

CONCRETE INNOVATIVE ADMIXTURES FROM OUR SITE TO YOUR SITE

SIKA CANADA'S KEY PROJECT CAPABILITIES





SIKA CANADA FROM OUR SITE TO YOUR SITE

Why are so many companies choosing to work with Sika Canada, the Best-in-Class Supplier across Canada? 1- Cross-Canada Production Facilities 2- Fully-Equipped Modern Concrete Lab 3- Regional Manufacturing of Key Raw Materials 4- In-House Dedicated Logistics 5- Customer-Site Admixture Storage and Metering Systems 6- Strategically-Located Technical Sales Staff 7- Portable Mini Lab for On-Site Support 8- Highly-Qualified Team 9- Total Cost Optimisation 10- Sustainable Solutions

SIKA CANADA BEST-IN-CLASS SUPPLIER

1 CROSS-CANADA PRODUCTION FACILITIES

For simplified logistics and our significant production capacity necessary to supply multiple large infrastructure projects, Sika Canada plants are conveniently located in Vancouver, Edmonton, Cambridge, Mississauga and Montreal.



2 FULLY-EQUIPPED MODERN CONCRETE LAB

Centrally-located in Montreal to support project testing across Canada, Sika can offer a comprehensive list of tests thanks to a wide assortment of state-of-the-art concrete testing equipment - from slump to shotcrete (mini-shot) testing, and everything in between. Additional and very specialized testing can be obtained through Sika labs located in Switzerland, the USA and elsewhere.

3 REGIONAL MANUFACTURING OF KEY RAW MATERIALS

Sika® ViscoCrete® polycarboxylate technology – the industry reference admixture for producing highstrength and self-consolidating concrete – is readily available thanks to Sika's PCE reactors located right here in North America, where we produce tailor-made products for our local markets.

4 IN-HOUSE DEDICATED LOGISTICS

Handled by a fleet of specialized tanker trucks and a team of logistic professionals dedicated to making sure that our customers are fully-supplied at all times.

5 CUSTOMER-SITE ADMIXTURE STORAGE AND METERING SYSTEMS

Provided in either dedicated structures for permanent production sites or via portable, sea container-housed systems for remote and temporary sites.

- CSA-approved dosing and metering equipment
- Installations by highly-qualified and experienced Sika specialists
- Many systems come equipped with Internet-based monitoring systems for automated re-supplying
- System installations are conducted during down-times to minimize impact on business
- On-going dosing and metering equipment R&D, for state-of-the art equipment and services





5 STRATEGICALLY-LOCATED TECHNICAL SALES STAFF

with sales offices located in Vancouver, Edmonton, Cambridge, Montreal and with Canada-wide coverage by a team of dedicated engineers and technicians located to service customers across the country.

7 PORTABLE MINI LAB FOR ON-SITE SUPPORT

Sika Canada's mini-lab can be made available for specialized large-scale and remote projects.

8 HIGHLY-QUALIFIED TEAM

of sales and technical support including several concrete and civil engineers, chemists and ACI-Certified lab technicians.



9 TOTAL COST OPTIMIZATION

Made possible by Sika Canada thanks to mix designs calculated to optimize the cost of your concrete batches and/or adjust for a wide range of materials; and our strategically-located manufacturing sites that help to reduce shipping costs. This is how we offer both technically advantageous products as well as cost-effective solutions for concrete manufacturers and users from coast to coast.

10 SUSTAINABLE SOLUTIONS

We, at Sika, are committed to the guiding principle of sustainable development – a pattern of resource use that aims to meet human needs in the present and in the future, closely linking economic, ecological and social needs.

The optimization of resource consumption and environmental safety are paramount to us when we design and manufacture products.

Sika® ViscoCrete® Superplasticizers reduce consumption of water in concrete manufacturing by as much as 40%; Sika® Viscoflow® Workability Retention Admixtures contribute to creating longer-lasting workability; and, therefore, more environmentally responsible concrete, buildings and structures.

Our set hardening admixture Sika® Rapid-1 and set accelerating Admixtures SikaSet® are contributing to save the energy cost; as well as Sika® Grinding Aids contribute to reduction of CO₂ emissions by replacing a higher percentage of clinker during cement manufacturing.

As the hub for Sika's operations in Canada, the Pointe-Claire site operates under dual certification: ISO 9001 for quality management systems and ISO 14001 for environmental management systems. Our other plants are ISO 9001-certified and in the process of being ISO 14001-certified.





PARTNERING WITH SIKA

Sika is a proven and reliable partner to the whole building and construction industry. Worldwide we provide our customers with far more than just the best 'state of the art' and technically proven concrete refurbishment materials. We also assist and add value for our customers, by providing many more support services for our products and their installation.

SPECIFIERS/CONSULTANTS

As the engineering of concrete structures continues to evolve, so do the construction methods and the demands placed on building materials. At Sika, we support this on-going process with value-added products, design support and sustainable solutions.





- Value-added products
- Design technical support
- Sustainable solutions



We understand work-site conditions and the notion that time is money. We have solutions to more than merely reduce the cost of a cubic meter of concrete.





- Ease of use/implementation
- Care-free logistics
- Technical/On-site service
- Value-engineered solutions

CONCRETE MANUFACTURERS

Sika partners with concrete manufacturers across the country to help them offer their customers the desired products at competitive prices using locally-available raw materials.





- Highly consistently-performing products (complete well-rounded product offering)
- Technical support
- Total cost optimization

END-USERS

The trend towards Design/Build/Manage projects has turned cost-calculations on their head. Increasingly, end-users are looking beyond immediate material costs and looking at the longterm impact of their building material choices.





- Assurance of quality outcome
- Cost-effective and sound solutions
- Long-term durability









SIKA OFFERS A COMPLETE PORTFOLIO OF PRODUCTS

- Sika® ViscoCrete®, Sika® Plastocrete, SikaPlast and Sikament® water reducers
- Sika® ViscoFlow® workability-retaining admixtures
- Sika® Stabilizer viscosity modifying admixtures
- Plastiment® and SikaTard® set retarders and hydration control products
- Sika Rapid-1® and SikaSet® set-hardeners and set-accelerators
- Sika® Air and Sika® AER air-entrainers
- Sika® CNI and Sika® FerroGard corrosion inhibitors
- Sika® Control, Sika® De-Air, Sika® Lightcrete, Sikacrete® and other specialty products
- SikaMix® dry cast admixtures
- Sika® WT, Sika® 1 and Sika® 1+ watertight concrete system admixtures
- SikaFiber® and SikaFiber® Force fibres
- Sigunit® shotcrete admixtures in both powder and liquid form
- SikaGrind® cement grinding aids
- Including a variety of curing and finishing accessory products

SIKA PRODUCTS FOR A DIVERSIFIED INDUSTRY

Sika offers a full range of compatible products, designed to obtain the required characteristics, whatever the type of concrete.

DURABLE CONCRETE – achieved through a reduced water-to-cement ratio, good flow ability (to fill even the most intricate form work), and proper curing – thanks to products from the Sika® ViscoCrete®, Sika® Control®,

work), and proper curing – thanks to products from the Sika® ViscoCrete®, Sika® Control®, Sika® Air, SikaCrete®, Sika® FerroGard®, Sika® CNI, SikaFiber® Force and Sika® Watertight Concrete product lines.

Resulting in

- Prolonged service life
- Lower maintenance and refurbishment costs
- Improved aesthetics
- Wider control-joint spacings
- Tougher, more durable floor surfaces Leading to
- Flatter and more true surfaces, and
- Greater customer satisfaction!



HIGH- AND EARLY-STRENGTH

CONCRETE – achieved through water reduction, plasticizing and fast hydration – thanks to products from the Sika® ViscoCrete®, SikaSet® and SikaRapid® product lines.

Resulting in

For Ready-Mix Concrete:

- Faster construction
- Cost-efficient mix designs
- Improved form-work rotation
- Improved designs and lower concrete consumption

For Precast Concrete:

- Rapid mould rotation and concrete surface finishing
- Early pre-stressing at low temperatures
- Reduced heat- and steam-curing energy consumption
- Cost-efficient mix designs



PUMPED CONCRETE with improved

rheology characteristics and cement hydration efficiency thanks to Sika® ViscoCrete® and improved internal cohesion properties thanks to Sika® Stabilizer.

Resulting in

- Improved internal cohesion
- Reduced friction during pumping Leading to
- Faster and consistent placing
- Optimized cost of mix design with efficient use of fines/ cements
- The ability to use a wider range of aggregates and gradings (including recycled aggregates)
- Increased quality and durability
- Less blockages and the ability to achieve longer pumping distances
- Reduced labour, and improved concrete surfaces

DRY-CAST CONCRETE with optimised cost and technical aspects thanks to SikaMix[®].

Resulting in

- Brilliant colours
- Reduced efflorescence
- Enhanced water-repellence
- Green strength right after compaction
- Uniform surface texture and product shape
- Improved freeze/thaw resistance
- Reduced wear-and-tear on equipment
- Fewer rejects or call-backs
- Cost effective mix designs
- $\hfill \blacksquare$ Faster production with increased output





WATERTIGHT CONCRETE achieved using the Sika Permeability Reducing Admixture range, such as the Sika® Watertight Concrete Powder, the Sika® WT-200 P, or the Sika® 1+ range of hydrophobic admixtures, coupled with Sika's wide range of waterproofing accessories for watertight joints

Resulting in

- Water being retained in the case of swimming pools, water-retaining structures, dams, waste-water treatment structures, etc., and kept out in the case of basements, underground parking garages, tunnels, etc.
- Quality backed by a 50-year track record Leading to
- Peace of mind for the client, specifier, contractor and enduser



SELF-COMPACTING CONCRETE

and details.

products.

with improved rheology characteristics and cement hydration efficiency thanks to Sika® ViscoCrete® and improved internal cohesion properties thanks to Sika® Stabilizer. We invite you to visit the SCC Zone at: http://usa.sika.com/en/solutions_products/Construction-Products-Services/Concrete/scc-zone.html

PRECAST CONCRETE with improved

efficiency thanks to Sika® ViscoCrete®

rheology characteristics and cement hydration

superplasticizers, improved internal cohesion

early strength development and/or modified

setting characteristics thanks to SikaRapid®,

aesthetic fair-faced concrete surfaces due to

Sika® Separol release agents and improved

shrinkage control thanks to Sika® Control

properties thanks to Sika® Stabilizer, improved

Resulting in

- Reduced labour and equipment costs
- Faster placement times and less finishing work
- Improved designs leading to lower concrete consumption
- Faster turn-around of formwork and rapid rotation of fewer moulds
 Leading to



- Fewer rejects or claims
- lacktriangle Increased structure service life
- Smooth and uniform surfaces
- Less wear-and-tear on operators due to less vibration work



Resulting in

- Outstanding workability
- High early strengths
- Ease of finishing and fine surface finishes Leading to
- Accelerated strength development
- Reduced cement volume and use of replacement materials
- Rapid mould rotation and concrete surface finishing
- Early pre-stressing at low temperatures
- Reduced heat and steam-curing energy consumption
- Cost-efficient mix designs

TUNNELLING AND MINING CONCRETE PRODUCTS such as our

Sika® Foam ground conditioning foaming agents and excavation-process polymers and additives; our SikaSet® accelerator and SikaTard® retarder for backfilling grout; our Sigunit accelerator for increased early strengths of Shotcrete; our Sika® Fiber for improved flexural toughness in both concrete and shotcrete inner linings; Separol release agents for pre-cast concrete segments; and SikaBond® R&B conveyor belt repair and bonding systems.

Resulting in

- Increased strength development
- Extended workability time
- Conditioning of soils for easier and faster TBM advancement Leading to
- Satisfied customers due to economies of time and materials.
- Lower wear and torque
- Better cutter efficiencies



CEMENT PRODUCTION with lower

energy costs and emissions, increased productivity and speed, lower clinker factor, and greater use of Limestone and other mineral fillers thanks to SikaGrind® grinding additives and quality improvers.

Resulting in

- Improved milling efficiency
- Lower dependence on clinker
- Reduced energy consumption Leading to
- Reduced CO₂ emissions
- lacksquare Improved cement quality
- Greater customer satisfaction



SIKA CANADA: PROVEN RESULTS ACROSS CANADA

Our global and regional Technology Centres and rapid technology transfer processes combined with our team of Sika specialists enables us to provide increased value for businesses everywhere.

BRENTWOOD TOWN CENTRE, BURNABY, BC

An entire district under development in Burnaby near Vancouver. It is the **largest construction site in Vancouver**, a project 20 years in the making. The Brentwood Town Centre will house a new shopping complex with over 350 businesses and restaurants as well as ten high-rises up to 60 floors containing offices and 4,200 apartments. **Sika® Admixtures** were and still used in the production of concrete for this major project, such as **Sika® ViscoCrete®-2110** Superplasticizer, **Sika® Plastocrete®-161^{ca}** Water Reducer, **Sika® AER^{ca}** Air Entraining Admixture, **SikaTard®-930** Hydration Stabilizer, and **Sika® Stabilizer 4R** viscosity modifying agent.

ROGERS CENTER, EDMONTON, AB

The Rogers Center is a 819,000 square foot multi-use indoor arena and the new home to the Edmonton Oilers National Hockey League franchise. Construction of the foundation began with implementation using an innovative and cost- effective low-slump vertical shotcrete method. The approximate 3000 cubic meters of 35 MPa shotcrete was sprayed along the entire

foundation. Sika® ViscoCrete®-2100, Sika® Plastocrete®-161^{cA} and Sika® AER^{cA} were utilized in the mix to optimize this cost effective solution. One of the build's most technical pours is the ultra-flat ice surface slab. The key to creating the laser-leveled slab was to ensure all concrete had a slump range from 200-230 mm after the pump, and that the initial and final settings were precise and consistent throughout the pour. Sikament®-300^{cA} was used for this application. The slump and retarding properties tied together perfectly to produce the ultra-flat floor and gave the crews an ample finishing time without the use of conventional retarders.



The Stantec Tower at 251 meters tall, incorporates 66 stories of commercial, retail and residential offerings. 483 SKY residential spaces are constructed on the towers top 36 floors which stand atop the **uniquely designed transfer slab** on the 30th storey, the first of its kind in the city of Edmonton. Pouring of the transfer slab began with just over 2300 cubic meters of **self-consolidating concrete**. To meet the demands of pumping the flowable concrete up 30

storeys, **Sika® ViscoCrete®-2100** in addition to **Sika® Stabilizer 4R** were incorporated to ensure a robust, flowable concrete that was supplied and delivered over a 30+ hour period, without any delays or lost loads.

LIGHT RAIL TRAIN (LRT), KITCHENER, ON

GrandLinq, a joint venture between Aecon, Kiewit and Keolis, managed the construction of the Kitchener LRT project using concrete ready mix supplier Tri City. The **62,000 m³ of concrete** was optimized with **Sika's ViscoCrete®- 2110**, netting a substantial reduction in cement. Other products Sika supplied were **SikaSet® RHE** and **Plastiment® RX** with great feedback from production, QC and management on the final performance.

HEBRON PLATFORM, NL

The Hebron Gravity Base Structure is an offshore production platform used to extract oil, 350 kilometers off shore from St John's Newfoundland. The GBS consisted of **132,000 m³ of reinforced concrete** designed to withstand the weight of the topsides, icebergs, and severe oceanographic conditions. The total platform was installed in approximately 95 metres water

depth and will store approximately 1.2 million barrels of crude oil. After a rigorous testing and selection process, Sika was chosen as the concrete admixture supplier to produce the high performance 65 MPa concrete that was required to be high slump, freeze thaw and chloride resistant. Sika's expertise in concrete resulted in Sika being selected as an important partner for this project. The Sika products were Sika® ViscoCrete®-2100 HRWR, Sika® MultiAir-25 air entraining, SikaTard®-440 retarder and Sika® Stabilizer 4R viscosity modifier.







YOUR INTEGRATED ONE-STOP SHOP FOR KEY PROJECTS

Our Sika Canada Cross-Selling team will help you get more leads for upcoming projects.



WATERPROOFING SYSTEMS

- Below-Grade Sheet Membranes
- Liquid-Applied Membranes
- Slab Dowelling & Curing Blankets
- Tank Lining



JOINT SEALING

- Interior/Exterior, Polyurethane, Hybrid & Silicone Sealants
- Semi-Rigid Joint Fillers, and more...



STRUCTURAL STRENGTHENING

- Carbon & Glass Fibre-Reinforced Polymer Systems
- Epoxy Adhesives
- Repair Mortars, and more...



GROUTING AND ANCHORING

- Cementitious & Epoxy Grouts, Chemical Anchoring
- Epoxy Adhesives,
- Special Admixtures, and more...



ROOFING SYSTEMS

- Vapour barriers, Insulation Boards, PVC Membranes
- Adhesives & Fastening Solutions
- Liquid-Applied Membranes



CONCRETE REPAIR AND PROTECTION

- Bonding Agents
- Repair Mortars, & Corrosion Inhibitors
- Penetrating Sealers
- High Performance Concrete, and more...



CONCRETE PRODUCTION:

- Water Reducers & Air Entrainers
- Slump- & Workability Retainers
- Viscosity Modifiers
- Fibers
- Grinding Aids, and more...



WALL SYSTEMS

- Epoxy/Urethane Coatings
- Interior/Exterior Elastomeric Coatings
- Repair Mortars



FLOOR SYSTEMS

- Parking Deck Membranes & Moisture Mitigation
- Underlayments & Polyurethane-Cement
- Chemical-Resistant/ESD Control/Epoxy, Terrazzo & Decorative Solutions

Founded in

1910 by Kaspar Winkler when he launched our first product, Sika® 1, a pioneering admixture to accelerate the setting and hardening of cement, mortar and concrete -- used most recently to waterproof the Gotthard Base Tunnel through the Alps.

SIKA CANADA INC founded in

1957 headquarters in Pointe-Claire, Quebec. WORLD'S
LARGEST PRODUCER of

construction products.

Approximately

5 % of our 18,000 employees worldwide dedicated to R&D and Technical Services, almost half of which work on cement and cementitious systems.

R&D FACILITY AND FULLY-EQUIPPED CONCRETE

LAB in Pointe-Claire, Québec.

SIKA - A WORLDWIDE PRESENCE



Sika Canada Inc., a member of the Sika Group, is a leader in the field of speciality chemicals for construction and manufacturing industries. Our product lines feature high quality roofing systems, concrete admixtures, mortars and resins, sealants and adhesives, structural strengthening components, industrial and decorative flooring, as well as protective coatings and waterproofing systems. Our expertise is borne out of a global presence and served by strong, local support. Sika has earned the trust of our customers for over 100 years, by delivering the highest standards of commitment and partnership.