OWL WATERPROOFING SOLUTIONS

Lava 20 Coloured Top Coat

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TECHNICAL DATA SHEET

(Dark Grey, Coloured, Red, Blue, Green, Light Grey, Yellow, Black, Brown)

UV-resistant Aliphatic Polyurethane Top Coat

Product Description

Lava 20 Coloured Top Coat is a pigmented, colour- and UV-stable, highly elastic polyurethane coating designed as a top-coat for protecting exposed polyurethane waterproofing membranes. It cures through a unique moisture-triggered chemical reaction, using both ground and air moisture. It provides excellent protection, particularly when a dark final color is preferred.

Product Information

Chemical Base	One-component, solvent-based, cold curing aliphatic polyurethane
Packaging	1 kg, 5 kg, 20 kg pails
Colour	Dark Grey, White, Red, Blue, Green, Light Grey, Yellow, Black, Brown
Shelf Life	9 months from date of production

Certifications

EN13813: Screed material and floor screed: 0.3kg/m2

CE

Advantages

- Easy to use (roller or airless spray).
- Improves the waterproofing membrane's resilience to stress and corrosion.
- Offers high solar reflectivity (white), which helps with thermoinsulation.
- Colour and UV resistance.
- Produces a glossy, cleanable surface.
- Does not exhibit the aromatic polyurethane coatings' grainy effect.
- Maintains its mechanical qualities across a temperature range of -40°C to +90°C
- Water, heat, and frost resistant.

Main Uses

- Roof waterproofing
- Roof, Terrace, balcony, and patio waterproofing
- Waterproofing footpaths, walkways, podium decks and auto decks etc.
- Waterproofing flat or slopped roofs, balconies and decks etc

Applied on: Lava 20, Lava 20 Vertical, Lava Detail 20, and similar surfaces with light pedestrian traffic, offering a glossy, colour-stable, and non-chalking finish.

Consumption

0.150 – 0.300 kg/m^2 in one or two layers.

Its coverage is based on effective roller application onto a flat surface under ideal circumstances. Consumption can be affected by elements like surface porosity, temperature, humidity, application technique, and finish necessary.

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Technical Data

PROPERTY	RESULTS	TEST METHOD
Elongation at Break	180 %	ASTM D 412
Tensile Strength	> 20 N/ mm2	ASTM D 412
Resistance to Water Pressure	No Leak	DIN EN 1928
Gloss retention after 2000h of accelerated aging (DIN EN ISO 4892-3, 400 MJ/m2)	Good	DIN 67530
Gloss chalking after 2000h of accelerated aging (DIN EN ISO 4892-3, 400 MJ/m2)	No chalking observed. Chalking grade 0	DIN EN ISO 4628-6
Adhesion to Lava 20	>2 N/mm^2	EN 1542
Adhesion to cement	4.5N/mm^2	EN 13892-8
Hardness (Shore A Scale)	85-90	ASTM D 2240 (15")
Solar Reflectance Index (SRI) (white colour)	107	ASTM E1980-01
Infrared emittance (white colour)	0.89	ASTM C1371-04a
Solar Reflectance (white colour)	85	ASTM E903-12
UV accelerated ageing, in the presence of moisture	Passed - No significant changes	EOTA TR-010
Hydrolysis (5% KOH, 7days cycle)	No significant elastomeric change	Inhouse Lab
Service Temperature	-40°C to +90°C	In-house Lab
Tack Free Time	1-3 hours	
Light Pedestrian Traffic Time	12 hours	Conditions: 20°C, 50% RH
Final Curing time	7 days	
Chemical Properties	Good resistance against acidic and alkali solutions (5%), detergents, seawater and oils.	

Application:

Surface Preparation

Proper surface preparation is crucial for achieving the best finish and long-lasting durability. Follow these steps to ensure the surface is ready for application:

1. **Clean and Dry Surface:**
   Ensure the concrete surface is clean, dry, and structurally sound. Remove any contaminants that could negatively affect the adhesion of the membrane. Maximum moisture content should be below 5%.
2. **Structural Requirements:**
   Substrate compressive strength should be at least 25 MPa. Cohesive bond strength must be at least 1.5 MPa. New concrete structures need to cure for at least 28 days before applying any membrane.
3. **Remove Contaminants:**
   Use a grinding machine to eliminate old coatings, dirt, grease, oils, organic substances, and dust. Smooth out any surface irregularities, and thoroughly remove all loose debris and grinding dust. For substrates other than concrete, consult the technical support team for guidance on surface preparation.

Waterproofing Membrane

Refer to the Product Data Sheet: For specific details on the Lava 20 waterproofing membrane.

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Top Coat Application Instructions

Stir thoroughly before applying and ensure that the Lava 20 Coloured Top Coat is well stirred for even consistency.

1. **Application Method:**
   Apply Lava 20 Coloured Top Coat using a roller, brush, or airless spray. The coating should be applied in one or two layers.
2. **Curing Time:**
   Allow 3-6 hours between layers, but no more than 36 hours.
3. **Optimal Application Temperature:**
   For best results, apply when the temperature is between 5°C and 35°C. Low temperatures will slow curing, while high temperatures will speed it up. High humidity may affect the finish, so take precautions if necessary.
4. **Flake Flooring Systems:**
   For flake flooring systems, sprinkle the flakes onto the freshly applied Lava 20 Coloured Top Coat.

Safety Warnings

Lava 20 Coloured Top Coat and Lava 20 System can become slippery when wet. To prevent slipperiness during wet conditions, sprinkle appropriate anti-slip aggregates onto the wet coating.

Maintenance for Stagnant Water:

In areas with stagnating water, clean the Lava 20 System regularly to prevent biological or microbial growth. For more information on anti-slip or cleaning recommendations, contact the technical department.

Packaging

Lava 20 Coloured Top Coat is available in metal pails of 1 kg, 5 kg & 20 kg. Pails should be kept for up to nine months in cool, dry areas. The material needs to be protected from moisture and direct sunshine. 5°C to 30°C C for storage. Items must be kept in their original, unopened packaging with labels that clearly state the manufacturer, the product name, the batch number, and any application warnings.

Safety Measures

Lava 20 Coloured Top Coat contains isocyanates. See information supplied by the manufacturer. Please study the Safety Data sheet. PROFESSIONAL USE ONLY