Sikalastic®-602 BR
(Decothane Root Resistant Base Coat)

High performance, root resistant and easily applied liquid Roof Waterproofing Base Coat.

Product Description
Sikalastic®-602 BR is a cold-applied, seamless and fully bonded, highly elastic, one-component, moisture-triggered polyurethane Root Resistant Base Coat (BR) designed to provide easy application and a durable solution in combination with Sikalastic®-622 TR (Top Coat Root Resistant) and Sikalastic®-623 DR (Detailing Top Coat UV- and Root Resistant)

Uses
- For SikaRoof® MTC Green and SikaRoof® MTC Ballast.
- For insulated and non-insulated roof designs
- For new construction and refurbishment projects

Characteristics / Advantages
- Proven technology - over 20 years track record
- Easy and quick application with Sika® Reemat® and Sikalastic® Applicator
- Fast curing, ability to rapidly become resistant to rain damage
- Highly elastic and crack-bridging
- Highly root resistant
- Seamless roof waterproofing membrane
- When used with approved primers will fully bond to most substrates preventing the migration of water
- Vapour permeable
- Strong resistance to a wide range of chemicals
- Low odour during application
- Long shelf life – 12 months

Tests
- European Technical Approval No. ETA-09/0224: SikaRoof® Inverted Roof Build-up for SikaRoof® MTC Green and SikaRoof® MTC Ballasted
- Root resistance approval according FLL (Institute of Horticulture) for SikaRoof® MTC Green and SikaRoof® MTC Ballasted

Product Data

Form

Appearance / Colours
Oxide Red

Packaging
15 litre pails (appr. 20.40 kg)

Storage

Storage Conditions / Shelf Life
12 months from date of production if stored properly in original, unopened and undamaged sealed packaging in dry conditions at temperatures > 0 °C and <25 °C. Higher storage temperatures may reduce shelf life of product.
**Technical Data**

**Chemical Base**  
One-component moisture-triggered Polyurethane

**Density**  
1.36 kg/l  
All density values at +23 °C (EN ISO 2811-1)

**Solid Content**  
~ 78.0 % by volume / ~ 84.3 % by weight

**Flash Point**  
+59°C

**Service temperature**  
-30 to +80°C (intermittent)

**Chemical Properties**

**Chemical Resistance**  
Strong resistance to a wide range of reagents including paraffin, petrol, fuel oil, white spirit, acid rain, detergents and moderate solutions of acids and alkalis. Some low molecular weight alcohols can soften the material. Contact Technical Service for specific recommendations

Salt spray to ASTM B117 (1000 hours continuous exposure) and prohesion testing to ASTM G85-94; Annex A5 (1000 hours cyclic exposure)

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**System Information**

**System Structure**  
SikaRoof® MTC Green

For intensive and extensive green roofs (cold, warm and inverted) to enhance the aesthetics of the building, improve thermal performance, aid noise reduction, provide habitats for plants and animals, reduce storm water run off, and to absorb CO₂.

SikaRoof® MTC Ballast

For gravel and paver ballasted roofs to provide a natural looking surface, to protect from potential damage, and to offer a non-combustible surface.

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**Build up**

<table>
<thead>
<tr>
<th>Systems</th>
<th>Cold roof build-up</th>
<th>Warm roof build-up</th>
<th>Inverted roof build-up</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SikaRoof® MTC Green and SikaRoof® MTC Ballast can be completed as cold, warm or inverted roof designs.</td>
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</tr>
<tr>
<td>Build up</td>
<td>Sikalastic®-602 BR applied in 1 coat, reinforced with Sika® Reemat Premium and sealed with 1 coat Sikalastic®-622 TR or 2 coats Sikalastic®-623 DR to exposed details.</td>
<td>Sikalastic® Vap, Sikalastic® Insulation and Sikalastic® Carrier adhered with Sikalastic® Coldstik, Sikalastic®-602 BR applied in 1 coat, reinforced with Sika® Reemat Premium and sealed with 1 coat Sikalastic®-622 TR or 2 coats Sikalastic®-623 DR to exposed details.</td>
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</tr>
<tr>
<td>Substrates</td>
<td>Sound concrete</td>
<td>Sound concrete or suitably designed profiled metal deck or plywood structures.</td>
<td>Sound concrete</td>
</tr>
</tbody>
</table>
Sikalastic®-602 BR

Primer Please refer to Sikalastic® Primer chart below

<table>
<thead>
<tr>
<th>Total dry film thickness (BR and TR/DR)</th>
<th>TR min. 2.1mm</th>
<th>TR min. 2.1mm</th>
<th>TR min. 2.1mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>DR min. 1.5 – 1.8mm</td>
<td>DR min. 1.5 – 1.8mm</td>
<td>DR min. 1.5 – 1.8mm</td>
<td></td>
</tr>
<tr>
<td>Total consumption</td>
<td>BR: ≥ 1.5l/m²(2.0kg/m²) upstands 0.75l/m²</td>
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</tr>
<tr>
<td></td>
<td>TR: ≥ 1l/m²(1.4kg/m²) or DR: ≥ 0.75l/m² and 0.75l/m² (2kg/m²)</td>
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</tr>
</tbody>
</table>

Sikalastic® Carrier is applied to areas with high movement, irregular substrates or to bridge cracks, joints, and seams on the substrate.

- One component product. Stir before using
- Low-temperature stability
- Thermal-shock resistant, i.e. will not be damaged by extended or sudden thermal exposure to ice, hail, rain, direct sunlight or rapid thermal swings
- Highly elastic and crack-bridging
- Vapour permeable
- Easy application by brush, roller or airless spray equipment even when accessibility is limited
- Bonds fully to most substrates, preventing the migration of water
- Root resistant
- Seamless waterproofing membrane
- Withstands mechanical loads of pedestrian and light wheeled traffic
- Compatible with bituminous felts

Application Details

Substrate Quality Cementitious substrates
New concrete should be cured for at least 28 days and should have a Pull off strength ≥1.5 N/mm². Inspect the concrete, including upstands, all areas should be hammer tested. Concrete must be suitably finished, preferably by wood float or steel pan. A power float finish is acceptable where the surface is prepared to avoid laitance (a tamped finish is not acceptable). The surface finish must be uniform and free from defects such as laitance, voids or honeycombing.
Substrate Preparation

Cementitious substrates

Cementitious or mineral based substrates must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and to achieve an open textured surface.

Loose friable material and weak concrete must be completely removed and surface defects such as blowholes and voids must be fully exposed.

Repairs to the substrate, filling of joints, blowholes/voids and surface levelling must be carried out using appropriate products from the Sikafloor®, SikaDur® and SikaGard® range of materials.

High spots must be removed by e.g. 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. Any requirement for priming must also be considered. Installing the membrane either when the concrete temperature is falling or stable can reduce outgassing. It is generally beneficial, therefore, to apply the embedment coat in the late afternoon or evening.

Note: For the Waiting Time / Overcoating you shall refer to the PDS of the appropriate cleaner. Other substrates must be tested for their compatibility. If in doubt, apply a test area first.

Substrate Priming

<table>
<thead>
<tr>
<th>Substrate</th>
<th>Primer</th>
<th>Consumption primer ([\text{ml/m}^2])</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cementitious substrates</td>
<td>Sika® Concrete Primer or Sika® Bonding Primer</td>
<td>(\approx 150)</td>
</tr>
</tbody>
</table>

Note: For the Waiting Time / Overcoating you should refer to the PDS of the appropriate cleaner and primer. Other substrates must be tested for their compatibility. If in doubt, apply a test area first.

Application Conditions / Limitations

Substrate and ambient Temperature: +5 °C min. / +35 °C max.

Substrate Moisture Content: < 4 % moisture content. No rising moisture according to ASTM (Polyethylene-sheet). No water / moisture / condensation on the substrate.

Relative Air Humidity: 5 % min. / 85 % max.

Dew Point: Beware of condensation. Surface temperature during application must be at least +3 °C above dew point.

Application Instructions

Mixing: Not required

Application Method: Prior to the application of Sikalastic®-602 BR the substrate must be prepared and the priming coat must have cured tack-free. For the Waiting Time/Overcoating please refer to the PDS of the appropriate primer.

The SikaRoof® MTC Green and SikaRoof® MTC Ballast can be carried out as cold, warm or inverted roof design.

Cold and Inverted Roof Design

First apply a coat of Sikalastic®-602 BR and roll in the Sika® Reemat whilst wet. Ensure there are no bubbles or creases and that the Sika® Reemat Premium overlaps by a minimum of 5cm. Prior to the application of Sikalastic®-621 TC the indicated Waiting Time in the table below should be achieved. On the main deck (non-exposed areas) apply a coat of Sikalastic®-622 TR, and to the exposed areas (details) apply two coats of Sikalastic®-623 DR.

Warm Roof build-up

Mix the components of the Sikalastic® Coldstik as instructed in the relevant PDS and apply to the substrate snaking the adhesive across the deck. For profiled metal decks apply along the crowns. Roll the Sikalastic® Vap into the adhesive, sealing side and end laps with a bead of adhesive. The Sikalastic® Insulation is embedded in a similar layer of Sikalastic® Coldstik. The Sikalastic® Carrier is then laid onto the Sikalastic®.
Insulation and adhered in a similar manner to the Sikalastic® Vap. Apply a coat of Sikalastic®-602 BR directly over the Sikalastic® Carrier and the Sika® Reemat Premium is rolled in whilst wet. Ensure that there are no bubbles or creases and that the Sika® Reemat overlaps by a minimum of 5cm. On the main deck (non-exposed areas) apply a coat of Sikalastic®-622 TR and at exposed areas (details) apply two coats of Sikalastic®-623 DR.

Please note, always begin with details prior to waterproofing the horizontal surface. The indicated Waiting Time in the table below should be achieved.

### Application Tools

<table>
<thead>
<tr>
<th>Tool</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jet washer</td>
<td>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® MTC Systems. Existing chippings should be removed by hand or scabbling prior to power washing.</td>
</tr>
<tr>
<td>Squeegee</td>
<td>Useful when removing excess water from the roof after overnight rain.</td>
</tr>
<tr>
<td>Drill and paddle</td>
<td>The two parts of Sikalastic® Coldstik should be mixed for two minutes using a drill and paddle. Part B should be poured into part A.</td>
</tr>
<tr>
<td>Pouring Can</td>
<td>The pouring can is used to snake the Sikalastic® Coldstik across the structural deck, the Sikalastic® Vap or the Sikalastic® Insulation.</td>
</tr>
<tr>
<td>Scraper</td>
<td>Required to squeeze the excess Sikalastic® Coldstik from the laps of the Sikalastic® Vap and Sikalastic® Carrier when sealing the side and end laps.</td>
</tr>
<tr>
<td>Medium pile roller</td>
<td>Used in the application of Sikalastic®-602 BR to ensure a consistent thickness of the seamless SikaRoof® MTC Systems.</td>
</tr>
<tr>
<td>Small Medium pile roller</td>
<td>Used in the application of Sika® Reemat, Sikalastic®-602 BR to details and penetrations throughout the roof construction.</td>
</tr>
<tr>
<td>Brushes</td>
<td>For application of Sika® Reemat, Sikalastic®-602 BR to all details and penetrations.</td>
</tr>
<tr>
<td>Stanley knife</td>
<td>This tool is required when cutting Sikalastic® Vap, Sikalastic® Insulation and Sikalastic® Carrier. When the Sikalastic® Insulation is resting on an uneven substrate, the back of the board should be cut to enable maximum contact with Sikalastic® Coldstik.</td>
</tr>
<tr>
<td>Saw</td>
<td>Used when cutting thick Sikalastic® Insulation boards.</td>
</tr>
<tr>
<td>Sikalastic® Applicator</td>
<td>A gravity fed, easy-to-use spreader for Sikalastic®-602 BR and Sikalastic® Coldstik.</td>
</tr>
</tbody>
</table>

### Cleaning of Tools

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

### Pot life

Sikalastic®-602 BR is designed for fast drying. High temperatures combined with high air humidity will increase the drying process. Thus, material in opened containers should be applied immediately. In opened containers, the material will form a film within 1 or 2 hours.

### Curing Details

<table>
<thead>
<tr>
<th>Applied Product ready for use</th>
<th>Temperature</th>
<th>Relative humidity</th>
<th>Rain resistant</th>
<th>Touch dry</th>
<th>Full cure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sikalastic®-602 BR</td>
<td>+5°C</td>
<td>50%</td>
<td>1 hour</td>
<td>8-10 hours</td>
<td>24 hours</td>
</tr>
<tr>
<td></td>
<td>+10°C</td>
<td>50%</td>
<td>1 hour</td>
<td>4 hours</td>
<td>8-10 hours</td>
</tr>
<tr>
<td></td>
<td>+20°C</td>
<td>50%</td>
<td>1 hour</td>
<td>3 hours</td>
<td>6-8 hours</td>
</tr>
</tbody>
</table>

**Note:** Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.

### Notes on Application / Limitations

Do not apply Sikalastic®-602 BR on substrates with rising moisture.

On substrates likely to exhibit outgassing, apply during falling ambient and substrate temperature. If applied during rising temperatures “pin holing” may occur from rising air.

Substrate preparation is crucial to ensure highly durable quality. Precisely follow the instructions of the corresponding Primer and Cleaner PDS and the most recent issue of the Method Statement.

Do not use Sikalastic®-602 BR for indoor applications.

Do not apply close to the air intake vent of a running air conditioning unit.

Do not apply Sikalastic®-602 BR directly on insulation boards. Instead use Sikalastic®-623 DR.
Carrier between insulation board and Sikalastic®-602 BR.

Areas with high movement, irregular substrates, or timber based roof decks require a complete layer of Sikalastic Carrier.

Do not apply cementitious products (e.g. tile mortar) directly onto Sikalastic®-602 BR.
**Note:** The following chapter is only mandatory for European countries.

**CE Labelling**

SikaRoof® MTC Green and SikaRoof® MTC Ballast can be completed as warm roof or inverted roof designs.

<table>
<thead>
<tr>
<th>Manufacturing plant:</th>
<th>SikaRoof® MTC Green and SikaRoof® MTC Ballast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid Plastics Limited</td>
<td></td>
</tr>
<tr>
<td>Iotech House</td>
<td></td>
</tr>
<tr>
<td>Miller Street</td>
<td></td>
</tr>
<tr>
<td>Preston</td>
<td></td>
</tr>
<tr>
<td>Lancashire PR1 1EA</td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Guideline for European Technical approval</th>
<th>ETAG-005-6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last two digits of the year in which the marking was affixed</td>
<td>09</td>
</tr>
<tr>
<td>European Technical approval No.</td>
<td>ETA 09/0224</td>
</tr>
<tr>
<td>System</td>
<td>SikaRoof® MTC Green and SikaRoof® MTC Ballast</td>
</tr>
<tr>
<td>Resistance to wind loads</td>
<td>&gt; 50kPa</td>
</tr>
<tr>
<td>External fire performance</td>
<td>No Performance Determined¹</td>
</tr>
<tr>
<td>Reaction to fire</td>
<td>EN 13501-1</td>
</tr>
<tr>
<td></td>
<td>Euroclass F</td>
</tr>
</tbody>
</table>

Level of use categories according to ETAG 005 with relation to:

- Working life: W3
- Climatic zones: M and S²
- Categorisation by imposed loads: P4
- Categorisation by roof slope: S1
- Categorisation by surface temperature:
  - Highest: TL1
  - Lowest: TH2
- Statement on dangerous substances: None contained
- Resistance to roots: Satisfactory³

¹) When the kit is fully covered by inorganic coverings listed in the Annex of Commission Decision 2000/553/EC it can be considered to satisfy the requirements regarding external fire performance without the need for testing in accordance with the Commission Directive 2000/553/EC.

²) Kit is always used under protection

³) Tested to DIN 4062: 1978 Cold processable plastic jointing materials for sewer drains; jointing materials for prefabricated parts of concrete, requirements, testing and processing.

**EU Regulation 2004/42**

According to the EU-Directive 2004/42, the maximum allowed content of VOC (Product category IIA / I type sb) is 600/500 g/l (Limits 2007 / 2010) for the ready to use product.

**VOC - Decopaint Directive**

The maximum content of Sikalastic®-602 BR is < 500 g/l VOC for the ready to use product.
| **Value Base** | All technical data stated in this Product Data Sheet is based on laboratory tests. Actual measured data may vary due to circumstances beyond our control. |
| **Local Restrictions** | Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields. |
| **Health and Safety Information** | For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological, and other safety-related data. |

**Editorial note for National Data Sheets:**
(This note must be deleted during preparation of National Product Data Sheet)
It may be necessary to adapt this disclaimer below to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika Corporate Legal in Baar.

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