

Decothane Root Resistant Base Coat

High performance, root resistant, versatile and easily applied liquid roof waterproofing base coat

Product Description

Sika Liquid Plastics' Decothane Root Resistant Base Coat is a high performance polyurethane coating used as an embedment coat for the Decothane Inverted Roof waterproofing system.

Uses

- Embedment Coat for Sika Liquid Plastics Inverted Roof System
- For insulated and non-insulated roof designs
- For new construction and refurbishment projects

Characteristics / Advantages

- Totally seamless, single pack liquid applied membrane
- Cold applied – eliminating the risk of fire during installation
- High solids, VOC compliant to 2004/42/CE
- BBA certified system
- Highest fire ratings once installed (B_{ROOF} (t4))
- Fast curing, develops early rain resistance
- Excellent adhesion to most conventional substrates*
- Easy and quick application – Deco Applicator available
- Minimal disruption and low maintenance
- Elastic properties – tolerant of thermal movement
- Independently tested and certified resistant to root penetration
- Flexible, impact resistant membrane
- Can be applied all year round above 2°C
- Approved to ETAg 005 (Part 6)
- Product Guarantee and Final Inspection Certificate available if installed by a Sika Liquid Plastics Quality Assured Contractor

*please refer to Substrate Preparation for further information

Test

Approvals / Standards

- European Technical Approval No. ETA-07/0004
- BBA Certificate No. 06/4359
- Root resistant to the FLL (2002) test method

Product Data

Form

Appearance / Colours Pigmented liquid
Red

Packaging 15 litres

Storage

Roofing



Product Data Sheet

Edition 08.2013
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 Version no. 02

Storage Conditions / Shelf Life

Store in original, unopened and undamaged sealed packaging in dry conditions at temperatures >0°C and < 25°C. Protect from frost.

A shelf-life of 12 months is achieved when stored in accordance with the above recommendations at a temperature of 20°C. Exposure to higher temperatures will reduce the shelf-life.

Reference should also be made to the storage recommendations of the material safety datasheet.

Technical Data

Chemical Base	One-component moisture-triggered Polyurethane	
Density	1.37 kg/L (+23 °C)	(EN ISO 2811-1)
Solid Content	~ 80.2 % by volume / ~ 86.0 % by weight	
Flash Point	+ 59°C	
Service Temperature	-30 to +80°C (intermittent)	

Resistance

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

Maximum Coverage Rate

Inverted Roof System: Main Deck Areas

Preparatory Layer:	Carrier Membrane adhered with Decostik®	1.0 L/m ²
Embedment Layer:	Root Resistant Base Coat	1.5 L/m ²
	Sika Reemat Premium	
Top Coat:	Root Resistant Top Coat	1.0 L/m ²

Note: Ideally overcoat within 2 days - If more than 7 days elapse between the application of the base coat and the Decothane Root Resistant Top Coat(s), clean the existing surface thoroughly before apply Liquid Plastics' Reactivation Primer and the next coat of Decothane.

For upstands please see Decothane Root Resistant Detail Coat Technical Datasheet.



System Data

Dry Film Thickness 1.9 mm

Tensile Strength 9.3 N/mm²

Tear Force 60 N

Tear Strength 29 N/mm

Tensile Elongation 45 %

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. The substrate must be of a suitable quality and condition to receive the system. Please refer to specification for further details.

*unless using DTE primer – see DTE Primer Technical Datasheet for further details.

Asphalt Asphalt contains volatiles which can cause bleeding and slight non-detrimental staining. The asphalt must be carefully assessed for moisture and/or air entrapment, grade and surface finish prior to any coating works being carried out.

Bituminous felt Ensure that bituminous felt is firmly adhered or mechanically fixed to the substrate. Bituminous felt should not contain any badly degraded areas.

Timber substrates Timber and timber based panel roof decks are to be well constructed, in good condition, firmly adhered, and with sufficient fixings for the nature and location of the site.

Roofing



Substrate Preparation

Cementitious substrates Laitance, other loose friable material and weak concrete must be completely removed and surface defects such as blowholes and voids must be fully exposed. In severe cases use abrasive blast cleaning, grinding or scarifying equipment to achieve a sound surface.

Repairs to the substrate, filling of joints, blowholes/voids and surface levelling must be carried out using appropriate products.

High spots must be removed e.g. by 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.

Asphalt Thoroughly clean using by power wash and allow to dry. All major cracks should be sealed to allow continuity of the Decothane Inverted Roof System. Asphalt must be carefully assessed for moisture and/ or air entrapment, grade and surface finish prior to any coating works being carried out. Any priming requirement must also be considered.

Bituminous felt Thoroughly clean using by power wash and allow to dry. Treat blisters by star cutting and removing any underlying water. Allow to dry and re-adhere using Decostik®. Badly degraded areas should be replaced with Carrier Membrane bonded in Decostik®.

Substrate Priming

Substrate	Primer/Preparation Layer
Cementitious Substrates	Carrier Membrane adhered with Decostik®
Asphalt	Carrier Membrane adhered with Decostik®
Bituminous Felt	Carrier Membrane adhered with Decostik®

Application Conditions / Limitations

Air Temperature +2°C min. / +35 °C max.

Substrate Temperature +2°C min. / +60 °C max.

Substrate Moisture Content Wood moisture equivalent (max): < 28%
Please note: Reference should also be made to the appropriate primer technical datasheet.

Relative Air Humidity 20% min. / 85% max.

Dew Point Beware of condensation. Surface temperature during application and cure must be a minimum of +3 °C above dew point.



Application Instructions

Mixing No mixing required

Application Method Prior to the application of Decothane Root Resistant Base Coat the substrate must be prepared with Carrier Membrane adhered with Decostik®. For the waiting/overcoating time please refer to the technical datasheet of the Decostik®.

Following this preparatory treatment apply a coat of Decothane Root Resistant Base Coat and roll in the Sika Reemat Premium whilst wet. Ensure that there are no bubbles or creases and that the Sika Reemat Premium overlaps by a minimum of 50mm. Prior to the application of Decothane Root Resistant Top Coat the waiting time indicated in the table below is to be achieved.

Please note: always begin by reinforcing the details prior to waterproofing the horizontal surface.

Please refer to the table on page 2 for coverage rates.

Application Tools For best results apply Decothane Root Resistant Base Coat by brush (for details and penetrations) or roller. Rollers should be disposable medium/long pile simulated sheepskin.

A Deco Applicator is also available for use on large roof areas. It is a gravity fed, easy to use spreader for Decothane Root Resistant Base Coat & Decothane Root Resistant Top Coat.

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 Decothane Root Resistant Base Coat 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

Applied Product ready for use

Temperature	Relative humidity	Rain resistant	Touch dry	Full cure
+2°C	50%	1 hour	6-8 hours	12-16 hours
+10°C	50%	1 hour	3 hours	6-8 hours
+20°C	50%	1 hour	2 hours	4-6 hours

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

Notes on Application / Limitations

Do not apply Decothane Root Resistant Base Coat 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.

Substrate preparation is crucial to ensure durability. Please follow the instructions in the technical datasheet of the corresponding Primer and pretreatment.



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Version no. 02

Applications of Decothane Root Resistant Base Coat in confined spaces must be undertaken in accordance with material safety datasheet recommendations.

Do not apply close to the air intake vents of running air conditioning units until either switched off or isolated as vapour may be drawn into the building.

Always use Carrier Membrane between Decotherm Insulation Board and Decothane Root Resistant Base Coat.

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

Do not apply cementitious products (e.g. tile mortar) directly onto Decothane Root Resistant Base Coat or Decothane Root Resistant Top Coat.

When lower temperatures are anticipated (e.g. overnight), Decothane Accelerator is recommended to shorten the overall curing period. Decothane Root Resistant Base Coat and Decothane Root Resistant Top Coat should not be applied under conditions where these limits are likely to be exceeded.

Do not use grit salt and/or other de-icing agents between coats of Decothane Root Resistant Base Coat or Decothane Root Resistant Top Coat as this may interfere with the cure and inter-coat adhesion of the product.

Roofing



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Value Base	All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.
Health and Safety Information	For information and advice on the safe handling, storage and disposal of chemical products, please refer to the most recent Material Safety Data Sheet.
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Specification assistance	NBS is the industry standard specification system, which allows architects, specifiers and engineers to insert clauses into specifications by manufacturer and product, making the process quicker and more efficient. We are members of NBS Plus and therefore detailed up-to-date product information is readily available to create accurate specifications.
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