

# Lava 20 Eco

**TECHNICAL DATA SHEET** 

Date: 15.09.2022

# Water Based Polyurethane Waterproofing System

#### **Product description**

Lava 20 Eco is a fluid applied, highly flexible, cold applied and cold curing, water based, single component, PU based waterproofing used for high performance waterproofing with a long life expectancy.

The Lava 20 Eco is made up of high quality elastic, water-based urethane resins.

Lava 20 Eco gives you a hydrophobic, 100% waterproof layer which is both seamless and flexible and can expand and contract throughout various weather conditions. Lava 20 Eco can be used over new or exisitng surfaces and can be applied to many kinds of substrates to provide effective long term protection.

# Uses

- · Waterproofing & Sealing applications
- Waterproofing of Rooftops, Flat Roofs, Balconies, Valleys and Terraces etc
- Protection of PU Spray Foam Insulation

#### **Advantages**

- Simple application (roller or airless spray).
- Water Based.
- When applied forms seamless membrane without joints.
- Provides high levels of crack bridging.
- Maintains its mechanical properties over a temperature span of -40°C to +90°C.
- · Provides water vapor permeability.
- Full surface adherence without any additional anchoring.
- The waterproofed surface can be walked on.
- Even if the membrane gets damaged, it can be easily repaired locally within minutes.
- In combination with top coat eco it offers long-lasting durability against UV and abrasion
- Low VOC content 50 g/l

## Quantity application rate

1.4 - 2 k g per m  $^2$  can be applied in two or three layers or in one application wet on wet with reinforcement fabric.

This coverage rate is given on the basis of a roller, spray or brush application in average or good substrate conditions. Conditions such as substrate porosity, climate and installation technique can change consumption rates.

Colors The Lava 20 Eco system comes in white & light Grey

# Technical data\*

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PROPERTY	RESULTS	TEST METHOD
Tensile Strength at 2 0 °C	> 5 , 5 N / mm2	ASTMD412
Elongation at Break at 20°C	> 350%	ASTMD412
Resistance to Water Pressure	No Leak (1m water column, 24h)	DINEN1928
Adhesion on surfaces (with primer)	>1 . 5 N / m m <sup>2</sup> failure)	EN1542
Hardness (Shore A Scale)	65	ASTMD2240(15")
Light Pedestrian Traffic Time	1 8 - 2 4 hours	Conditions: 20 ° C, 5 0 % R H
Final Curing time (ponding test)	10 days	
VOC	50 g/l	



#### Installation Process

The surface needs to be structurally sound, clean & dry. The substrate moisture content should be over 8 %. New concretestructures need to dry for at least 28 days. Old, loose coatings, dirt, fats or oils need to be cleaned with alkaline cleaner or by agrinding machine.

#### Repairing voids, cracks or joints etc:

The careful sealing of existing cracks and joints before the application is extremely important for long lasting waterproofing results. This can be done with Owl PU mastic or Lava 20 Eco and Fabric Tape / mesh.

- Fill any voids with Owl PU mastic
- Apply a layer over Lava 20 Eco over the area and then embed the fabric tape fully saturating the cloth, then apply another layer of Lava 20 Eco over the area to complete the repair.

#### **Priming**

Use Lava Eco Primer over the entire surface (ensuring its clean and dry prior to use) & allow the primer to cure according its technical instruction.

### Lava 20 Eco - Waterproofing Application

Mix thoroughly before use. Lay Lava 20 Eco on the surface once the primer has cured and spread it by roller, brush or squeegee over the entire area, alternatively you can use a spray pump.

<u>Note</u>: Always add reinforcement fabric on weak or problematic areas, like wall-floor junctions, pipes, outlets and around skylights etc.

To reinforce these areas; simply apply Lava 20 Eco over the area and then lay the reinforcement fabric over the Lava 20 Eco followed by more Lava 20 Eco to complete the reinforcement.

Lava 20 Eco can be used unreinforced over some surfaces such as metal, concrete and timber etc (with local reinforcement on joints etc) however for extra durable results you can install full reinforcement over the entire substrate and on some surfaces such as bitumen torch down felt and asphalt we recommend full reinforcement for extra strength.

You can apply another lay (wet on wet) over the Lava 20 Eco and the reinforcement fabric or you can leave the second coat for 18 - 24 hours and you can apply another layer of the Lava 20 Eco to complete the Lava 20 Eco application.

Note: Only apply Lava 20 Eco in temperatures above 5°C should be between 5°C. Low temperatures slow cure times and higher temperatures speeds up cure times.

#### Finishing (optional)

If a color stable, chalk free and hard wearing, durable, impact resistant surface is desired, apply one or two layers of the Lava Top-Coat Eco over Lava 20 Eco. The Lava Top Coat Eco is optional and if applied will extend the life of the system indefinitly.

#### **Packaging**

Lava 20 Eco pails should be stored in dry and cool rooms for up to 15 months. Protect the material against moisture and direct sunlight. Storage temperature: 5 ° - 3 0 ° C. Products should be stored in a cool & dry place in their unopened containers, bearing the manufacturers name, product description, batch number and warning labels.

### Safety measures

Keep away from children. See data supplied by the manufacturer.

Keep out of reach from children. See information supplied by the manufacturer. FOR PROFESSIONAL USE ONLY.
We are liable only for our products being free from defects and the correct installation of the materials is the installers liability and responsibility