Sikalastic®-622 TR
(Decothane Root Resistant Top Coat)

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

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

Packaging
15 litre pails (appr. 20.10 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.
Technical Data

Chemical Base
One-component moisture-triggered Polyurethane

Density 1.34 kg/l
All density values at +23 °C

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)

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.

<table>
<thead>
<tr>
<th>Build up</th>
<th>Cold roof build-up</th>
<th>Warm roof build-up</th>
<th>Inverted roof build-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systems</td>
<td>SikaRoof® MTC Green and SikaRoof® MTC Ballast can be completed as cold, warm or inverted roof designs.</td>
<td></td>
<td></td>
</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>
<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>
</tr>
<tr>
<td>Primes</td>
<td>Sound concrete</td>
<td>Sound concrete or suitably designed profiled metal deck or plywood structures.</td>
<td>Sound concrete</td>
</tr>
<tr>
<td>--------</td>
<td>----------------</td>
<td>--------------------------------------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Primer</td>
<td>Please refer to Sikalastic® Primer chart below</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Total dry film thickness (BR and TR/DR)**
  - TR min. 2.1mm
  - DR min. 1.5 – 1.8mm

- **Total consumption**
  - TR: ≥ 1.5l/m²(2.0kg/m²)
    - upstands 0.75l/m²
  - DR: ≥ 1.5l/m²(2.0kg/m²)
    - upstands 0.75l/m²

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

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>One component product. Stir before using</td>
<td></td>
</tr>
<tr>
<td>Low-temperature stability</td>
<td></td>
</tr>
<tr>
<td>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</td>
<td></td>
</tr>
<tr>
<td>Highly elastic and crack-bridging</td>
<td></td>
</tr>
<tr>
<td>Vapour permeable</td>
<td></td>
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<tr>
<td>Easy application by brush, roller or airless spray equipment even when accessibility is limited</td>
<td></td>
</tr>
<tr>
<td>Bonds fully to most substrates, preventing the migration of water</td>
<td></td>
</tr>
<tr>
<td>Root resistant</td>
<td></td>
</tr>
<tr>
<td>Seamless waterproofing membrane</td>
<td></td>
</tr>
<tr>
<td>Withstands mechanical loads of pedestrian and light wheeled traffic</td>
<td></td>
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<tr>
<td>Compatible with bituminous felts</td>
<td></td>
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</tbody>
</table>

### Application Details

#### Substrate Quality

Sikalastic®-602 BR must be fully cured before applying Sikalastic®-623 DR. For the Waiting Time please refer to the table below.

#### Substrate Preparation

Substrate must be dry and clean, and all contamination that may hinder adhesion, such as dust, dirt, moss, oil, grease, coatings, etc. should be removed. Preferably clean the membrane using a water jet at approximately 140 bar (2000 p.s.i) and using Sika® Biowash if necessary. Allow to dry.

#### Substrate Priming

<table>
<thead>
<tr>
<th>Substrate</th>
<th>Primer</th>
<th>Consumption primer [ml/m²]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing SikaRoof® MTC waterproofing system (older than 7 days)</td>
<td>Sika® Reactivation Primer</td>
<td>≈ 200</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 GFM whilst wet. Ensure there are no bubbles or creases and that the Sika® Reemat GFM 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 profilled 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 GFM is rolled in whilst wet. Ensure that there are no bubbles or creases and that the Sika® Reemat GFM 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

Jet washer: 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.

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

Drill and paddle: 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.

Pouring Can: The pouring can is used to snake the Sikalastic® Coldstik across the structural deck, the Sikalastic® Vap or the Sikalastic® Insulation.

Scraper: Required to squeeze the excess Sikalastic® Coldstik from the laps of the Sikalastic® Vap and Sikalastic® Carrier when sealing the side and end laps.

Medium pile roller: Used in the application of Sikalastic®-622 TR to ensure a consistent thickness of the seamless SikaRoof® MTC Systems.

Small Medium pile roller: Used in the application of Sika® Reemat GFM, Sikalastic®-602 BR to details and penetrations throughout the roof construction.

Brushes: For application of Sika® Reemat GFM, Sikalastic®-602 BR and Sikalastic®-622 TR to all details and penetrations.

Stanley knife: This tool is required when cutting Sikalastic® Vap, Sikalastic® Insulation and Sikalastic® Carrier. When the Sikalastic® Insulation is resting on a uneven substrate, the back of the board should be cut to enable maximum contact with Sikalastic® Coldstik.

Saw: Used when cutting thick Sikalastic® Insulation boards.

Sikalastic® Applicator: A gravity fed, easy-to-use spreader for Sikalastic®-602 BR and Sikalastic® Coldstik.

Airless spray equipment: Two spray applied layers is the minimum requirement. The pump should have the following parameter:

- min. pressure: 220 bar
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®-622 TR 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></td>
<td>+2°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
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®-622 TR for indoor applications.

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

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®-622 TR.
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>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid Plastics Limited</td>
</tr>
<tr>
<td>Iotech House</td>
</tr>
<tr>
<td>Miller Street</td>
</tr>
<tr>
<td>Preston</td>
</tr>
<tr>
<td>Lancashire PR1 1EA</td>
</tr>
<tr>
<td>United Kingdom</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 Euroclass F</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Working life:</th>
<th>W3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climatic zones:</td>
<td>M and S²</td>
</tr>
<tr>
<td>Categorisation by imposed loads</td>
<td>P4</td>
</tr>
<tr>
<td>Categorisation by roof slope:</td>
<td>S1</td>
</tr>
<tr>
<td>Categorisation by surface temperature:</td>
<td></td>
</tr>
<tr>
<td>- Highest</td>
<td>TL1</td>
</tr>
<tr>
<td>- Lowest</td>
<td>TH2</td>
</tr>
<tr>
<td>Statement on dangerous substances</td>
<td>None contained</td>
</tr>
<tr>
<td>Resistance to roots</td>
<td>Satisfactory³</td>
</tr>
</tbody>
</table>

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®-622 TR 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.

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**Editorial note for National Data Sheets:**

(This note must be deleted during preparation of National Product Data Sheet)

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