OWL WATERPROOFING SOLUTIONS

TECHNICAL DATA SHEET

Lava Detail 20

Fiber-Reinforced Waterproofing Membrane Composed of Liquid Polyurethane For Intricate Roofing Detailing

Product description

Single-component, liquid-applied, thixotropic, consistently flexible, fiber-reinforced polyurethane membrane Lava Detail 20 is used for long-lasting waterproofing.

Cures by reaction with ground and air moisture.

Advantages

- Easy to use (brush or roller)
- Resistant to water and rain; produces a smooth layer with no joints or potential cracks
- Frost & water resilient
- Preserves its mechanical characteristics between - 30°C and + 80°C
- Provides porosity for moisture
- Complete surface adhesion with no further anchoring
- If the layer is damaged, it can be restored locally in minutes
- Low cost maintenance

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,
- Rooflights,
- Chimneys,
- Pipes,
- Gutters, etc.

Consumption

2 - 3 kg/m^2 depending on application.
This 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.

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.

Colors

Lava Detail 20 is supplied in Grey and Black.

Technical data*

PROPERTY	RESULTS	TEST METHOD
Composition	Polyurethane high-solids pre-polymer	
Elongation at Break	> 250 %	ASTM D 412
Tensile Strength	> 2 N/mm ^{2}	ASTM D 412
Water Vapor Permeability	> 20 or/m^2 per 24 hours	ISO 9932:91
Resistance to Water Pressure	No Leak (1m water column, 24h)	DIN EN 1928
Adhesion to concrete	> 2,0 N/mm ^{2} (concrete failure)	ASTM D 903
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 Curino time	7 days	
Chemical Properties	Good resistance against acidic and alcalic solutions (5%), detergents, seawater and oils.	

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Certifications

According to the European Union Directive for liquid-applied roof waterproofing kits ETAG 005, the Lava Detail 20 was examined by the German state testing institute for construction materials MPA-Braunschweig and was confirmed to be compliant. CE

The European Technical Assessment (ETA), the CE mark, and certification in accordance with the EOTA (European Organization of Technical Approval) were awarded to the Lava Detail 20 by the German State Institute for Construction Techniques DIBt-Berlin. Depending on the applied thickness, the European Technical Assessment (ETA) is valid for two categories of use (W2 and W3).

Application

Surface Preparation/ Priming

For the best quality and longevity, careful surface preparation is necessary. The surface must be free of any pollution that could compromise the coating's adhesion and be clean, dry, and sound. New concrete structures must dry for a minimum of 28 days. A grinding machine must remove dust, fats, oils, organic materials, and old coatings. Potential surface imperfections must be smoothed off. Grinding dust and any loose surface fragments must be completely cleaned. Never use water to clean the surface!

Priming

Please refer to **Lava Detail 20 Surface preparation/ priming** table.

Lava Detail 20 surface preparation/ priming table*

Surface preparation	Preparation	Primer not necessarv	Primer recommended
Polymeric Bitumenfelt (APP/SBS)	*5	X	
Chippings finished Bitumenfelt (APP/SBS)	*4	X	
Chippings finishes Oxidized Bitumenfelt	*4	X	
Plain Oxidized Bitumenfelt	*5	X	
Painted surfaces	*3	x	
Steel	*1, *3	X	
Aluminum	*1, *3	X	
Copper	*1	X	
Zinc	*1	X	
Concrete	*2, *6		X
Liqhtweiqht Concrete	*2, *6		X
Plaster	*2, *6		X
Screed	*2, *6		X
Brick	*2, *6		X
Stones	*2, *6		X
EPDM Membranes	*1, *7	X	
PVC Membranes	*1, *7	X	
PVC Riqid	*1	X	
Wood	*2		X
Polyester	*1, *7	X	
Acrylic Glass	*1	X	
Glass	*1	X	

1. Sand or use a grinding wheel to smooth the surface before applying.*
2. Mineral substrates have a maximum residual moisture level of 5%. Cementitious surfaces that are brand-new must be at least 28 days old. Remove any mechanically loose parts.*
3. Thoroughly scrape off old paint.
4. The Bitumenfelt's slate chippings are bonded by the suitable Lava 20 primer.*
5. Use a fire torch to melt the surface, then immediately cover it with sufficient dry quartz sand (0.4-0.8mm).*
6. Use a wire brush to rough up the surface before coating.*
7. Always conduct an adhesion test before application. Contact Owl Waterproofing's application department for substrates that are not listed.*

** Due to the current state of laboratory and practical expertise, all information on the treatment of surfaces should be taken as indicative. Deviations are conceivable due to the wide variety of materials available. Thus, it is impossible to guarantee that the information is entirely accurate. An adhesion test is required to ensure compatibility for the particular function because of the various object requirements and the fluctuating conditions. Thus, preliminary coating adhesion studies are always advised. We would gladly evaluate your surface samples if questions arise regarding the coating's appropriateness for your surface.

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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 Dark Grey 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 our R+D Department for more information.

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. For further information, please contact our R+D Department.

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

• All values represent typical values and are not part of the product specification. In sample preparation the lava 20 Catalystwas used as an accelerationadditive.The appliedcoatingmightyellow and/ or fade upon UV Exposure.