Product Data Sheet
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Roofing

Decothane Balcons

Single pack, solvent based Polyurethane, used in Balcony 10, 15 and 20 waterproofing systems

Product Description

Decothane Balcons is a highly elastic, high build, UV resistant, single pack, moisture triggered polyurethane waterproofing coating.

Uses

- UV resistant, waterproof, crack-bridging coating
- Finishing options provide skid inhibiting properties
- For light to medium mechanical exposure
- For balconies, terraces, footbridges, stairways, galleries etc.

Characteristics / Advantages

- Waterproof, develops early rain resistance
- Excellent adhesion
- Crack-bridging
- UV resistant – non-yellowing
- High elasticity – allows for greater thermal movement
- Approved to ETAg 005 (Part 6)

Tests

Approvals/ Standards

European Technical Approval ETA no 13/0982

Product Data

Form

Appearance

Pigmented liquid

Slate Grey (RAL 7015), Pebble Grey (RAL 7032), Cement Grey (RAL 7042), Light Ivory (RAL 1015), Pale Grey (7035)

Packaging

5 litres

15 litres

Storage

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 9 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

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Chemical Base	Aliphatic Polyurethane	
Density	~1.32 kg/l @ 20°C	(EN ISO 2811-1)
Solid Content:	~ 70.9 % (by volume) / ~ 78.9 % (by weight)	(EN ISO 3251)
Flash Point	~ 42°C	(EN ISO 3679)
Tensile Strength	Unreinforced film : 11.4 N/mm² Sika Reemat Premium: 17.7 N/mm²	(EN ISO 527-1 / EN ISO 527-3)
Elongation at Break	Unreinforced film : ~ 400-600% Sika Reemat Premium: 30%	(EN ISO 527-1 / EN ISO 527-3)
Water Vapour Permeable	μH_20 = 2500; S_D (1400µm) = 3.5m	(EN1931)

Resistance

Chemical Resistance	Resistant to mild acids, alkalis, detergents and some solvents. More details are available on request.	
Fire Resistance	B_{ROOF} (t1) Class E	(DD ENV 1187 part 1) (EN 13501-1)

System Information

Maximum Coverage Rates

Balcony 10 Waterproofing

Primer (as required)	Quick Cure Primer	0.1 L/m²
	or Bonding Primer	0.125L/m²
Waterproofing		
First Coat:	Decothane Balcons with Decothane Accelerator*	1.1 L/m²
Reinforcement:	Sika Reemat Premium	
Second Coat:	Decothane Balcons with Decothane Accelerator*	0.5 L/m²

Wearing Coat		
Top Coat	Decoquick† with Decothane Accelerator*	0.2 L/m^2
	Fine Sand Aggregate	0.2 Kg/m^2

Balcony 15 Waterproofing

Primer (As required)	Quick Cure Primer	0.1 L/m^2
	or Bonding Primer	0.125 L/m^2
Waterproofing		
First Coat:	Decothane Balcons with Decothane Accelerator*	1.1L/m^2
Reinforcement:	Sika Reemat Premium	
Second Coat:	Decothane Balcons with Decothane Accelerator*	0.5 L/m^2
Wearing Coat		
Top Coat	Decothane Balcons with Decothane Accelerator*	0.3 L/m^2
	Medium Sand Aggregate	3.5 Kg/m²
Seal Coat	Decoquick† with Decothane Accelerator	0.4 L/m^2

Balcony 20 Waterproofing (Buried system)

Primer (As required)	Quick Cure Primer	0.1 L/m^2
	or Bonding Primer	0.125 L/m^2
Waterproofing		
First Coat	Decothane Balcons with Decothane Accelerator*	1.1L/m^2
Reinforcement	Sika Reemat Premium	
Second Coat	Decothane Balcons with Decothane Accelerator*	1.0 L/m^2
Finish	Tiles§, Pavers or screed	

Note: 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 7 days. For periods longer than this and less than 14 days the surface must be reactivated with Sika Reactivation Primer. Periods between coats longer than 14 days may affect the normal life term of the system –If this happens consult Sika Liquid Plastics for advice. Ensure each application/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.

Please note: the above rates are for smooth substrates only.

These figures are theoretical and do not allow for any additional material that may be required due to surface porosity, surface profile, variations in level or wastage etc. The excess of quartz sand or paint flakes has to be removed before applying the seal or top coat.

**Please refer to the Decothane Accelerator technical datasheet for instructions of use.*
†Please refer to the Decoquick technical datasheet for instructions of use.
§Tiles can be bonded in Sika Liquid Plastics Tile Adhesive; please contact Technical Customer Services for further information.

Exposed metal surfaces to be included in the coating schedule should be wire brushed or mechanically abraded to remove rust/scale or oxidation. Return to a clean, bright metal wherever possible. Apply Sika Liquid Plastics' Metal Primer prior to applying the Balcons System. Please refer to the Metal Primer data sheet for coverage rates, curing times and mixing instructions.

Use equipment with deference to safety and where necessary, check suitability with the equipment provider.

Substrate Quality

Concrete substrates must be sound and of sufficient compressive strength (minimum 25 N/mm^2) with a minimum pull off strength of 1.5 N/mm^2.

The substrate must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc.

Old coatings have to be solid, adhered and free of layers detrimental to adhesion. Existing layer is to be cleaned and mechanically roughened. A test area must be applied to confirm compatibility.

Substrate Preparation

New Concrete	Inspect the new concrete deck, ensure all areas are sound and laid in accordance with recognised and relevant standards. New concrete should be allowed a minimum of 28 days before priming. Any defective areas must be made good using an appropriate polymer modified mortar and allowed to cure for a minimum period of 72 hours before overcoating, in accordance with standard concrete repair procedures.
Existing Concrete	Inspect the concrete, all areas are to be hammer tested, areas found to be hollow or defective must be removed and made good using an appropriate polymer modified mortar and allowed to cure for a minimum period of 72 hours before overcoating, in accordance with standard concrete repair procedures.

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Asphalt	Thoroughly clean by power washing 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.
Outgassing	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.
Vertical Concrete Surfaces	Ensure that all vertical cementitious surfaces are fair and smooth. For larger areas of imperfections use an appropriate fairing coat to fill all voids and air inclusions. Bag-rubbing may be used for localised filling of minor imperfections. For larger repairs use an appropriate polymer modified mortar. Allow to cure for a minimum period of 72 hours before overcoating, in accordance with standard concrete repair procedures.

Note: For the waiting times for overcoating of primers please refer to the technical datasheet of the appropriate primer. For further information please contact Sika Liquid Plastics' Technical Customer Services.

Application Conditions / Limitations

Substrate & ambient temperature	+2°C min. / +30°C max. Frozen substrates must thaw for 24 hours.
Substrate Moisture Content	Wood moisture equivalent (wme) (max): < 28% Please note: Reference should also be made to the appropriate primer technical datasheet.
Relative Air Humidity	80% r.h. max. 35% min. (below +20°C: 45% min.)
Dew Point	Beware of condensation. Surface temperature during application and cure must be a minimum of 3°C above dew point.

Application Instructions

Mixing Time	**Standard** Before use slightly stir the Decothane Balcons **Accelerated** Before use slightly stir the Decothane Balcons then add the full Decothane Accelerator unit (60ml Decothane Accelerator for 5L of Decothane Balcons; 180ml Decothane Accelerator for 15L of Decothane Balcons) and stir using a drill and paddle until a uniform mix has been achieved. Over mixing must be avoided to minimise air entrapment.
Mixing Tools	Use a low speed drill and paddle (300 - 400 rpm) or other suitable equipment to mix the Decothane Accelerator with the Decothane Balcons.

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Application Method / Tools	Prior to application, check substrate moisture content, r.h. and dew point, comply with the applications detailed above. **First and second coat** Apply with a thermo bonded medium pile disposable roller. **Note:** All coats should be ideally rolled and laid off in one direction to achieve a good even finish.
Cleaning of Tools	Dispose of rollers after use. Brushes may be cleaned with a suitable cleaning solvent.
Pot Life	The material in opened containers should be applied immediately as a surface film formation will happen within 1 - 2 hours. **Note:** High temperatures and high air humidity will accelerate curing significantly.

Curing Details

Applied Product ready for use

At r.h 50%	Touch Dry	Through Dry	Return to service
Standard			
20°C	~6 hours	~10 hours	~15 hours
2°C	~12 hours	~20 hours	~30 hours
Accelerated			
20°C	~1 hours	~1.5 hours	~6-8 hours
2°C	~3 hours	~4 hours	~12-18 hours

Note: Times are approximate and will be affected by changing ambient conditions.

Return-to-service times are provided as a guide only and may vary as a result of conditions. Newly installed balconies should be protected from exposure to heavy traffic by overlaying with an appropriate protective covering. This is particularly critical where early access is needed by other construction related traffic. Sika Liquid Plastics will not be held responsible for damage to balcony surfaces that results from failures to adequately protect newly laid areas.

For further advice, consult Sika Liquid Plastics Technical Customer Services

Notes on Application

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Limitations

Prior to overcoating with Decothane Balcons, 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 Balcons applied in each area is from the same control batch numbers.

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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.

Disclaimer

The information, and, in particular, the recommendations relating to the application and end-use of Sika Liquid Plastics products, are given in good faith based on Sika Liquid Plastics' current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika Liquid Plastics' 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 Liquid Plastics 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.

General Information

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.

Contact Details

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