

# 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.

## CONCRETE BEYOND COMMODITY

With a core competency and rich history in concrete production, we strive to look beyond the commodity market to design and create concrete admixtures that give our customers an advantage and set them apart in their marketplace. Sika's unique ViscoCrete® Technology is a clear example of this.

Our ViscoCrete® line of products encompasses a group of polycarboxylate based, high performing, water-reducing concrete admixtures. From conventional to high-strength, self-consolidating concrete, our ViscoCrete® products are specially formulated to provide full range water reduction with a variety of cementitious materials allowing for ultimate versatility. As the world's largest supplier of polycarboxylate

technology developed specifically for cement and concrete production, we truly understand the building blocks of polymer design. The result is products that are less sensitive to the many variables that can affect concrete, providing our customers greater consistency.

Sika partners with customers and develops a solid understanding of their business and needs, ultimately playing a role in their success. As a part of this our representatives provide the highest level of technical support from project inception to actual concrete placement in the field. We work with customers to establish value added concrete, designing mixes that stand out among the rest...taking concrete beyond a commodity product.

	PRODUCT FAMILY	PRODUCT NAME	ASTM DESIGNATION	PRODUCT DESCRIPTION
WATER REDUCTION & WORKABILITY	Water-Reducers	Plastocrete® 161	ASTM C494 Type A, B & D	General purpose water reducer
		Plastocrete® 10N	ASTM C494 Type A, B & D	Water reducer with controlled setting characteristics, extended setting times at higher dosages
		Plastocrete® 250	ASTM C494 Type A, B & D	A new generation water reducer, recommended whenever increased plasticity and higher ultimate strengths are desired
	Mid-Range Water-Reducers	SikaPlast®-200	ASTM C494 Type A & G	Mid-range water reducing admixture with enhanced finishability
		SikaPlast®-300 GP	ASTM C494 Type A & F	ViscoCrete® powered cost efficient, multi-purpose mid-range water reducer
		Sikament® AFM	ASTM C494 Type A & F	ViscoCrete® based mid-range with neutral setting characteristics, improved finishability, and slump retention
	High-Range Water-Reducers	Sikament® 475	ASTM C494 Type A & F	Multi-range WR, improves workability, workability retention and concrete finishability
		Sikament® 686	ASTM C494 Type A & F	HRWR, moderate workability retention, high early & ultimate strength, increased durability
		Sikament® 610	ASTM C494 Type A & F	HRWR, ViscoCrete® based, faster setting and high early and ultimate strength
		Sika® ViscoCrete®-1000	ASTM C494 Type A & F	HRWR, with improved slump life, finishability, high early strength, increased durability
		Sika® ViscoCrete®-2100	ASTM C494 Type A, F & ASTM C 1017	Ultra HRWR, with good slump retention, improved finishability, increased durability
		Sika® ViscoCrete®-4100	ASTM C494 Type A, F & ASTM C 1017	Ultra HRWR, with moderate workability retention, non retarding, for SCC and conventional concrete
		Sika® ViscoCrete®-6100	ASTM C494 Type A & F	Ultra HRWR, with fastest set and high early strength, suitable for precast applications
		Sika® ViscoCrete®-2110	ASTM C494 Type A & F	Ultra HRWR, extremely high water reduction and slump retention, high early and ultimate strength
Sikament® SPMN		ASTM C494 Type A & F	HRWR based on melamine & naphthalene, improved workability and finishability	
Powdered Admixtures		Sika® ViscoCrete®-125 P		Powdered HRWR for concrete and mortar dry mix, fast dispersion and good slump life
	Sika® ViscoCrete®-225 P		Powdered HRWR for concrete and mortar dry mix, faster dispersion	
Workability Retaining Admixture	Sika® ViscoFlow®-2020	ASTM C494 Type S	PCE based, increases workability retention without delay in set time, increased early strength	
SET CONTROL	Retarders & Hydration Control	Plastiment® XR	ASTM C494 Type B & D	Water reducer/retarder, prevents slump loss, increases set time
		Plastiment®	ASTM C494 Type B & D	Water reducer/retarder, effective in hot weather, enhanced workability and finish
		SikaTard® 440	ASTM C494 Type B & D	Hydration controller, maintains workability up to several hours/days, no affect on ultimate strength
	Set Accelerators	SikaSet® NC	ASTM C494 Type C & E	Non-chloride based set accelerator, suitable for fast track applications, protection from cold & freezing conditions
		SikaSet® NC-4	ASTM C494 Type C & E	Effective accelerator where high early strength concrete is desired and the use of calcium chloride is prohibited
		SikaSet® HE	ASTM C494 Type C & E	Chloride based, economical set accelerator, faster set time and early strength
Strength/Hardening Accelerators	Plastocrete® 161 HE	ASTM C494 Type C & E	Chloride based, water reducing, set accelerator, faster set time and early strength	
DURABILITY ENHANCEMENT	Air Entrainers	Sika® Rapid-1	ASTM C494 Type C	Strength/hardening accelerator, non-chloride, no workability loss, for very high early strength
		Sika® Air	ASTM C 260	AEA based on organic materials, stable & predictable air, uniform void spacing
		Sika® AEA-14	ASTM C 260	AEA based on organic materials, low spacing factor, improved air quality
		Sika® Multi Air-25	ASTM C 260	Synthetic based AEA, controlled air entrainment, high quality air void system
		Sika® Air-260	ASTM C 260	Patented multi-component AEA, reduces air fluctuations, stable air
	Corrosion Inhibitors	Sika® Air-360	ASTM C 260	Concentrated AEA, suitable for low slump concretes, lean and fly ash mixes
		Sika® FerroGard®-9015		Dual action corrosion inhibitor, anodic and cathodic protection, reduced occurrence of corrosion
		Sika® CNi	ASTM C494 Type C, ASTM C 1582	Calcium nitrite based corrosion inhibitor, forms protective layer around rebar
		Sika® Control-220	ASTM C494 Type S	Drying shrinkage reducing admixture, suitable for high performance concrete, reduces formation of cracks
		Sika® Control-75	ASTM C494 Type S	Shrinkage reducing admixture, reduces cracking, easy to use
Shrinkage Reduction/Compensation	Sika® Control-NS	ASTM C494 Type S	Shrinkage reducing/compensating admixture with reduced potential for drying shrinkage cracking and curling	
Silica Fume	Sikacrete®-950DP	ASTM C 1240	Densified silica fume	
Metakaolin	Sikacrete® M-100	ASTM C618, Class N	Highly reactive metakaolin pozzolan for portland cement concrete, grouts and mortars applications	
Alkali-Silica Reaction Mitigation	Sika® Control ASR	ASTM C494 Type S	Lithium nitrate based ASR mitigating admixture, increased durability and life span	
WATER-TIGHT	Watertight Applications	Sika® Watertight Concrete Powder	ASTM C494 Type S	Integral watertight admixture, reduces water absorption and water penetration under pressure, also acts as water reducer
		Sika® WT-215 P	ASTM C494 Type S	Integral crystalline admixture, reduces water absorption and water penetration under pressure
DRYCAST	Drycast Admixtures	SikaMix® PL-100		Polycarboxylate blend, drycast admixture, improves productivity, reduces porosity and machine wear
		SikaMix® BF3		High strength plasticizer for concrete blocks and pavers
		SikaMix® HC-300	ASTM C494 Type F	Plasticizing admixture for drycast application, increases strength, durability and productivity, reduces water absorption
		SikaMix® AE-3	ASTM E 514	High performance primary and secondary efflorescence reducer/water repellent admixture, improved color brightness
		SikaMix® AE-6		High performance water repelling and efflorescence reducing admixture
		SikaMix® W-10	ASTM E 514	Efflorescence reducer, water repellent, decreases water absorption
SPECIALTY PRODUCTS	Specialty Admixtures	SikaMix® W-10 M		Water repellent and efflorescence control mortar admixture, improves bonding of mortar with masonry units
		Sikament®-100 SC	CRD-C 661	Anti-washout admixture for under water concrete placement
		Sika® Stabilizer-4R	ASTM C494 Type S	Viscosity modifier, improved stability and segregation resistance, preserve slump and flow, improved surface quality
		Sika® Lightcrete Powder		Powdered admixture for CLSM, flowable fill, lean mix backfill, unshrinkable fills
		Sika® Lightcrete Liquid		Liquid admixture for CLSM, flowable fill mixes, increases flow, reduces density
		Sika® Perfin-305		Concrete surface appearance enhancing admixture
FIBERS	Concrete Fibers	Sigunit®-L72 AF	ASTM C1141	Alkali free liquid shotcrete accelerator, reduces rebound, increases early age
		Sika® Rugasol-S		Surface retarder, retard set of surface mortar in concrete, suitable for exposed aggregate surface, prevent cold joints
		SikaFilm®		Retards moisture evaporation from fresh concrete surfaces, prevents plastic shrinkage cracking, aids finishing
	SikaFiber®	ASTM C 1116	Monofilament or fibrillated micro-fibers (polypropylene, acrylic, nylon) for reduced plastic shrinkage and settlement cracking, enhances durability and toughness	
	SikaFiber® Force	ASTM C 1116 & ASTM C820	Includes structural macro-synthetic fibers (UL rated), steel fibers and steel & synthetic fiber blend; replaces WWF and steel	



# CONCRETE ADMIXTURES

Product Selection Guide for your Next Project

## PRODUCTIVITY FROM PRODUCTION TO PLACEMENT

From the production of conventional concrete to SCC to very high early strength concrete, Sika products are formulated to help improve productivity in your plants and on the job site.

- Higher solids products improve efficiency in delivery and dosing.
- ViscoCrete® products “wet out” faster, improving production times.
- Sika® Rapid-1 is formulated to allow plant addition and still attain very high early strengths.
- Set & Hardening Accelerators that allow a decrease in curing necessary helping to turn forms faster.
- ViscoFlow® products help to improve slump retention.
- Greater utilization of supplementary cementitious materials with ViscoCrete®.



## CEMENT PRODUCTION

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

- The SikaGrind®-800 series is Powered by ViscoCrete®.
- Ultimate versatility in masonry production with our SikaGrind® MC-831/1031 allowing independent adjustment of air entrainment and workability.



## 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 equipment.

- Sigunit®-L72 AF is a high performance shotcrete accelerator that helps improve bond to subgrade.
- SikaTard® 440 is a hydration stabilizer that may be used in shotcreting applications.

## PROJECTS NOT PRODUCTS

Sika is not just a leader in concrete production but we also have a full line of construction products from “roof to basement”. We have products that cover, protect, seal, bond, strengthen, reinforce, make air and water tight, and ultimately improve the quality, beauty and durability of structures. We focus on a system approach, bringing owners, architects, and engineers a single source for their entire building envelope. This means our emphasis is not just products but projects. We work to provide value to both customers and A&E's through a project selling approach that benefits all throughout the construction process.



## DRYCAST PRODUCTION

Our SikaMix® line of products is specially formulated to help improve drycast production and improve hardened properties.

- Powered by ViscoCrete, SikaMix® PL-100 helps to improve production time, product aesthetics and strengths.
- SikaMix® AE-3 is our highest performing, most efficient, silane based efflorescence controlling admixture. In test after test it has proven to help eliminate efflorescence better than competitive products.



## 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.

- Sika provides a system approach to watertight concrete with a wide range of jointing materials from Sika® Greenstreak®.
- From project conception to completion Sika can offer engineering, detailing, and on site project assistance to help ensure the watertightness of structures.
- Sika® Watertight Powder is powered by ViscoCrete®, making it the most efficient watertight solution available.

# SIKA FULL RANGE SOLUTIONS FOR CONSTRUCTION:



WATERPROOFING



CONCRETE



REFURBISHMENT



SEALING AND BONDING



FLOORING



ROOFING

All sales of Sika products are subject to Sika's current Terms and Conditions of Sale available at [usa.sika.com](http://usa.sika.com) or by calling 800-933-7452. Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Product Data Sheet, product label and Safety Data Sheet, which are available at [usa.sika.com](http://usa.sika.com) or by calling Technical Services at 800-933-7452. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instructions for each Sika product as set forth in the current Product Data Sheet, product label and Safety Data Sheet prior to product use.

The sale of all Sika products are subject to the following Limited Warranty:

### LIMITED MATERIAL WARRANTY

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor.

**NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.**

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Our most current General Sales Conditions shall apply.  
Please consult the Product Data Sheets prior to any use and processing.

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# CONCRETE ADMIXTURE PRODUCT GUIDE

BUILDING TRUST



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