OWL WATERPROOFING SOLUTIONS

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TECHNICAL DATA SHEET

LAVA DETAIL 20

Liquid Polyurethane-Based Fiber-Reinforced Waterproofing Membrane Designed for Complex Roofing Details

Product Description

Lava Detail 20 is a liquid-applied, thixotropic, permanent, elastic, fiber-reinforced, one-component polyurethane coating used for long-lasting waterproofing of complex roofing details and connections.

Product Information

Chemical Base	Single-component, air and ground moisture-cured, cold-applied, and cold-curing thixotropic fiber-reinforced aromatic polyurethane.
Packaging	1, 6 kg metal pails
Colour	Grey, Black, White
Shelf Life	9 months from the date of production

Uses

Lava Detail 20 is mainly used to create waterproof seals on difficult and complex roofing details such as: Wall-floor connections, Flashings and 90° angles, Light domes, Roof lights, Chimneys, Pipes, Gutters etc.

Consumption

2 - 3 kg/m^2 depending on application.
The coverage is based on application by roller onto a smooth surface in optimum conditions. Factors like surface porosity, temperature and application method can alter consumption. In case of, Fabric reinforcement, consumption may alter.

Advantages

- → Easy to use (roller or airless spray)
- → A flawless, jointless membrane is formed when applied.
- → UV stable
- → Resistant to raw sewage and frost
- → The waterproofed surface can be used for domestic (light) foot traffic.
- → Resistant to detergents, oils, seawater, and household chemicals.
- → Provides water vapor permeability, allowing the surface to breathe.
- → Excellent heat resistance, preventing it from softening.
- → Excellent weather resistance
- → Excellent adhesion to ceramic tiles, and excellent adherence to glazed surfaces

Surfaces

The primary application for Lava Detail 20 is the construction of waterproof seals between various building materials, such as Bitumen felts, PVC membranes, concrete, mortar, and screed, as well as various metals and wood.

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Technical Data*

PROPERTY	RESULTS	TEST METHOD
Composition	Polyurethane high-solids pre-polymer	
Elongation at Break	> 250 %	ASTM D 412
Tensile Strength	> 2 N/mm2	ASTM D 412
Water Vapor Permeability	10 gr/m2 per 24 hours	ISO 9932:91
Resistance to Water Pressure	No Leak (1m water column, 24h)	DIN EN 1928
Carbon Dioxide Permeabily (1.2kg/m2)	2.5 gr/m2/day	EN 1062-6
Water Permeabily (1.2kg/m2)	0.025 kg/m2/h0.5	EN 1062-3
Adhesion to concrete	> 2.5 N/mm2 (concrete failure)	EN 1542
Hardness (Shore A Scale)	65-70	ASTM D 2240
Application Temperature	5° C to 35°C	Conditions: 20°C, 50% RH
Rain Stability Time	3-4 hours	
Light Pedestrian Traffic	12-18 hours	
Final Curing time	7 days	
Chemical Properties	Good resistance against acidic and alcalic solutions (5%), detergents, seawater and oils.	

Certifications

EAD 030350-00-0402: European Technical Approval: ETA09/0241

Working life expected:	**W3 (4.1kg/m2)**	**25 Years**
Climate Zone:	M and S	All
Imposed loads:	P1 to P4	Very High (maximum load)
Roof slopes:	S1 to S4	<5o to >30o
Lowest surface temperature:	TL4	-30oC
Highest surface temperature:	TH4	+90oC
Reaction to fire:	Class E	EN 13501-1
Resistance to wind loads	≥ 50 kPa	EU Norm

Working life expected:	**W2 (2.4kg/m2)**	**10 Years**
Climate Zone:	M and S	All
Imposed loads:	P1 to P3	High
Roof slopes:	S1 to S4	<5o to >30o
Lowest surface temperature:	TL3	-20oC
Highest surface temperature:	TH4	+90oC
Reaction to fire:	Class E	EN 13501-1
Resistance to wind loads	≥ 50 kPa	EU Norm

EN1504-2: Surface protection product for concrete (2.5kg/m2)

CE

Applications

Surface Preparation/ Priming

For highly absorbent surfaces such as concrete, cement screed, or wood, use Lava 20 Fast Primer or Lava 20 Epoxy Primer. For non-absorbent surfaces like metal, ceramic tiles, and old coatings, apply Lava 20 Epoxy

Primer. Bitumen, asphalt felts, and acrylic coatings should also be primed with Lava 20 Epoxy Primer.

Detail Waterproofing membrane
Before using, thoroughly and carefully stir Lava Detail 20 with a wooden staff. Don't use a power drill. Use a 10 cm wide brush to evenly apply the Lava Detail 20 to the prepared and/or primed surface. Apply a second layer 18 to 36 hours later. Always reinforce with chopped strand matting/ polyester tape. Apply a correctly cut piece of chopped strand matting/ polyester tape to the still-wet Lava Detail 20, press it to soak, and then saturate it once more with sufficient Lava Detail 20 to complete the task.

ATTENTION: Avoid using the Lava Detail 20 on surfaces that are below +5°C during application and for 4 hours following, on frozen surfaces, in the rain or mist, on wet Lava Detail 20 Primer, or on surfaces with rising humidity. High temperatures hasten curing while low temperatures delay it.

Finishing
Apply one or two layers of the Lava 20 Top Coat on top of the Lava Detail 20 to create a surface that is color stable and free from chalking. If a dark final color is desired, the application of the Lava 20 Coloured Top-Coat is especially necessary. Alternately, to protect against UV rays and improve the end result optically, suitable aggregate can be broadcast over the final (second) layer of the Lava Detail 20 while it is still wet, until full saturation. Please refer to the various finishing application techniques' technical instructions or get in touch with us.

WARNING: Wet conditions make the Lava Detail 20 and/or Lava 20 System slippery. Sprinkle appropriate aggregates onto the still-wet coating to create an anti-slip surface to prevent slipperiness on rainy days. Please contact our technical dept. for more information.

Packaging
Lava Detail 20 is available in 6 kg pails. Pails should be kept for up to nine months in cool, dry areas. The material needs to be protected from moisture and direct sunshine. Storage range: 5° to 30° C. Items must be kept in their original, unused containers with labels on the application precautions, batch number, manufacturer's name, and product identification.

Safety measures
Lava Detail 20 contains isocyanates. See information supplied by the manufacturer. Please study the Safety Data sheet. PROFESSIONAL USE ONLY