



PRODUCT DATA SHEET

Sikalastic® HLM 5000 GC

LIQUID, COLD-APPLIED, BITUMEN-MODIFIED, ELASTOMERIC WATERPROOFING MEMBRANE SYSTEM

PRODUCT DESCRIPTION

Sikalastic® HLM 5000 GC is a one-component, moisture-curing, bitumen-modified polyurethane elastomeric waterproofing membrane for exterior below-grade or between slab applications.

USES

- Concrete
- Plywood (exterior)
- Exterior below grade (on masonry, concrete, and incidental metal)
- Above grade (between two-course concrete and within cavity walls)
- Parking garages
- Plaza decks and malls
- Balconies and planters
- Below-grade slabs
- Foundation walls
- Walls and culverts
- Split slabs

PRODUCT INFORMATION

| | |
|---------------------------|---|
| Chemical Base | Bitumen-modified polyurethane |
| Packaging | 5 gal (19 lts) pails |
| Color | Black |
| Shelf Life | 12 months |
| Storage Conditions | Store in unopened containers in clean, dry, conditions at +40 °F to +80 °F (+4 °C to +27 °C). During storage, an easily removable skin of Sikalastic® HLM 5000 GC may form, which does not affect performance of the product. |

CHARACTERISTICS / ADVANTAGES

- Sikalastic® HLM 5000 GC can be applied minimum 72 hrs after the concrete is poured, or as little as 24 hrs following the removal of the forms.
- Can be applied to damp concrete
- Available in standard and high-build systems to prevent water penetration
- Passes ASTM C 1305
- Elastomeric product accommodates expansion and contraction
- Wide service-temperature range, making Sikalastic® HLM 5000 GC suitable for all climates
- Chemical resistance to bacterial attack, select acids, alkalis and salts
- Seamless cold-applied membrane eliminates lapping, seaming and precutting
- Does not require hot-melt equipment
- Compliant with ASTM C 836
- Compliant with national standard of Canada 37.58 - M86 developed by CGSB
- Compliant with SCAQMB

Product Data Sheet
Sikalastic® HLM 5000 GC
May 2025, Version 01.04
020706301000000195

| | |
|--|---|
| Thickness | <p>60 mils Approx. 25 ft²/gal at 60 mils DFT</p> <p>90 mils Approx. 18 ft²/gal at 90 mils DFT</p> <p>120 mils Approx. 13 ft²/gal at 120 mils DFT</p> <p>Note: Coverage may vary with the application technique used. Actual coverage rate and mil thickness depend on finish and porosity of the substrate.</p> |
| Volatile organic compound (VOC) content | RG: 53 g/L |
| Viscosity | 800 poise Brookfield |
| Solid content by mass | 85% ± 1% |
| CSI / CSC MasterFormat® | 07 14 00 Fluid-Applied Waterproofing |

TECHNICAL INFORMATION

| | | | |
|---------------------------------|---|--|--|
| Testing | 120 mil (High-Build) | 60 mil (Standard) | ASTM C 836 (Type OO) |
| | N/A | 85 | |
| Tensile Strength | 120 mil (High-Build) | 60 mil (Standard) | ASTM D 412 |
| | 200 psi (1.4 MPa) | 150 psi (1.0 MPa) | |
| Elongation at Break | 120 mil (High-Build) | 60 mil (Standard) | ASTM D 412 (Elongation) |
| | 300% | 600% | |
| Dimensional Stability | <u>Weight Loss</u> | | ASTM C 836 (20% maximum) |
| | 120 mil (High-Build) | 60 mil (Standard) | |
| Crack Bridging Ability | 120 mil (High-Build) | 60 mil (Standard) | ASTM C 1305 cycled 10 times per 24 hrs at +15 °F (-9 °C) |
| | Passed 1/4" no loss of bond or cracking exhibited | Passed 1/16" no loss of bond or cracking exhibited | |
| Water Vapor Transmission | 120 mil (High-Build) | 60 mil (Standard) | ASTM E96 |
| | 0.075 perms | 0.1 perms | |

Product Data Sheet
Sikalastic® HLM 5000 GC
May 2025, Version 01.04
020706301000000195



| | | | |
|--|--|---|------------|
| Service Temperature | min. - 40 °F (- 40 °C) / max. + 120 °F (+50°C) | | |
| Adhesion in peel | <u>120 mil (High-Build)</u> min. 5 lbs/in | <u>60 mil (Standard)</u> min. 5 lbs/in | ASTM C 836 |
| Dimensional change after immersion in water | None (after 3 days at +73 °F / +23 °C) | | |
| Thermal resistance | <u>120 mil (High-Build)</u> No cracking | <u>60 mil (Standard)</u> No cracking | ASTM C836 |

SYSTEM INFORMATION

| | |
|-------------------------|---|
| System Structure | The following products are part of the Sikalastic® HLM 5000 GC system. <ul style="list-style-type: none"> ▪ Sika® Flexitape Heavy (reinforcing fabric) ▪ Sika® Drainage Mat 420/720/1000 (drainage composite) |
|-------------------------|---|

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.

- with Sikalastic® HLM 5000 GC; avoid using liquid curing compounds.
- In horizontal applications concrete must be slopped to drain to avoid ponding water on the surface of Sikalastic® HLM 5000 GC
- Not intended for interior applications.

LIMITATIONS

- Apply Sikalastic® HLM 5000 GC when substrates are dry and air temperatures are +40 °F to +90 °F (+4 °C to +32 °C); for application at temperatures below +40 °F (+4 °C), consult Technical Services.
- Temperatures influence viscosity and handling characteristics of Sikalastic® HLM 5000 GC : heat increases and cold decreases the flow. Keep Sikalastic® HLM 5000 GC cool in hot weather and warm in cold weather. Avoid application when inclement weather is present or imminent.
- Do not apply to reinforcing bars or to wet or contaminated surfaces.
- Do not directly heat containers with flame, stove, hot plate or oven.
- Patch all voids and deep depressions in substrates with appropriate patching material before applying Sikalastic® HLM 5000 GC.
- Before applying Sikalastic® HLM 5000 GC, dam all drains and drain openings.
- Carefully work material over irregular concrete to avoid pinholes and holidays.
- Protect Sikalastic® HLM 5000 GC coated surfaces from puncture with protection board until required topping or backfill is placed.
- Not intended as an exposed or wearing surface.
- The material must be protected with appropriate protection sheets or drainage mat as soon as possible or at the latest before backfilling or within 90 days after application.
- Do not use where a solvent odor is objectionable, e.g., near areas where food preparation or processing occur during the application.
- Specify wet or paper curing for concrete to be coated

Product Data Sheet
Sikalastic® HLM 5000 GC
May 2025, Version 01.04
020706301000000195

BUILDING TRUST



ENVIRONMENTAL, HEALTH AND SAFETY

Read, understand and follow all Safety Data Sheets and product label information for this product prior to use.

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

1. All concrete deck surfaces should be lightly steel troweled to a flat uniform surface. A light broom finish is acceptable. Membrane curing compounds must be mechanically removed.
2. For extremely porous block: Prime substrate with Sikadur-22 Lo-Mod FS, Sikalastic FTP Lo-VOC Primer or Sikalastic GDC Primer.
3. Remove dust, dirt and other contaminants just before application. Surfaces must be dry at the time of application.
4. Air-void pockmarks or honeycombs must be opened up to allow Sikalastic® HLM 5000 GC to fill the cavities completely. Air entrapment within voids may cause blisters. Extreme cases may require additional repair.

PRESTRIPING

1. Before applying the final membrane, all joints, cracks and openings around protrusions must be sealed by caulking or prestripping (a preliminary coating of Sikalastic® HLM 5000 GC applied with a trowel or stiff-bristled brush) as outlined in section "Static Joint and Cracks". Allow to dry overnight before applying final membrane.
2. When the final membrane is applied, the overall thickness over joints and cracks, at coves and around penetrations should be approximately 100 wet mils (2.5 mm) on the standard system.

STATIC JOINTS AND CRACKS

Joints and cracks less than 1/16" (1.6 mm) should be filled by prestripping. Apply material so it both fills and overlaps the joint or crack to a width of 4" (102 mm) on each side.

CONSTRUCTION OR EXPANSION JOINTS

All joints over 1/8" (3 mm) must be sealed with Sikaflex®-1A or Sikaflex®-11 FC. Any working joint less than 1/8" (3 mm) should be routed to a minimum of 1/4" (6 mm) and filled with a sealant. Prevent the waterproofing membrane from adhering to the joint sealant, which could cause sealant or membrane failure, by applying a coat of wax or bond breaker tape over the cured sealant and then prestripping.

UNCOATED METAL SURFACES

Remove dust, debris, and any other contaminants from vent, drain pipe and post penetrations, reglets and other metal surfaces. Clean surfaces to near white per SSPC-NACE2 and prime immediately with Sikadur-22 Lo-Mod FS or Sikalastic EP Primer. Provide appropriate cant with Sikaflex®-1A or Sikaflex®-11 FC sealants to eliminate 90° angles.

VENT, DRAIN PIPE, AND POST PENETRATIONS

Clean metal surfaces to bright metal and prime with metal primer Sikadur-22 Lo-Mod FS or Sikalastic EP Primer. Remove dust, debris and any other

contaminants from voids. Seal with the appropriate sealant. For PVC substrates use Sikaflex® Primer-449.

APPLICATION

A test application is always recommended before proceeding with entire application.

NOTE: Finish coat must be applied in a pinhole-free, continuous membrane for waterproofing integrity.

STANDARD SYSTEM

1. For horizontal applications, empty contents of pail and spread immediately to ensure workability. Best results are obtained by marking off 125 ft² (11.61 m²) areas and evenly spreading the contents of a 5 gallon (18.93 L) unit with a rubber-edged notched squeegee. Repeat the above procedure until the entire surface is covered.
2. For vertical applications, apply by brush or roller at the rate of 25 ft²/gallon (0.6 m²/L). Best results are obtained by marking off 125 ft² (11.6 m²/L) and evenly applying the contents of a 5 gallon (18.93 L) pail.
3. Verify the applied thickness with a wet mil gauge as the work progresses.
4. The integrity of the cured membrane on a horizontal surface may be verified by damming the entire area and flooding with water to a minimum depth of 2" (51 mm) and allowing the water to stand for 24 - 48 hours. Visually inspect the bottom surface to check for any water penetration. If repairs are necessary, the area should be drained and allowed to dry before reapplying Sikalastic® HLM 5000 GC. After reapplication, the area should be tested again for membrane integrity.

HIGH-BUILD SYSTEM

- Concrete application: Apply 60 wet mils of Sikalastic® HLM 5000 GC. Allow the first coat to cure overnight and follow with a second 60 wet-mil application of Sikalastic® HLM 5000 GC.
- Plywood/OSB board application: All plywood construction must comply with APA (American Plywood Association) standards. All plywood/OSB board joint must be sealed Sikaflex®-1A or Sikaflex®-11 FC. A detail coat of the membrane must be applied before the final membrane is installed.

CURING

Appreciable properties develop within 24–48 hours at 75 °F (24 °C) and 50% relative humidity. Protect Sikalastic® HLM 5000 GC from traffic during curing.

DRAINAGE AND PROTECTION

Drainage Composite

- For protection during backfill and where hydrostatic pressure is anticipated, use the appropriate Sika Drainage Mat System.
- For protection during backfill only, install protection board as soon as possible following cure of Sikalastic® HLM 5000 GC.

Protection Board

- Install RMAX® BG Protection Board as soon as possible following cure of the liquid membrane. Protect Sikalastic® HLM 5000 GC from traffic before placement of protection board. Sikalastic® HLM 5000 GC must be

Product Data Sheet
Sikalastic® HLM 5000 GC
May 2025, Version 01.04
02070630100000195



cured before installation of any topping.

OTHER RESTRICTIONS

See Legal Disclaimer.

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 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



Product Data Sheet
Sikalastic® HLM 5000 GC
May 2025, Version 01.04
020706301000000195

SikalasticHLM5000GC-en-US-(05-2025)-1-4.pdf

