

# CONCRETE ADMIXTURE PRODUCT GUIDE



BUILDING TRUST CONSTRUIRE LA CONFIANCE

## A HISTORY OF EXCELLENCE

For over one hundred years, Sika has been producing high quality, innovative admixture technologies for concrete. Sika's first product, appropriately named Sika 1, was a concrete admixture that allowed for the electrification of tunnels in Europe by waterproofing the concrete that lined the interior. Now recognized as a world leader in specialty chemicals and other products specifically engineered for concrete, we continue to bring technologies to the market that focus on the optimization of costs, workability, and durability of concrete throughout the production and application processes.

With a full line of concrete admixtures and complementary products for cement production, ready mix, tunneling & mining, precast/prestress, paving, manufactured concrete products, and dry mortar production, Sika has unique and innovative solutions to meet the needs of the concrete industry. Our broad range of admixtures help to improve both the plastic and hardened properties of concrete, providing both consistent and reliable results to our customers and end users.





**CEMENT PRODUCTION** Our SikaGrind series of products help increase production, improve concrete strengths and allow for the inclusion of greater amounts of limestone.



**TUNNELING & MINING** With a rich history in tunneling & mining, Sika provides both products and equipment for tunneling applications. Our alliance with Aliva allows us to offer high quality shotcreting equimpment.



### DRY CAST PRODUCTION Our SikaMix line of products

is specially formulated to help improve dry cast production and improve hardened properties.



#### WATERTIGHT CONCRETE

Sika has been making concrete watertight for over 100 years. We offer a wide range of integral admixtures to improve concrete's ability to withstand water penetration. Most importantly, good watertight concrete requires high quality jointing materials also provided by Sika.

PRODUCT FAMILY	PRODUCT NAME	ASTM DESIGNATION	PRODUCT DESCRIPTION
Water-Reducers	Sika® Plastocrete®-161 N	ASTM C494 Type A	New generation, synthetically-manufactured v
	Sika® Plastocrete®-161 <sup>CA</sup>	ASTM C494 Type A, B & D	General purpose water reducer
	Sika® Plastocrete®-10N	ASTM C494 Type A, B & D	Water reducer with controlled setting character
Mid-Range Water-Reducers	Sikaplast-200	ASTM C494 Type A & G	Mid-range water reducing admixture with enh
	Sikaplast-500	ASTM C494 Type A & F	Viscocrete Powered mid-range water reducer,
	Sikament <sup>®</sup> -475	ASTM C494 Type A & F	Multi-range water-reducing admixture utilzing
High-Range Water-Reducers	Sikament <sup>®</sup> -300 N / 300 <sup>CA</sup>	ASTM C494 Type F	Normal-setting high-range water-reducing su
	Sika® Viscocrete®-1000	ASTM C494 Type A & F	HRWR with improved slump life, finishability,
	Sika® Viscocrete®-2100	ASTM C494 Type A, F & ASTM C1017	Ultra HRWR, with good slump retention, impr
	Sika® Viscocrete®-2110	ASTM C494 Type A & F	Ultra HRWR, extremely high water reduction a
	Sika® Viscocrete®-6100	ASTM C494 Type A & F	Ultra HRWR with fastest set and high early st
Workability Retaining Admixture	Sika <sup>®</sup> ViscoFlow-2020	ASTM C494 Type S	Workability-retaining admixture for use in var
Retarders & Hydration Control	Sika® Plastiment® RX	ASTM C494 Type B & D	New generation, synthetically-manufactured
	Sika <sup>®</sup> Plastiment <sup>®</sup> / Plastiment <sup>®CA</sup>	ASTM C494 Type B & D	Water Reducer/ retarder, effective in hot wear
	Sikatard-440	ASTM C494 Type B	Hydration controller, maintains workability up
	Sikatard-930	ASTM C494 Type B	Hydration controller; stabilizes concrete mixes
Set Accelerators	SikaSet <sup>®</sup> NC	ASTM C494 Type C & E	Non-chloride based set accelerator, suitable fo
	SikaSet <sup>®</sup> RHE	ASTM C494 Type C & E	Unique, next-generation non-chloride-accelera
	SikaSet <sup>®</sup> HE	ASTM C494 Type C & E	Chloride based, economical set accelerator, fas
Strength/Hardening Accelerators	Sika® Rapid-1	ASTM C494 Type C	Strength / hardening accelerator, non-chloride
Air Entrainers	Sika® AER <sup>CA</sup>	ASTM C260	AEA based on organic materials, stable & prec
	Sika® Air-60	ASTM C260	Unique synthetically-manufactured surfactan
	Sika® Multi Air	ASTM C260	Synthetic based AEA, controlled air entrainme
	Sika® Air-260	ASTM C260	Patented multi-component AEA, reduces air f
	Sika® Air-360	ASTM C260	Concentrated AEA, suitable for low slump con
Corrosion Inhibitors	Sika Ferrogard <sup>®</sup> -901		Dual action corrosion inhibitor, anodic and cath
	Sika <sup>®</sup> CNI	ASTM C494 Type C, ASTM C1582	Calcium nitrite based corrosion inhibitor, form
Dry Cast Admixtures	SikaMix PL-100		Polycarboxylate blend, dry-cast admixture, im
	SikaMix AE-3	ASTM E514	High performance primary and secondary efflo
	SikaMix W-10	ASTM E514	Efflorescence reducer, water repellent, decreas
	SikaMix W-10 M		Water repellent and efflorescence control mor
	SikaMix BF3		High strength plasticizer for concrete blocks a
	SikaMix-512		Ready-to-use water-reducing admixture for ex
Watertight Applications	Watertight Concrete Powder (WCP)	ASTM C494 Type F & S	Integral watertight admixture, reduces water
	Sika <sup>®</sup> WT-200 P		Water-resisting, crystalline watertight concret
Silica Fume	Sikacrete <sup>®</sup> -950 DP	ASTM C1240	Densified silica fume
Specialty Admixtures	Sika <sup>®</sup> Stabilizer 4R	ASTM C494 Type S	Viscosity modifier, improved stability and seg
	Sika® Stabilizer Aquagel		Ready-to-use anti-washout powdered admixt
	Sika® Control-75	ASTM C494 Type S	Shrinkage-reducing admixture for high-perfor
	Sika <sup>®</sup> Control NS	ASTM C494 Type S	Shrinkage-reducing and compensating admixt
	Sika <sup>®</sup> Lightcrete Powder		Powdered admixture for CLSM, flowable fill, le
	Sika® De-Air / Sika® PerFin-305		Entrained air reducers
Concrete Fibers	SikaFiber® HP	ASTM C1116	Fine denier, monofilament polypropylene fibre
	SikaFiber® PPM	ASTM C1116	Monofilament polypropylene fibre, reduces ble
	SikaFiber® PPF	ASTM C1116	Fibrillated polypropylene fibre, replaces tempe
	SikaFiber® MS-25	ASTM C1116	UL-rated structural macro synthetic fibre, good f
	SikaFiber® Force-650	ASTM C1116, Type III	A micro-synthetic reinforcing fibre for shotcre
Shotcrete Accelerator	Sika <sup>®</sup> Sigunit <sup>®</sup> L72 AF	ASTM C1141	Alkali-free liquid shotcrete accelerator, reduce
	Sika® Sigunit® L50 AF		High-performance liquid alkali-free accelerator
Powdered Admixtures	Sika® Viscocrete®-125		Powdered HRWR for concrete and mortar dry
	Sika® Viscocrete®-225		Powdered HRWR for concrete and mortar dry
Specialty Concrete Products	Sika® Rugasol-S		Surface retarder, retard set of surface mortar
	SikaFilm		Retards moisture evaporation from fresh conc
Grinding Aids	SikaGrind-455 GNT	ASTM C465	Cost-effective grinding aid for portland and ot
	SikaGrind-240 <sup>CA</sup>		Chloride-free liquid additive to allow for easier
	SikaGrind-721		Efficient, chloride-free liquid performance enh
	SikaGrind-872		Efficient, chloride-free liquid performance e

d water-reducing normal-set admixture for more plastic and flowable concrete

cteristics, extended setting times at higher dosages

nhanced finishability

er, high plasticity and early and final strength

ing Sika's ViscoCrete<sup>®</sup> technology for conventional ready mix concrete

super-plasticizing admixtures for stronger, more durable concrete

ty, high early strength, increased durability

proved finishability, increased durability

n and slump retention, high early and ultimate strength

strength, suitable for precast applications

various concrete applications, including conventional high-slump or SCC.

d set-retarding final strength-increasing admixture for all types of concrete

eather, enhanced workability and finish

up to several hours/ days, no affect on ultimate strength

es for long periods without negatively influencing the quality

for fast track applications, protection from cold & freezing conditions

erator for concrete with accelerated setting and strength gain characteristics

faster set time and early strength

de, no workability loss, for very high early strength

edictable air, uniform void spacing

ant for air entrainment in concrete

nent, high quality air void system

r fluctuations, stable air

oncretes, lean and fly ash mixes

athodic protection, reduced occurrence of corrosion

ms protective layer around rebar

mproves productivity, reduces porosity and machine wear

florescence reducer / water repellent admixture, improved color brightness

eases water absorption

ortar admixture, improves bonding of mortar with masonry units

and pavers

extruded concrete such as hollow-core, curbs and gutters

er absorption and water penetration under pressure, also acts as water-reducer rete admixture with crack-healing properties to reduce concrete permeability

gregation resistance, preserve slump and flow, improved surface quality

xture for concrete

ormance concrete with greatly reduced drying shrinkage cracking

ixture

, lean mix backfill, unshrinkable fills

pre, reduced plastic shrinkage and settlement cracking

bleeding, plastic shrinkage, and settlement, enhances durability and toughness perature steel, controlling plastic shrinkage and settlement cracking

d finishability, reduces shrinkage, improves residual concrete strength after cracking rete, designed for use as a safe, simple WWF replacement

ces rebound, increases early age

tor for wet or dry shotcrete for high-quality and high initial strength concrete ry mix, fast dispersion and good slump life

ry mix, faster dispersion

r in concrete, suitable for exposed aggregate surface, prevent cold joints ncrete surfaces, prevents plastic shrinkage cracking, aids finishing

other hydraulic cements

er grinding and enhanced quality of cement

nhancing grinding aid

nhancing grinding aid

### SIKA SOLUTIONS FROM ROOF TO FOUNDATION

**Concrete Production** 

Sika® Plastocrete®, SikaSet®

Concrete Repair & Protection

Sika® ViscoCrete®

Sika<sup>®</sup> Air / AER<sup>CA</sup>

Sika MonoTop®

Sikagard<sup>®</sup>

SikaTop®, SikaRepair®

SikaProof<sup>®</sup>, SikaFuko<sup>®</sup>

Waterproofing Systems

#### **Roofing Systems**



Sarnafil® Sikaplan® Sikalastic®

#### **Grouting and Anchoring**



SikaGrout® Sikadur® Sika AnchorFix®

#### Floor & Wall Systems



Sikafloor® Sikagard® Sikagard® Duroplast

#### Also Available:



CONCRETE SikaFiber® TECHNOLOGY





CONCRETE MANUFACTURED CONCRETE PRODUCTS States TECHNOLOGY



CONCRETE

MiniShot – SHOTCRETE TESTING 2.0



Sika® ViscoCrete® & Sika® ViscoFlow® countering concerts weakwaity









Sikaflex® Sikasil® Sikadur® Combiflex

#### **Structural Strengthening**



Sikadur®, Sika® CarboDur® SikaWrap® Sika® CarboShear

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 industries for over 100 years by delivering the highest standards of commitment and partnership.

BUILDING TRUST



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Sika® Greenstreak® SikaSwell®, SikaFix®