BUILDING TRUST

PRODUCT DATA SHEET

Sikalastic® HLM 5000 R

(formerly MSeal HLM 5000 R)

LIQUID, COLD-APPLIED WATERPROOFING MEMBRANE SYSTEM

DESCRIPTION

Sikalastic® HLM 5000 R is a single component, moisture curing, polyurethane based waterproofing membrane that cures by reaction with atmospheric moisture to form a tough membrane.
Sikalastic® HLM 5000 R protects structures from water penetration while remaining flexible to handle the nominal expansion and contraction of substrates.

USES

- Waterproofing exterior concrete & plywood
- Exterior Below Grade on Concrete and Masonry
- Above Grade between two courses of concrete or masonry and cavity walls
- Balconies, Planter boxes & Parking Garages
- For podiums and green roofs

FEATURES

- Waterproof - Protects structure from water penetration
- Elastomeric - Permits nominal expansion and contraction of the structure
- Low Temperature Flexibility – Wide service temperature, suitable for all climates
- Single Component – No complex mixing & easy to use
- Cold Applied & Seamless – Eliminates lapping, seaming and precutting
- Available in Two grades – Easy application on vertical and horizontal surfaces

PRODUCT INFORMATION

Packaging	25 kg /pail		
Colour	Black		
Appearance and colour	Liquid		
Shelf life	6 months from date of production		
Storage conditions	Store out of direct sunlight, clear of the ground on pallets protected from rainfall.		
Density	1.5 +/- 0.05 kg/L		
Viscosity	**Self Levelling Grade**	**Roller Grade**	(23°C)
	5,000 cps	15,000 cps	

TECHNICAL INFORMATION

Tensile strength	> 2.0 MPa		(ASTM D 412)
Elongation	> 500 %		(ASTM D 412)
Tensile adhesion strength	> 1 MPa		(ASTM C 794)
Tear strength	> 15 N/mm		(ASTM D 624)
Artificial ageing	Passes 6 mm Extensibility after heat aging		(ASTM C 1522)
Permeability to water vapour	1.5 (Perms)		(ASTM E 96)
Service temperature	Minimum	- 35°C	
	Maximum	50°C	
Water absorption	< 5%		(ASTM D 570)
Flexibility at low temperature	- 35°C		(ASTM D 1970)

APPLICATION INFORMATION

Yield	11m^2 per pack of 25Kg at Wet Film Thickness of 1.4mm ~1.6mm 11m^2 per pack of 25Kg at Dry Film Thickness of 1.2mm ~ 1.4mm
Tack free time	< 12 hours @ 23°C
Drying time	< 24 hours @ 23°C

BASIS OF PRODUCT DATA

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

All concrete deck surfaces should be lightly steel troweled to a flat, uniform surface. A light broom finish is acceptable. New concrete must be properly water cured at least 14 days. Membrane curing compounds must be mechanically removed.
For extremely porous block: Prime with a coat of Sikalastic® HLM 5000 R diluted up to 5% with xylene. Remove dust, dirt and other contaminants just before or during application. Surfaces must be dry at the time of application. Air void pockmarks or honeycombs must be opened up to allow Sikalastic® HLM 5000 R to fill the cavities completely.

SUBSTRATE QUALITY / PRE-TREATMENT

PRESTRIPING

Before applying the final membrane, all joints, cracks and openings around protrusions must be sealed by caulking or pre-striping (a preliminary coating of Sikalastic® HLM 5000 R applied with a trowel or stiff-bristled brush). Allow to dry overnight before applying final membrane.

STATIC JOINTS AND CRACKS

Joints and cracks less than 1.6 mm should be filled by pre-striping. Apply material so it both fills and overlaps the joint or crack to a width of 100 mm on each side.

WORKING OR EXPANSION JOINTS

All joints over 3 mm must be sealed with a urethane sealant. Any working joint less than 3 mm should be routed to a minimum of 6 mm and filled with a sealant. Prevent the waterproofing membrane from adhering to the joint sealant by applying a coat of wax or bond breaker tape over the cured sealant and then pre-striping.

APPLICATION

A test application is always recommended before proceeding with entire application.
Select the grade of Sikalastic® HLM 5000 R that best meets individual job requirements
For horizontal applications, empty contents of pail and spread immediately to ensure workability. Best results are obtained by marking off 11 m^2 areas and evenly spreading the contents of 25 Kg unit with a rubber-edged notched squeegee.
For vertical applications, apply by trowel / roller at the rate of 0.4m^2/Kg.
Verify the applied thickness with a wet film gauge as the work progresses.
The integrity of the cured membrane on a horizontal surface is verified by damming the entire area and flooding with water to a depth of 50mm 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 R. After application, the area should be tested for membrane integrity

CURING TREATMENT

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

DRAINAGE AND PROTECTION

For protection during backfill and where hydrostatic pressure is anticipated, use a suitable geotextile to divert the water.
For protection during backfill only, install protection board as soon as possible following cure of Sikalastic® HLM 5000 R.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product’s suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

PT. Sika Indonesia Head Office and Manufacturing
Jl. Raya Cibinong-Bekasi Km.20
Limusnunggal-Cileungsi
Bogor 16820-Indonesia
Tel. +62 21 8230025, Fax +62 21 8230026