

## Decothane Root Resistant Detail Coat

Highly durable, UV-stable, root resistant, versatile and easily applied liquid Roof Waterproofing Detail coat

**Product Description** Sika Liquid Plastics' Decothane Root Resistant Detail Coat is a high performance polyurethane coating used as a finishing coat for details within the Decothane Inverted Roof waterproofing system.

**Uses**

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

**Characteristics / Advantages**

- Provides protection to ensure the effective elimination of micro-organisms in the substrate.
- 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<sub>ROOF(t4)</sub>)
- 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)
- Single point guarantee available if installed by a Sika Liquid Plastics Quality Assured Contractor

\*please refer to Substrate Preparation for further information

### Tests

**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** Pigmented liquid  
Slate Grey, Shale Grey and White

**Packaging** 15 litres



## Storage

### Storage Conditions / Shelf Life

Store in original, unopened and undamaged sealed packaging in dry conditions at temperatures  $>0^{\circ}\text{C}$  and  $< 25^{\circ}\text{C}$ . Protect from frost.

A shelf-life of 12 months is achieved when stored in accordance with the above recommendations at a temperature of  $20^{\circ}\text{C}$ . 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

1.44 kg/L ( $+23^{\circ}\text{C}$ )

(EN ISO 2811-1)

### Solid Content

~ 81.3 % by volume / ~ 87.4 % by weight

### Flash Point

+  $62^{\circ}\text{C}$

### Service Temperature

-30 to  $+80^{\circ}\text{C}$  (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 Customer Services 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 Rates

### Preparatory Layer

Substrate must be prepared according to specification – for further information please contact technical customer services

<b>Embedment Layer</b>	Decothane Root Resistant Base Coat	1.0 L/m <sup>2</sup>
	Sika Reemat Premium	
<b>Top Coat</b>	Decothane Root Resistant Detail Coat	0.75 L/m <sup>2</sup>
<b>Top Coat</b>	Decothane Root Resistant Detail Coat	1.0 L/m <sup>2</sup>

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

## Typical Test Data

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**Dry Film Thickness** 2.5 mm

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**Tensile Strength** 11.0 N/mm<sup>2</sup>

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**Tear Force** 120 N

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**Tear Strength** 52 N/mm

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**Tensile Elongation** 84 %

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## Application Details

### Substrate Quality

#### Cementitious substrates

New concrete should be cured for at least 28 days\* and should have a pull off strength  $\geq 1.5 \text{ N/mm}^2$ . 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.

#### Brick and stone

Mortar joints must be sound and preferably flush pointed.

#### Slates, tiles, etc.

Ensure all slates/tiles are sound and securely fastened, replacing obviously broken or missing sections.

#### 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.

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### Metals

Metals must be in sound condition.

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### Wooden substrates

Timber and timber based panel roof decks are to be in good condition, firmly adhered, or mechanically fixed.

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### Paints/Coatings

Ensure the existing material is sound and firmly adhered.

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### Existing Decothane Systems

The existing Decothane System should still be soundly adhered to the substrate.

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### 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.

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.

### Brick and stone

Thoroughly clean by power wash and allow to dry. Where there is a risk of algal re-growth on absorbent surfaces use Sika Liquid Plastics Biowash. Please refer to the Biowash Technical Datasheet for further information.

### Slates, tiles, etc.

Slates, tiles, etc. need a good adhesion to the substrate otherwise they need to be removed. Thoroughly clean by power wash and allow to dry. Where there is a risk of algal re-growth on absorbent surfaces use Sika Liquid Plastics Biowash. Please refer to the Biowash Technical Datasheet for further information.

### Asphalt

Thoroughly clean by power wash and allow to dry. All major cracks should be sealed to allow continuity of the Decothane 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 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



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Bituminous coatings

Remove loose or degraded coatings. Apply the Decothane System directly.

Metals

Steelwork is ideally prepared to Sa2½ (Swedish Standard SIS 05 : 5900 = 2nd quality BS4232 = S.S.P.C. grade SP10) OR as indicated by the blasting specification which may be of a higher standard. Where blasting is not permitted, clean metal preparation by pin hammer, etc. is acceptable.

Non-ferrous metals are prepared as follows. Remove any deposits of dust and oxidation and abrade to bright metal. Wire brushing can be used for soft metal such as lead. The surface must be clean and free from grease which, if present, must be removed with a proprietary solution. Wash with detergent, rinse and dry.

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.

Paints/Coatings

Remove loose or degraded coatings. Ensure the surface is clean and free from grease.

Existing Decothane Systems

Thoroughly clean by power wash and allow to dry. Allow to dry.

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

**Substrate Priming**

Substrate	Primer
Cementitious Substrates	Sika Liquid Plastics Quick Cure Primer or Bonding Primer
Brick and Stone	Not required
Slate, tiles etc	Not required
Asphalt	Not required, subject to surface assessment tests
Bituminous Felt	Not required
Bituminous Coatings	Not required
Metals	Sika Liquid Plastics Metal Primer
Timber Substrates	Timber based roof decks require a layer of Carrier Membrane. For exposed timber upstands use Bonding Primer or Quick Cure Primer



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**Paints** Subject to adhesion tests, Bonding Primer or metal primer for aluminium based solar reflective coatings

**Existing Decothane** Sika Liquid Plastics Reactivation Primer

*Note: For the Coverage Rates/Waiting Time/Overcoating of any products besides Decothane Base Coat please refer to the corresponding technical datasheet. Other substrates must be tested for their compatibility. If in doubt, apply a test area first.*

**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 and the priming coat must have cured tack-free. For the waiting time/overcoating please refer to the technical datasheet of the appropriate primer.

Apply first coat of Decothane Root Resistant Base Coat and roll in the Sika Reemat Premium 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 two coats of Decothane Root Resistant Detail Coat the indicated waiting time in the table below should be achieved.

Please note, always begin with details prior to waterproofing the horizontal surface.

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

**Application Tools** For best results apply Decothane Root Resistant Detail 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 Detail 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.

Roofing



### Pot Life

Decothane Root Resistant Detail 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 Detail 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 from rising air.

Substrate preparation is crucial to ensure highly durable quality. Precisely follow the instructions of the corresponding Primer and Cleaner technical datasheet.

Do not use Decothane Root Resistant Detail Coat 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 Carrier Membrane.

Decothane Top Coat is not recommended for frequent traffic. If daily pedestrian traffic is unavoidable, Decothane Top Coat shall be covered with appropriate elements such as tiles, stone plates, or wooden panels.

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


When lower temperatures are anticipated (e.g. overnight), Decothane Accelerator is recommended to shorten the overall curing period. Decothane products 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 as this may interfere with the cure and inter-coat adhesion of the product.



**CE Labelling**

Decothane Waterproofing Systems are approved for use by the European Organisation for Technical Approvals (EOTA). When independently tested in accordance with ETAG 005 (Guideline for European Technical Approval of Liquid Applied Roof Waterproofing Kits), the following levels of performance were established:

	
Decothane Inverted Roof Waterproofing Systems	
Sika Liquid Plastics Limited, Iotech house, Miller Street, Preston, UK, PR1 1EA	
ETA No. 07/0004	
ETAg 005 (Part 6)	
Characteristic	Level of Performance (Inverted Roof Membrane)
External Fire Performance: (Note: At the time of testing a valid EN did not exist. Indicated classifications under prEN 13501-5 are: B <sub>Roof</sub> t1), B <sub>Roof</sub> (t2) and B <sub>Roof</sub> (t3). Classification under BS476-3:1958 was assessed as EXT.F.AA. See evaluation report for test results	No performance determined
Reaction to Fire:	Euroclass F
Categorisation by working life:	W3 (expected working life of 25 years)
Categorisation by Climate Zone: (Note: For inverted roof systems, the Root Resistant Membrane is always covered)	Suitable for use in both M (moderate) and S (severe) climate zones
Categorisation by imposed loads:	P4
Categorisation by roof slope:	S1 (pitch less than 5%)

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Categorisation by surface temperature: - lowest - highest (Note: Inverted roof waterproofing is insulated from external temperature fluctuations)	TL1 TH2
Statement on dangerous substances:	None contained
Resistance to roots:	Satisfactory (tested to DIN 4062:1978)

See ETA certificate 07/0004 for specific details. This should be read in conjunction with ETA certificate 03/0052 for further information and performance expectations of exposed Decothane Roof Waterproofing applications.

## Limitations

Prior to overcoating with Decothane Root Resistant Base Coat, the priming coats must have cured tack-free.

Do not use for interior applications.

Always apply during falling temperatures. If applied during rising temperatures "pin holing" may occur from rising air. If this is not possible and the substrate seems to be outgassing the use of Quick Cure Primer will be necessary. Please refer to the Quick Cure Primer Technical Datasheet for further information.

The incorrect assessment and treatment of cracks may lead to a reduced service life and reflective cracking.

For colour matching purposes, always ensure the Decothane Root Resistant Detail Coat applied in each area is from the same control batch numbers.

## 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.

## Disclaimer

The information contained herein are given in good faith based on Sika's current knowledge and experience of Sika Liquid Plastic's products when properly stored, handled and applied under normal conditions in accordance with Sika Liquid Plastic's recommendations. The information only applies to the application(s) and product(s) expressly referred to herein. In case of changes in the parameters of the application, such as changes in substrates etc., or in case of a different application, consult Sika Liquid Plastic's Technical Service Department prior to using Sika Liquid Plastic's products. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. All orders are accepted subject to our current terms of sale and delivery. Users should 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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**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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#### Contact Details

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# Roofing



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Decothane Root Resistant Detail Coat



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