BUILDING TRUST

PRODUCT DATA SHEET

Decothane® Ultra

HIGH PERFORMANCE, ONE-COMPONENT, HIGH SOLIDS, UV-STABLE, LIQUID APPLIED POLY-URETHANE WATERPROOFING MEMBRANE WITH LOW ODOUR

PRODUCT DESCRIPTION

Decothane® Ultra is a cold-applied, one-component,seamless, highly elastic, UV stable and moisture-triggered polyurethane membrane with significantly reduced odour. It cures to form a seamless, durable and weather-resistant waterproofing solution for exposed roof areas

USES

Decothane® Ultra may only be used by experienced professionals. For roof waterproofing solutions in both new construction and refurbishment projects

- For roofs displaying complex detail areas, even when accessibility is limited
- For cost efficient life cycle extension of failing roofs
- For odour sensitive areas
- For insulated and non-insulated roof designs

CHARACTERISTICS / ADVANTAGES

- Low maintenance
- One component - no mixing, easy and ready to use
- Cold applied – requires no heat or flame
- Minimal odour - suitable for odour sensitive projects
- High solids
- Seamless membrane
- Compatible with Sika® Reemat Premium – easy to detail
- Easily recoated when needed - no stripping required
- Elastic - retains elasticity even at low temperatures
- Good adhesion to most substrates – see table
- Free from rain damage almost immediately on application (see table)

APPROVALS / STANDARDS

- British Board of Agrement (BBA) certified No. 14/5158
- European Technical Approval (No.ETA - 14/0331)
- External fire performance according to ENV 1187:BRoof(t1) + (t4) over Built up roofing system, classification under BS 476-3: 1958 EXT F. AB
- Olfasense– Report Number SIKA23A_01

PRODUCT INFORMATION

Chemical Base	One-component, moisture-triggered, aliphatic polyurethane
Packaging	15 Litre Metal Pails
Shelf Life	9 months from date of production

Storage Conditions	The product must be 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. Reference shall also be made to the storage recommendations within the safety data sheet. It is recommended that the product is stored under warm conditions (20°C) prior to application at temperatures below 10°C.
Colour	Slate grey (RAL 7015); Dove Grey (RAL 7040); Shale Grey (RAL 8500); White, (RAL 9016); other colours available upon request
Density	~1.42 kg/l approx. (+23°C) (EN ISO 2811-1)
Solid content by mass	~88.0 % (+23°C / 50 % r.h.)
Solid content by volume	~84.5 % (+23°C / 50 % r.h.

TECHNICAL INFORMATION

Tensile Strength	Ultra 15 10 N/mm²	Ultra 20 8.5 N/mm²	Ultra 25 8.3 N/mm²	EN ISO 527
Tensile resistance	370 N/25mm	410 N/25mm	530 N/25mm	EN ISO 527
Tear Strength	30 N/mm	30 N/mm	30 N/mm	EN ISO 527
Service Temperature	-30°C to +80°C (intermittent)			
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 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

System Structure

Reinforced Roof Waterproofing
Decothane® Ultra is applied in one coat reinforced with Sika Reemat Premium and sealed with a final top coat of Decothane® Ultra.
System Working Life ~15 Years

Layer	Product	Consumption
Primer	Refer to substrate pre-treatment	Refer to the primer Product Data Sheet
Embedment Coat	Decothane® Ultra	~1.25 L/m²
Reinforcement	Sika® Reemat Premium	-
Top Coat	Decothane® Ultra	0.5 L/m²

System Working Life ~20 Years

Layer	Product	Consumption
Primer	Refer to substrate pre-treatment	Refer to the primer Product Data Sheet
Embedment Coat	Decothane® Ultra	~1.25 L/m²
Reinforcement	Sika® Reemat Premium	-
Top Coat	Decothane® Ultra	~0.75 L/m²

System Working Life ~25 Years

Layer	Product	Consumption
Primer	Refer to substrate pre-treatment	Refer tot he primer Product Data Sheet
Embedment Coat	Decothane® Ultra	~1.50 L/m²
Reinforcement	Sika® Reemat Premium	-
Top Coat	Decothane® Ultra	~1.0 L/m²

Dry film thickness	Ultra 15	Ultra 20	Ultra 25	EN ISO 527
	1.5 mm	1.8 mm	2.2 mm	

APPLICATION INFORMATION

Ambient Air Temperature	+2°C min/+40°C max
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.
Substrate Temperature	+2°C min/+60°C max
Substrate Moisture Content	Wood moisture equivalent (wme) (max): <28%
Pot Life	Decothane® Ultra 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 hour.
Waiting Time / Overcoating	~48 hours. For longer periods ≤ 14 days, the surface must be reactivated with Sika Reactivation Primer.

Applied Product Ready for Use

Temperature	Relative Humidity	Rain Resistant	Overcoating Time	Full Cure
+5°C	50%	~1 hour	Overnight	~24 hours
+10°C	50%	~1 hour	~8-10 hours	~12-24 hours
+20°C	50%	~1 hour	~4-6 hours	~12-18 hours

Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.
*Be aware that heavy rain or rain showers can physically mark or damage the still liquid coating
Application at heavier than recommended thicknesses may result in a prolonged soft feeling to the coating. This will eventually cure.

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.

FURTHER DOCUMENTS

Do not apply Decothane® Ultra on substrates with rising moisture.
Decothane® Ultra is not Intended for permanent immersion under water.
Material will dry at the surface in around 30 minutes depending on temperature. Always maintain a wet edge and finish surface as work proceeds. Going back to re-work areas that are partially dried may disrupt the surface.
All colours are interchangeable. However, darker colours eg Slate or Cloud Grey are best suited for embedment of the Reemat. Lighter colours used as the final coat will reduce solar heat gain into the roof build up.
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.
Applications of Decothane® Ultra 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.
Decothane® Ultra is not recommended for frequent traffic. If daily pedestrian traffic is unavoidable, Decothane® Ultra shall be covered with appropriate elements such as stone plates, or wooden panels on supports.
Always use a Carrier Membrane between Decotherm Insulation Board and Decothane® Ultra.
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® Ultra.
The application of the system must be approached as one operation. Always plan for reasonable progress of each coat. Work only so far in advance that the existing surface can be overcoated as the next operation. Finish the coating system completely before progressing to the next area. The ideal time between coats is within 48 hours.
It is not good practice to plan breaks between coats of more than 14 days. For periods longer than this consult Sika Liquid Plastics for advice. Ensure each applic-

ation/coat is clean and dry prior to overcoating.
At no stage should the Sika Liquid Plastics system or waterproof coating in its finished or intermediate stage be used as a workspace or access floor without adequate protection.

ECOLOGY, HEALTH AND SAFETY

REGULATION (EC) NO 1907/2006 - REACH

According to the EU Directive 2004/42/CE, the maximum allowed content of the VOC (product category 11A / i type sb) is 600/500g/l (limits 2007/2010) for the ready to use product. The maximum content of Decothane® Ultra is <500g/l for the ready to use product

DIRECTIVE 2004/42/CE - LIMITATION OF EMISSIONS OF VOC

APPLICATION INSTRUCTIONS

EQUIPMENT

For best results apply Decothane® Ultra by brush (for details and penetrations) or roller. Rollers should be disposable medium pile simulated sheepskin.

SUBSTRATE PREPARATION

General
All dust, loose and friable material must be completely removed form all surfaces before application of the product and associated system products, preferably by vacuum extraction equipment.
To confirm adequate surface preparation and Decothane® Ultra adhesion, carry out a preliminary trial before application together with adhesion tests as required.
Prior to the application of Decothane® Ultra embedment 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.
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.
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 Liquid Plastics Biowash. Please refer to the Biowash Technical Datasheet for further information. Repair any spalling, flaking or other damage and replace any missing jointing.
Asphalt
Thoroughly clean using 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 using by power wash and allow to dry. Existing felt surfaces that are badly cracked, degraded or where blistering has occurred, should be locally removed back to a sound, straight cut, well adhered edge and replaced with Carrier Membrane S-Vap.
Single Ply
The Single Ply should be prepared in accordance with the Specification provided for the individual project.
Bituminous Coatings
Remove loose, degraded, tacky or mobile 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 to Sa2½ (Swedish Standard SIS 05: 5900 = 2nd quality BS4232 = S.S.P.C. grade SP10) is not permitted alternative blast media or clean metal preparation by pin hammer, etc. is acceptable. Less effective methods of preparation that leave corrosion in-situ may reduce expected life term.
Dull galvanised surfaces can usually be treated with Sika Metal Primer directly following adhesion test. Bright or new galvanised surfaces may require mordant solution.
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 thoroughly and dry.
Timber Substrates
Timber and timber based panel roof decks require a complete layer of Carrier Membrane prior to the application of the chosen system. The substrate should then be treated as a felt roof. Small timber protrusions may be treated directly, provided that the timber is of exterior quality, e.g. marine plywood, (see Substrate Priming for further information).
Paints/Coatings
Remove loose or degraded coatings returning to a firm, feathered firm edge. Remaining coatings are only be overcoated if soundly adhered. Ensure the surface is clean and free from grease.
Existing Decothane Systems
Clean the membrane using a water jet at approxim-

ately 14N/mm2 (2000 p.s.i) using detergent and rinse thoroughly. Thoroughly clean by power wash and allow to dry.
Note: *For the Waiting Time/Overcoating please 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.*

MIXING

Decothane® Ultra is supplied ready for use and mixing is not required, however, if the product is settled or separated on opening, stir Decothane® Ultra gently but thoroughly in order to achieve a uniform colour.

APPLICATION

Prior to the application of Decothane® Ultra the priming coat, if used, must have cured tack-free. For the Waiting Time/Overcoating, please refer to the PDS of the appropriate primer.
Damageable areas (handrails etc) have to be protected with tape or plastic wrapping.
Please note, always begin with details prior to the installation of the horizontal surface.

1. Apply embedment coat of Decothane® Ultra. Work only so far in advance that the material stays liquid.
2. Roll in the Sika Reemat. Overlap the Reemat a minimum 50mm and ensure overlaps are sufficiently wet to bond both layers.
3. The rolller may require only a little extra material to keep wetted but no further siginficant material needs to be added at this stage.
4. After the coat is dry enough to walk on, seal the roof area with further coats of Decothane® Ultra dependant of the specified system.

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.

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.

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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