) The cement bin ensures accurate ONLY PAY FOR WHAT YOU USE!

the cement behind the aggregates. metering of the required cement amount for the mix.

Consistent & Homogeneous Results

Thanks to the dual auger cement metering system, mix designs remain consistently for every pour. (9) All materials enter the continuous mixer simultaneously, undergoing thorough blending by BMQ's unique mix auger. (10) The outcome is a homogeneous concrete mixture, flawlessly delivered to the discharge chute.

Expect superior quality, precise quantity, and zero waste with each and every







DISCOVER BMQ'S COMPLETE ON-SITE SOLUTION

We proudly present our exclusive offerings - UHPC **Ductal**, innovative **CHRONOMax**, and reliable **ADHEMax** products, the highlights of which you will find in the tables below, as well as detailed properties and applications by referring to our **product selector**.

BMQ GOES BEYOND WITH MORE TURNKEY ON-SITE SOLUTIONS:

- Transportation Infrastructure Concrete Powering economies with standard mixes, favored by ministries of transportation, airports, and ports.
- Precision counts! From Fast Track to self-compacting, wet/dry-shotcrete, non-shrink backfill, fiber-reinforced, or tailored formulas - BMQ delivers expertise and solutions.
- Conventional Mixes Versatility reigns! For residential, commercial, and industrial projects, trust BMQ's diverse mix options for pools, sidewalks, slabs, foundations, fences, and more. Achieve excellence with us!

BMQ, MOBILE MINI-PLANTS - on-site solution for high-performance concrete. Available in Eastern Canada, including the greater areas of Montreal, Ottawa, Toronto and many more locations. **CONTACT US TODAY!**

CHRONOMax

HIGHLIGHTS

- Ultra fast strength gain and curing time
- Very durable
- Self-consolidating and latex modified variants available
- Accelerated membrane application
- Low-shrinkage

PROPERTIES

- 20 MPa at 3 hours in compression
- 35 MPa at 28 days in compression
- 300 Coulombs chloride ion penetration at 56 days with latex modified variant
- 0.20 kg/m² in salt scaling resistance

APPLICATIONS

- Fast track works
- Emergency repairs
- Accelerated membrane application to under 8 hours

ADHEMax

HIGHLIGHTS

- High durabilityExcellent bond strength
- PumpableAccelerate membrane application
- Less prone to structural cracks
- Overlay structurally effective at 32mm thickness or more

PROPERTIES

- 24 GPa at 28 days modulus of
- 300 Coulombs chloride ion
- 0.10 kg/m² in salt scaling resistance

APPLICATIONS

- Highway ramps, overpass structure & road repairs
- Loading docks

ductal **HIGHLIGHTS**

- Self-consolidating
- Pumpable
- Can be designed for slopesUltra durable and strong
- Extend service life
- Excellent crack control
- Strain hardening and ductile

PROPERTIES

- 120 MPa at 28 days in compression
- 5.5 MPa at 28 days in tension
- 100 Coulombs chloride ion penetration at 56 days
- 500 μm/m at 90 days in shrinkage
- 0.01 kg/m² in salt scaling resistance
- About 100 years for chloride ions to penetrate 25 mm
- About 300 years for chloride ions to penetrate 50 mm

APPLICATIONS

- Closure pours between precast
- Links slabs and expansion joint
- Beam end and bearing encase-
- Column and abutment jacketings
- Bridge deck and structural slab

BMQ PRODUCT SELECTOR - Discover the Possibilities

UNCOVER THE PERFECT CONCRETE SOLUTION FOR YOUR NEEDS!

Whether it's fast strength development, exceptional adhesion to existing slabs, or superior rigidity - we've got you covered!

PROPERTIES	CHRONOMax ⁻	CHRONOMax ^{sc}	CHRONO Max ^{LX*}	ADHE Max ^a	ductal®
Strength Range	35 MPa	35 MPa	35 to 50 MPa	35 MPa	120 to 150 MPa
Strength Maturity	20 MPa @ 3 hours	20 MPa @ 4 hours	20 MPa @ 3 hours	35 MPa @ 28 days	120 MPa @ 28 days
Chloride Ion Permeability	<1000 C. @ 91 days	<1000 C. @ 91 days	<1000 C. @ 91 days	<1000 C. @ 91 days	<100 C. @ 91 days ASTMC1202*(without fibers)
Slump	150±30 mm	-	170±30 mm	170±30 mm	-
Flow	-	675±50 mm	-	-	220±20 mm
Bond Strength	-	-	> 2.0 MPa	> 1.3 MPa	> 2.5 MPa
Salt Scaling	0.20 kg/m² @ 56 cycles	0.20 kg/m² @ 56 cycles	0.10 kg/m² @ 56 cycles	0.10 kg/m² @ 56 cycles	0.01 kg/m² @ 56 cycles
Modulus (GPa)	30	24	24	24	45
Set Time	30 min	30 min	30 min	4 hours	4 hours
Working Time	15 min	15 min	15 min	1 hour	90 min

TRANSPORTATION	CHRONOMax ⁻	CHRONOMax ^{sc*}	CHRONO Max ^{LX}	ADHE Max	ductal°
APPLICATIONS	CSACC	CSACC+SC	CSACC+LM	LMC	UHPC
OVERLAY					
LINK SLAB					
STRUCTURAL FAST TRACK REPAIRS					
ON-GRADE FASTTRACK REPAIRS					
STRUCTURAL REPAIRS OR RETROFIT					
EXPANSION JOINT					
HIGHWAY OR RUNWAY PAVEMENT					
SPALL REPAIR					
COLUMN JACKETING					

BUILDINGS	CHRONOMax ⁻	CHRONOMax ^{SC*}	CHRONO Max ^{LX*}	ADHEMax ^a	ductal°
APPLICATIONS	CSACC	CSACC+SC	CSACC+LM	LMC	UHPC
PARKING STRUCTURES					
ACCELERATED MEMBRANE APPLICATION					
SEISMIC RETROFITS OR DESIGN					
FIRE, BLAST OR BALLISTIC PROTECTION					
BALCONIES, RAMPS, STAIRS, OUTDOOR SLABS					
ARCHITECTURAL ELEMENTS					
CLADDING AND BUILDING ENVELOP					
COLUMN JACKETING					
MULTIPLE REPAIRS					

ELEVATE YOUR SUSTAINABLE CONSTRUCTION JOURNEY



At BMQ, we are not just a company - we are architects of progress, champions of innovation, and dedicated partners. Today, our commitment to a brighter future takes center stage as we embark on a transformative mission to redefine the construction industry, ultimately leading us toward a net-zero future. As proud division of Lafarge Canada, we are we are dedicated to working with our clients to revolutionize the way the world builds, for the betterment of people and the planet.

Our suite of cutting-edge performance products is at the forefront of sustainability, offering our customers waste free on-site solutions. With BMQ, you can count on a pristine worksite upon project completion, eliminating the need for excess packaging, additional equipment, and on-site storage of raw materials. Furthermore, our innovative solutions minimize the requirement for curing water, making every drop count. What more could one desire in the pursuit of sustainability?

Taking our commitment to sustainability a step further, BMQ's volumetric business is propelling the journey to net zero into uncharted territory. As trailblazers in groundbreaking products like CHRONOMax and ADHEMax high-performance concretes, BMQ is wholeheartedly aligned with Lafarge Canada's vision of becoming the premier provider of sustainable construction solutions in Canada. Through continuous product and service innovation, we stand as a beacon of hope for a more sustainable and resilient tomorrow.

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



Let's talk about your ideas





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