

# PRODUCT DATA SHEET

## Laser Form<sup>®</sup>

### CONCRETE SLAB EDGE FORMING SYSTEM

#### PRODUCT DESCRIPTION

A form system that works with laser guided screed technology.

#### USES

Laser Form<sup>®</sup> is used in place of hard forms for forming up concrete slabs.

#### CHARACTERISTICS / ADVANTAGES

- A better concrete slab end product
- A harder, more durable slab edge
- Consistent F-numbers from the floor center to the floor edge
- Designed to work with wide placement technologies
- No hand floating or edging
- No hand troweling
- Provides temporary edge protection
- Compatible with larger aggregates
- More efficient use of job site resources
- Rigid foam is lightweight, easy to move and install
- No special training required

#### PRODUCT INFORMATION

<b>Packaging</b>	Sold in bundles of 192 linear feet per bundle.
<b>Appearance / Color</b>	White, grey or reddish blocks, sheets, panels or forms
	<b>Physical State:</b> Solid <b>Odor:</b> Slight Hydrocarbon Odor
<b>Shelf Life</b>	No expiration
<b>Storage Conditions</b>	Store in a cool, dark, dry environment.
<b>Mass per Unit Area</b>	<b>Specific Gravity:</b> 1.05 to 1.18 <b>Vapor Density:</b> 2.5 Pentane Blowing Agent (Air = 1)

# APPLICATION INSTRUCTIONS

## APPLICATION METHOD / TOOLS

### Surface Prep

Subgrade should be consistent and leveled to +/- 1/2" from the start and finish point of the concrete pour.

### Application

**Ensure subgrade is leveled to +/- 1/2".**

- With laser or level, locate the approximate area the form will be placed and check elevation randomly along line.
- Set Sika® Laser Form® on the subgrade to string a line. The string line can be set in either of two locations. Setting the line to the finished edge of the pavement/slab requires that the inside edge of the Sika® Laser Form® be placed to the line (follow step 'A' below). An alternate and more preferable location of the string line is at a location 8" beyond the finished pavement. This requires the outside edge of the Sika® Laser Form® be placed to the line (follow step "B" below). The taller outside edge of the form allows for easier alignment with the line.

### Align Sika® Laser Form® and stake in place

A) Place the inside face of the Sika® Laser Form® to the string line and spike the form in place. Use three spikes driven vertically through the top of the form and two spikes driven at an angle through the form from the outside face per 8-foot section. Ensure that spikes are located approximately 8" from each end of the 8-foot section. Alternatively, five spikes driven at an angle through the top of the form may be used. Spikes driven at an angle prevent uplift (floating) of the form during concrete placement. Spikes placed through the top of the form will be easier to remove during stripping and cleanup. A standard 2 x 4 can be staked along the outer edge of the Sika® Laser Form® for added stability.

### -OR

B) Place the outside face of the Sika® Laser Form® to the string line and spike the form in place. Use three spikes driven vertically through the top of the form and two spikes driven at an angle through the form from the outside face per 8-foot section. Ensure spikes are located approximately 8" from each end of the 8-foot section. Alternatively, five spikes driven at an angle through the top of the form may be used. Spikes driven at an angle prevent uplift (floating) of the form during concrete placement. Spikes placed through the top of the form will be easier to remove during stripping and cleanup. A standard 2 x 4 can be staked along the outer edge of the Sika® Laser Form® for added stability.

### Apply Sika® Laser Form® Release

- Apply Sika® Laser Form® Release to the top and inside edge of the Sika® Laser Form®. The green color of the release agent aids in insuring that the entire surface is coated. Specifically formulated for Sika® Laser Form®, the release agent greatly simplifies stripping, cleanup, and disposal. Take care to avoid application of the release agent to any rebar.
- Agitate Sika® Laser Form® Release before and during

application to maintain uniform mix.

- A fan tip nozzle rated at 0.5 GPM is recommended. Apply at a rate of approximately one gallon per 350 linear feet of Sika® Laser Form®.
- Protect Sika® Laser Form® Release from freezing.

### Insert rebar, smooth dowels, or plate dowels as required through the pre-cut openings

- If sleeved dowels are used, place sleeve over the dowel prior to placing concrete.

### Pour concrete, screed, and finish

- Place concrete ahead of the laser-guided screed as normal. DO NOT allow the concrete being discharged from the chute to directly impact the Sika® Laser Form®. Damage or displacement of the Sika® Laser Form® may result. Rather, place concrete near the form and "shade" the concrete up and over the Sika® Laser Form® with a rake or shovel.
- Vibrate concrete, as you would with wood forms, near and around the dowels to ensure good consolidation.
- Allow the laser-guided screed to work over the top of the form and beyond the edge. The screed head should always be presented to the Sika® Laser Form® as near perpendicular as possible. This reduces any additional lateral load the screed may impart to the form. When impractical to position the screed head perpendicular, such as when completing a pour, angle the head as much as possible to minimize the load on the form. Make sure adequate concrete is present and a "finished" surface extends past the inside edge of the Sika® Laser Form® (8" from the outside edge).
- Clear waste concrete from the outside edge of the Sika® Laser Form®. This allows for easier measurement (required later) and cleanup.
- Power trowel as normal, allowing pans or blades to extend past the Sika® Laser Form®.
- No hand floating or edging is required.

### Snap chalk line and cut concrete

- After final trowel, measure 8" from the backside of the Sika® Laser Form® at every saw cut joint (~12'-18') and snap a chalk line.
- Set saw to a depth sufficient to cut the depth of the Sika® Laser Form®, typically 1 1/2". Carefully check to ensure the depth of cut will not damage embedded dowels.
- Saw cut the slab, following the line marked 8" from the backside of the Sika® Laser Form®

Stripping can be done immediately or at a later date. Leaving the concrete and form in place protects the edge of the finished slab and may be desirable in the case of tilt-up construction or delayed second pours.

### Removal

- Concrete can be removed by various means. Breaking the concrete into 3' or 4' sections with a small sledgehammer may facilitate removal but is not normally necessary.
- A large pry bar inserted under the concrete, parallel to the joint line, works well in removing large sections of concrete without damaging the finished slab. A claw hammer also works well in breaking the waste concrete

from the form.

- Once the concrete is removed, the spikes can be withdrawn in a similar manner. Inserting a large pry bar under the head of the spike and “popping” the spikes out works well. Claw hammers, while not providing much leverage, can also be used for this purpose.
- Separate the Sika® Laser Form® from the concrete using a flat shovel or spade. Inset the blade of the spade or shovel in the saw cut joint and gently pry the Sika® Laser Form® from the concrete, sliding the form over the embedded dowels. While one man can easily remove the form in this manner, two men working in tandem near each end of an 8-foot section of the Sika® Laser Form® can remove larger sections, minimizing debris cleanup.

## LIMITATIONS

- Stakes are available in three lengths, 12”, 16” and 20” to match slab thickness and subgrade condition. Staking requirements vary depending on these factors, Loosely compacted or sandy soils may require longer stakes and more frequent staking. Fewer and shorter stakes may be used on thinner pavements with exceptionally hard subgrades.
- Although elevation of the Sika® Laser Form® is not critical (+/- 1/2” of finished pavement elevation), alignment to the sting line is important. Quality of the finished slab edge will suffer if the Sika® Laser Form® is allowed to deviate horizontally from the line.
- Inspect inside perimeter of the Sika® Laser Form® for voids between the form and subgrade. Block all voids with fill to prevent concrete from entering the void area and floating the form.

## BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

## OTHER RESTRICTIONS

See Legal Disclaimer.

## ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

## LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates (“SIKA”), the user must always read and follow the warnings and instructions on the product’s most current product label, Product Data Sheet and Safety Data Sheet which are available at [usa.sika.com](http://usa.sika.com) or by calling SIKA’s Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or 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 label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

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 the product’s shelf life. User determines suitability of product for intended use and assumes all risks. User’s and/or buyer’s sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs. **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.**

Sale of SIKA products are subject to the Terms and Conditions of Sale which are available at <https://usa.sika.com/en/group/SikaCorp/termsandconditions.html> or by calling 1-800-933-7452.

**Sika Corporation**

201 Polito Avenue  
Lyndhurst, NJ 07071  
Phone: +1-800-933-7452  
Fax: +1-201-933-6225  
usa.sika.com

**Sika Mexicana S.A. de C.V.**

Carretera Libre Celaya Km. 8.5  
Fracc. Industrial Balvanera  
Corregidora, Queretaro  
C.P. 76920  
Phone: 52 442 2385800  
Fax: 52 442 2250537



Product Data Sheet  
Laser Form®  
January 2019, Version 01.01  
020703830200000005

LaserForm-en-US-(01-2019)-1-1.pdf

