



FOR MORE INFORMATION VISIT
USA.SIKA.COM/SLABSOLUTIONS

BUILDING SOLUTIONS

Sika[®] SLAB SOLUTIONS

A COMPREHENSIVE APPROACH TO SLABS ON GROUND

BUILDING TRUST



SIKA SLAB SOLUTIONS

THE KEY TO A LONG LASTING CONCRETE SLAB in the most demanding conditions is proper slab design and material selection. Through the best practice guidelines of ACI combined with Sika's more than 100 years of global expertise in concrete solutions, Sika is able to provide the most comprehensive suite of products in the market to create a more durable, crack resistant and cost effective slab for your next construction project.

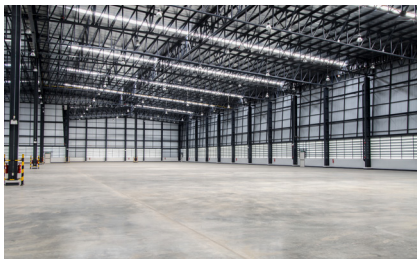
Value for owners, contractors and producers alike, Sika Slab Solutions addresses all phases of construction, from production to placement. Key features and benefits of Sika Slab Solutions include:

- Extended joint spacing
- Partial or full replacement of reinforcing
- Remend section thickness
- Building code compliant

Until this point, the design community has been left to handle concrete slab designs on their own. Provided with all necessary information, Sika is able to assist your design team in creating concrete with increased joint spacing, reduced section thickness, and conventional reinforcements, as well as optimized

placement characteristics, low shrinkage, increased structural loading capacity, and reduced curling. The result is a building code accepted approach with notes and recommended details tailored and optimized to each project.

On-site support continues with Sika's experienced field representatives assisting local producers with mix design suggestions to ensure the highest possible level of performance. With experts in the fields of waterproofing, sealants, repair, flooring and roofing, Sika is your single-source provider for all of your project needs. From pre-pour preparation to final finished flooring, your next large slab is in the hands of the market leader for innovation, service, and value.



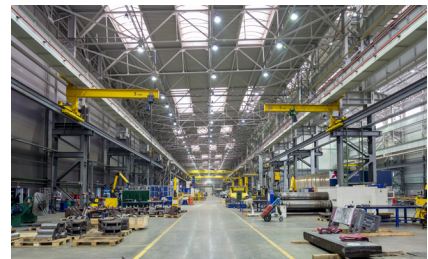
TYPICAL APPLICATIONS:

- Warehousing
- Distribution Centers
- Manufacturing Facilities
- Commercial and Retail Space
- Food & Beverage Facilities
- Educational Facilities
- Hospitals
- Data Centers



FEATURES AND BENEFITS:

- Extended Joint Spacing
- Partial or Full Replacement of Reinforcing
- Reduced Construction Costs and Schedule
- Reduced Maintenance Costs
- Increased Service Life
- Enhanced Surface Quality and Durability
- Project Assistance and Support
- Single-Source Supplier
- Building code compliant



PRODUCT FAMILIES:

- Sika ViscoCrete® Series of Water Reducing Admixtures
- Sika Control® Series - Shrinkage Reducing/Compensating Admixtures
- Sika Fibermesh® and Enduro® Concrete Fibers
- Sika Dry Shake Hardeners
- Sika Solutions for Concrete Curing
- Sika Solutions for Concrete Joints
- Sika Flooring Systems
- Sika Roofing Systems
- Sika Decorative Concrete

CONCRETE ADMIXTURES

Concrete design begins with the proper proportioning of cement, water and aggregate. Design of concrete, however, is optimized for value, workability and performance with the addition of chemical and mineral admixtures. Below are a selection of products that, when combined accordingly, will produce a high performance slab on ground - Sika Slab Solutions.

	<p>SIKA VISCOCRETE® SERIES - WATER REDUCERS</p> <p>The use of a water reducing admixture provides a way to increase overall strength, lower permeability, allow for easier placement and to control slump life for optimal surface finishing.</p>	<ul style="list-style-type: none"> ■ Increase Overall Strength ■ Lower Permeability ■ Ease of Placement
	<p>SIKA VISCOFLOW® SERIES - WORKABILITY ENHANCERS</p> <p>Sika provides the newest admixture technologies to extend slump life and enable optimized pumping. Sika ViscoFlow® technology extends slump life without retardation. For concrete pumping, the use of a viscosity modifier increases mix stability and segregation resistance resulting in better flow and improved surface quality/aesthetics.</p>	<ul style="list-style-type: none"> ■ Increase Slump Life ■ Extended Working Time ■ Improve Surface Quality ■ Decrease Segregation ■ Improved Pumping
	<p>SIKA CONTROL® SERIES - SHRINKAGE REDUCERS</p> <p>The use of a shrinkage reducing admixture (SRA) or shrinkage reducing and compensating admixture (SRCA) helps to control early and late age shrinkage cracking in concrete. A SRA/SRCA therefore increases durability, can extend joint spacing, and lower short and long term costs of ownership.</p>	<ul style="list-style-type: none"> ■ Reduced Shrinkage Cracking ■ Increase Life Span ■ Lower Repair Costs ■ Extend Joint Spacing
	<p>SIKA FIBERMESH® - CONCRETE FIBERS</p> <p>Macro Synthetic Concrete Fibers can replace some or all temperature & shrinkage reinforcing steel. ACI design standards allows for the use of microfiber and macrofiber reinforcement to partially/fully replace conventional slab reinforcement such as welded wire fabric or rebar. The use of structural fibers creates a 3D matrix of protection within the entire cross section of the concrete. If cracking is to occur, the fiber engages and provides crack containment.</p>	<ul style="list-style-type: none"> ■ Same Cost ■ Extend Joint Spacing ■ Replace Reinforcement ■ Accelerate Construction ■ Increase Tensile Capacity ■ Increase Durability & Impact Resistance
	<p>SIKACONTROL® FD-100 - FRESH CONCRETE DENSIFIER</p> <p>Developed specifically for slabs on ground and similar applications, SikaControl® FD-100 increases density of freshly mixed, non-air entrained concrete. This helps prevent negative effects from delamination and blistering.</p>	<ul style="list-style-type: none"> ■ Increase Density of Plastic Concrete ■ Reduce Likelihood of Delamination / Surface Defects

LOAD TRANSFER SYSTEMS FOR CONCRETE JOINTING

The movement of material handling equipment, such as forklifts, automated equipment, and other vehicular traffic, over the top of concrete slab joints requires precautions to avoid slab deflection and subsequent cracking. Without a mechanism to transfer loads between the two or more slab sections, they will move independently of one another, causing joint fatigue and deterioration. This deterioration will lead to the need for nosing repair and joint material replacement; increasing joint maintenance cost over time. Traditional doweling practices are time and labor intensive to use, so Sika has created a series of solutions to address this.

	<p>SIKA SPEED DOWEL Speed Dowel provides a practical dowel alignment method for transferring loads across, and managing stresses within, concrete slab-on-ground joints.</p>	<ul style="list-style-type: none"> ■ Used for Construction Joints ■ Ensures proper dowel alignment for positive load transfer ■ Reduces time and cost for conventional slip dowel installation ■ Eliminates need to grease dowels
	<p>SIKA SPEED PLATES Speed Plate provides load transfer across construction joints and immediately accommodates lateral and axial movement produced by concrete shrinkage and differential slab movement.</p>	<ul style="list-style-type: none"> ■ Used for Construction Joints ■ Ensures proper plate alignment for positive load transfer ■ Allows for axial and lateral slab movement ■ Eliminates need to grease dowel
	<p>DOUBLE TAPERED BASKET Double tapered basket design accommodates axial and lateral slab movements more rapidly than other tapered plate basket system. It is a method in accordance with ACI 360 Design of Slabs-on-Ground.</p>	<ul style="list-style-type: none"> ■ Used for Saw Cut Joints ■ Allows for axial and lateral movement ■ Double tapered design provides consistent and increased bearing area across every plate dowel
	<p>ZIPCAP 2-PIECE CONTROL - JOINTS FORMER ZipCap Control Joint is a fast, easy method of providing a weakened plane in flat concrete surfaces. The plane of weakness created by Zip Cap anticipates cracking forces and reduces undesired random cracks.</p>	<ul style="list-style-type: none"> ■ Used for Control Joints ■ Creates a control joint with excellent aggregate interlock ■ Installs easily in fresh concrete
	<p>SIKA SPEED LOAD Speed Load is a single component dowel sleeve for use in expansion joints. Speed Load passes through pre-drilled expansion boards and has a self-locking design to securely position and align round dowels for positive load transfer.</p>	<ul style="list-style-type: none"> ■ Used for Expansion Joints ■ Dowel sleeve passes through expansion board ■ Allows contractor to pour against and through expansion joints ■ Eliminates need to grease dowels
	<p>SIKA EMSEAL® EXPANSION JOINTS & PRECOMPRESSED SEALANTS Sika Emseal® products are designed and manufactured to meet the demands of both the remediation of existing buildings and the maintenance of new structures. Sika Emseal® products address the application demands of modern construction.</p>	<ul style="list-style-type: none"> ■ Used for Expansion Joints ■ Solutions for horizontal and vertical joints ■ Watertight, fire rated, insulating and seismic options for all parts of your project

CONCRETE CURING

Regardless of your project application, all concrete must be cured for optimal surface durability and performance. ACI Chapter 318 Guidelines emphasizes the importance of wet curing over a 7 day period - illustrating that the compressive strength can be increased by more than 50% over curing in air alone.

Traditional methods such as misting, ponding, and using materials such as burlap or plastic can yield positive results, but are time and labor intensive to use and maintain. Burlap will maintain moisture in a slab only if it is continually moistened-requiring time and labor. Plastic will maintain most of the concrete moisture, but must be secured and can visibly mar the concrete surface.

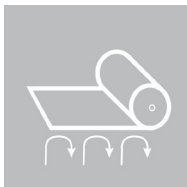
Sika's finishing aid/curing film and curing blankets will lower your labor costs and increase your slabs durability and aesthetics.



SIKAFILM®

SikaFilm® retards moisture evaporation from the concrete surface and acts as a finishing aid for concrete flatwork. SikaFilm® is recommended for use in all applications where a superior finish is required on concrete flatwork. SikaFilm® protects concrete from the effects of excessive moisture loss in rapid drying conditions.

- Reduces moisture loss and rapid drying from concrete surface
- Aids in finishing concrete that produces little or no bleed water, such as microsilica mixes or mixes with air entrainment
- Simple installation with spray on application



SIKA ULTRACURE®

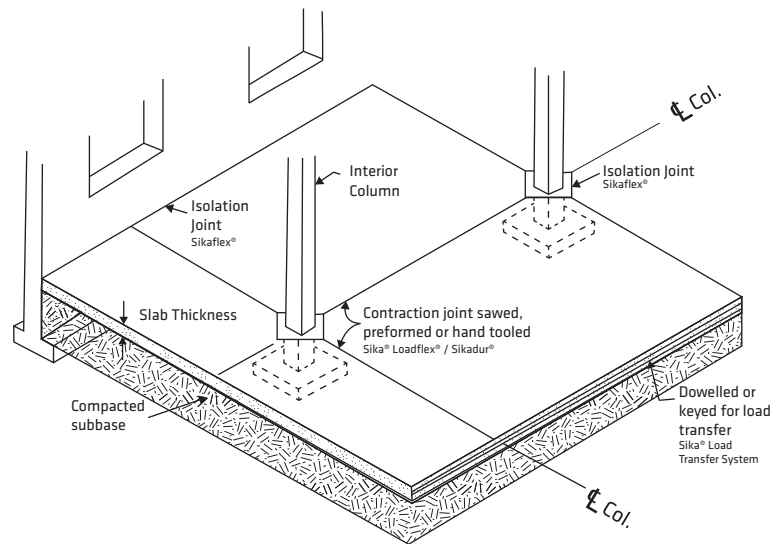
Sika UltraCure® is a heavy duty concrete curing blanket that features a polyethylene vapor barrier applied to one side to help minimize concrete overheating, maintain moisture levels, and natural cellulose fibers to.

- Retains 100% relative humidity on the surface after a single wetting, for 7 days
- Absorbs and distributes water evenly over the entire slab surface
- Helps protect slabs and other flooring from wind, UV, and debris
- Simple installation: rolls out where needed
- Helps prevent surface scratches, contaminants, and potential impact hazards reinforcement

SEALANTS FOR CONCRETE JOINT PROTECTION

Concrete expands and contracts with drying and temperature changes. To control this movement, joints are placed into the concrete slab at a predetermined spacing. These joints can be saw cut (control) or preformed (isolation / expansion), allowing for these natural changes in the concrete to occur at defined locations.

While concrete joints offer protection from uncontrolled cracking, they need protection themselves. Heavy forklift traffic can quickly damage joint edges causing them to widen and become unsafe. To prevent joint damage, joints are filled with either an epoxy or polyurea control joint filler and shaved smooth to create a flush profile for forklift traffic. Expansion joints in floors should still be able to withstand heavy traffic but have the flexibility for joint movement.



Source: ACI 360R-10 Guide to Design of Slabs-on-Ground



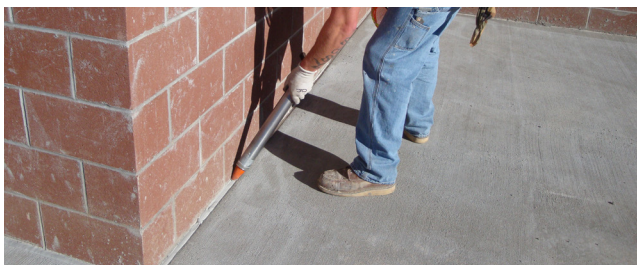
Sikadur®-58 CJR

- Used for control joints with vehicle traffic
- Can be placed with bulk gun and pump
- Thicker body will not run out after placed in joint, allowing for a nice ridge and less staining
- Easy to shave compared to typical epoxies
- Low odor
- High moisture tolerance prevents bubbling and foaming at joint line



Loadflex-524 EZ

- Used for control joints with vehicle traffic
- Shaves smooth in as little as 15 minutes allowing spaces to open to foot and forklift traffic sooner
- Extended Shave time window affords contractors the ability to come back the next day and shave
- Better UV Resistance compared to typical polyureas
- High moisture tolerance prevents bubbling and foaming at joint line



Sikaflex® 1c SL

- Used for isolated joints with no traffic
- 1- Component, No Mixing Required
- Self-Leveling, pourable
- Can be applied to Damp Concrete 1 hour after getting wet
- Can be applied to green concrete 24 hours after pour
- Accelerated Curing

FULL SERVICE SOLUTIONS

Additional Building Solutions Offered by Sika

For more than 100 years, architects, construction companies, and manufacturers have trusted Sika products to seal, bond, damp, reinforce, and protect the things they design and build. Beyond simply providing specialty products, Sika is a true partner, bringing its deep application and technical expertise to projects while addressing customer needs for better, smarter, and more sustainable solutions.

The comprehensive products offered by Sika address the entire life cycle of a facility, from initial construction up to the point in time when repair, refurbishment or extension become necessary. For more information, please reach out to your local representative.



SIKA ROOFING SOLUTIONS

Sika Sarnafil®'s systems, products and services are designed to precisely fit your needs. With more than 50 years of roofing and waterproofing experience, on buildings of all types and many diverse climates, Sika® Sarnafil® is a leader in PVC membrane technology.

AVAILABLE PRODUCTS

Adhesives, Bonding Agents, Concrete Admixtures, Expansion Joints, Green Roofing, Liquid Applied Roofing, PVC Roofing, Roof & Wall Insulation, and Sealants & Joints



SIKA FLOORING SOLUTIONS

Sika is a world renowned market leader in cement, epoxy and polyurethane flooring systems that have been proven in both new construction and refurbishment projects in commercial and industrial construction. The Sika Secure System plays a critical role in the final appearance and service life of your installed floor.

AVAILABLE PRODUCTS

Bonding Agents, Flooring Levelers & Primers, Decorative Flooring, Comfort Flooring, ESD Flooring, Commercial/Industrial Flooring, and Sealants & Joints



SIKA BUILDING ENVELOPE SOLUTIONS

Properly insulated walls and roofs are an essential piece in the reduction of energy usage and reduced air infiltration into a structure. Through the use of continuous, polyiso insulation and taped seams, it is possible to achieve these goals easier and more efficiently, which allows you to enjoy cost savings throughout the life of your structure.

AVAILABLE PRODUCTS

Air Barriers, Architectural Coatings & Finish Assemblies, Coating & Water Repellents, Decorative Concrete, Expansion Joints, Masonry Veneer Systems, Plaster & Stucco, PVC Roofing, Roof & Wall Insulation, Sealants & Joints, Vertical Glass (Structural Glazing), Waterproofing Membranes, Waterstop

ADDITIONAL RESOURCES AVAILABLE AT WWW.USA.SIKA.COM/SLABSOLUTIONS

- Contact Information for Sika Slab Experts
 - Lunch and Learn Requests
 - Project Review and Inquiries
 - Suggested Specifications
 - Additional Information on these products and more
- CONTACT AN EXPERT TODAY!



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 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 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.

Contact Sika:

Phone: 1-800-933-7452

Website: usa.sika.com

Our most current General Sales Conditions shall apply.

Please consult the Product Data Sheets prior to any use and processing.

Sika Corporation

201 Polito Avenue

Lyndhurst, NJ 07071

Phone: 201-933-8800

Fax: 201-933-6225