

## PRODUCT DATA SHEET

# Sikalastic®-505 BH

Acrylic liquid applied roof coating

## DESCRIPTION

Sikalastic®-505 BH is a cold-applied, one component waterborne liquid applied membrane, elastic and UV-resistant.

Suitable for use in hot and tropical climatic conditions.

## USES

- For exposed roof coating solutions in both new construction and refurbishment projects
- For exposed roofs with many details and complex geometry when accessibility is limited
- For cost efficient life cycle extension of failing exposed roofs

## CHARACTERISTICS / ADVANTAGES

- Increases solar reflection compared to darker substrates, subsequently enhances energy efficiency by reducing cooling cost
- One component - ready to use
- Excellent adhesion on porous and non-porous substrates
- Water vapour permeable

## PRODUCT INFORMATION

<b>Packaging</b>	5 kg, 15 kg and 20 kg plastic pails
<b>Shelf life</b>	12 months minimum from date of production if stored properly in original, unopened and undamaged sealed packaging.
<b>Storage conditions</b>	Store in dry conditions in original packaging at temperatures between +5 °C and +30 °C. Protect from direct sunlight and frost.
<b>Appearance and colour</b>	White and grey, liquid form
<b>Density</b>	~1.55 kg/l (+25°C)
<b>Solid content by volume</b>	~54% (ISO 3233)

## System structure

Build up:	Sikalastic®-505 BH (applied in minimum of 2 coats)
Substrates:	Cementitious, brick, stone, metal
Primer:	Please refer to Substrate pre-treatment
Dry film thickness:	Min. 0.35 mm – 0.75 mm
Total consumption:	Min. 1.0 kg/m <sup>2</sup> – 2.1 kg/m <sup>2</sup> (depending on application – please refer to Sika's Technical Department for further information)

Attention: Do not apply more than 0.35 kg/m<sup>2</sup> Sikalastic®-505 BH per coat for layers without reinforcement.

## APPLICATION INFORMATION

Ambient air temperature	+8 °C min. / +40 °C max.
Relative air humidity	80 % max.
Dew point	Beware of condensation. Surface temperature during application must be at least +3 °C above dew point.
Substrate temperature	+8 °C min. / +40 °C max.
Substrate moisture content	< 6 % moisture content. No rising moisture according to ASTM (Polyethylene-sheet). No water / moisture / condensation on the substrate.

Substrates	Substrate	Primer	Consumption [kg/m <sup>2</sup> ]
	Cementitious substrates	Sikalastic®-505 BH diluted with 10 % water.	~0.3
	Metals (Ferrous or galvanised metals, lead, copper, aluminium, brass or stainless steel)	Sikalastic® Metal Primer or Sikalastic®-505 BH without water dilution*	0.2 – 0.3

\*Please contact Sika Technical Department for more information.

Waiting time to overcoating	Before applying the base coat of Sikalastic®-505 BH on the second coat of Sikalastic®-505 BH allow intermediate coats to fully cure:			
	Substrate Temperature	Relative humidity	Minimum	Maximum <sup>1)</sup>
	+10 °C	50 %	~8 h	3 months
	+20 °C	50 %	~6 h	3 months
	+30 °C	50 %	~4 h	3 months

1) Assuming that all dirt has been removed and intercoat contamination is avoided.

Note: Times are approximate and will be affected by coating thickness and changing ambient conditions particularly temperature and relative humidity. Low temperature and high humidity retard curing, while high temperatures and low humidity accelerate curing progression. The above times are based on a coating consumption of 0.35 kg/m<sup>2</sup>.

Applied product ready for use	Substrate Temperature	Relative humidity	Touch dry	Rain, water & condensation resistant	Full cure
	+10 °C	50 %	~5 h	~14 h	~7 d
	+20 °C	50 %	~3 h	~10 h	~5 d
	+30 °C	50 %	~2 h	~6 h	~3 d

## 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.

## IMPORTANT CONSIDERATIONS

- Do not apply Sikalastic®-505 BH on substrates that have rising moisture.
- Always apply during falling ambient and substrate temperature. If applied during rising temperatures “pin holing” may occur from rising and expanding air. Sikalastic®-505 BH may be flood tested when fully cured using 50 millimeter depth of water for a maximum period of 24 hours.
- Ensure that each coat of Sikalastic®-505 BH is totally dry and the surface is without pinholes before applying further coats.
- Do not apply Sikalastic®-505 BH if inclement weather such as rain, fog or extreme humidity (80 % maximum) causing condensation is expected.
- Ensure that the applied Sikalastic®-505 BH has sufficient curing time (see curing times above) before any such inclement weather is expected.
- Do not allow temporary ponding or moisture (Dew, Condensation etc.) to remain between coats on any horizontal surfaces or until the final coating has totally cured. Brush or mop surface water away during this time. It is recommended to carry out Adhesion and Compatibility tests with the Primer prior to application of following coats.
- Sikalastic®-505 BH should not be applied on areas subject to long-term ponding water.
- Sikalastic®-505 BH should not be applied for Roofing structures with a positive pitch of less than 3 %.
- If aesthetics are important and normal drying times are to be achieved, do not apply Sikalastic®-505 BH top coats with consumption rates greater than 0.35 kg/m<sup>2</sup>.
- Do not apply Sikalastic®-505 BH directly on insulation boards. Sikalastic® Flexitape Heavy or Sika® Reemat Premium can be applied at areas with high movements, irregular substrate or to bridge cracks, joints and seams on the substrate as well as for details. Sikalastic® Flexitape Heavy or Sika® Reemat Premium can be used as total reinforcement or for partial reinforcements over dynamic cracks and joints.
- Sikalastic®-505 BH is not recommended for pedestrian traffic. Sikalastic®-505 BH shall be covered with appropriate paving materials.
- Do not apply cementitious products for example tile adhesives directly onto Sikalastic®-505 BH, contact Sika Technical Department for more information.
- Sikalastic®-505 BH is to be used mainly in exposed applications and is not for inverted buried roofing systems.
- Sikalastic®-505 BH should not be subject to permanent water immersion.
- Sikalastic®-505 BH may need to be maintained with additional coatings.

## 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 substrates must be prepared using abrasive blast cleaning, scarifying equipment or other suitable mechanical methods and cleaned using high pressure water jet.

Cementitious substrates:

- New concrete should be cured for at least 28 days and should have a pull-off strength  $\geq 1.5$  N/mm<sup>2</sup>.
- Loose friable material and weak concrete must be completely removed by mechanical means to achieve an open textured surface and all surface defects such as blowholes and voids must be fully exposed.
- Repairs to the substrate, filling of joints, blowholes/voids and surface leveling must be carried out using the appropriate Sika® products.
- Refer to Sika's Technical Department for further advice. High spots must be removed by for example grinding.
- Outgassing is a naturally occurring phenomenon of concrete that can produce pinholes in subsequently applied coatings.
- The concrete must be carefully assessed for moisture content, air entrapment, and surface finish prior to any coating work.
- Installing the Sikalastic®-505 BH either when the concrete temperature is falling or stable can reduce outgassing. Prime the substrate before applying the Sikalastic®-505 BH systems.

Brick and stone:

Mortar joints must be sound and flush pointed. Use localized reinforcement over connection joints and prime before applying Sikalastic®-505 BH. For other substrates please contact Sika's Technical Department.

### MIXING

Prior to application, stir Sikalastic®-505 BH thoroughly for 1 minute in order to achieve a homogeneous mixture using a slow speed (300 - 500 rpm) drill and basket type paint mixer. Over mixing must be avoided to minimize air entrainment.

## APPLICATION

Prior to the application of Sikalastic®-505 BH the priming coat must have cured tack-free. Protect adjacent areas from splashes, over painting, damage etc. with an adhesive tape or plastic. Sikalastic®-505 BH is applied in 2 – 6 coats as per the required system. Prior to the application of each coat the indicated waiting times must be followed.

Sikalastic® Flexitape Heavy or Sika® Reemat Premium is applied at areas having high movements, irregular substrate or to bridge cracks, joints and seams on the substrate. Please note, always begin with detailing works prior to waterproofing the horizontal surface.

Tools:

High Pressure Jet Washer (minimum 150 bar): If dust, vegetation, moss / algae or other contaminants are present on the existing roof, a power washer is required to clean the substrate prior to the application of SikaRoof® Systems. Existing chippings should be removed by hand or scabbling prior to power washing.

Squeegee: Useful when removing excess water from the roof after overnight rain

Drill and paddle: Sikalastic®-505 BH should be mixed for one minute using a slow speed (300-500 rpm) drill and basket type paint mixer.

Solvent resistant short-piled roller: Used in the application of Sikalastic®-505 BH to ensure a consistent thickness of the seamless SikaRoof® systems. Thick hair brush: For application of Sikalastic®-505 BH to all details and penetrations.

Airless spray equipment: Used only for the roof coating systems / top coats of reinforced systems. Two spray applied layers is the minimum requirement.

Please perform spray tests before application start.

Note: Please refer to the most recent issue of the specific method statement

## CLEANING OF EQUIPMENT

Clean all tools and application equipment with water immediately after use. Hardened / cured material can only be removed mechanically

## 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.

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SIO 9001, 14001 – SGS  
Sika Saudi Arabia Limited

All products are supplied under  
a management system certified  
to conform to the requirements  
of the quality, environmental  
and occupational health &  
safety standards ISO 9001, ISO  
14001 and ISO 45001.



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