

# RLA 1KOMPÖNENT

## Cementitious Fibre Reinforced One-Part Waterproofing Membrane



### **DESCRIPTION:**

RLA 1KOMPÖNENT is one component, a flexible fibre-reinforced waterproof membrane.

A specially formulated cementitious base incorporating graded aggregates and polymers produces a flexible waterproof membrane capable of withstanding significant flexural strain. It is suitable for 5 bar positive and 1.5 negative bar pressure.

### **RECOMMENDED USE:**

- A flexible waterproofing membrane for applications such as planter boxes and retaining walls.
- Waterproof protection of concrete shelves.
- Suitable for use in concrete swimming pools.
- In situations subject to 5 bar positive and 1.5 bar negative hydrostatic pressure.
- For use over cement-rendered masonry, FC sheeting, concrete, water-resistant plasterboard, and structural plywood.

### **FEATURES & BENEFITS:**

- Easy to apply by brush/roller or spray.
- Can be applied on damp surfaces.
- High adhesion strength.
- Versatile mixing ratio.
- Good crack bridging.
- Suitable for light foot traffic.

RLA 1KOMPÖNENT is a class one wet area membrane.

### **SURFACE PREPARATION:**

Ensure all surfaces are cleaned by blast cleaning, high-pressure water-jetting (400 bar), wire-brushing, grinding, and abrading of ceramic tiles etc., to remove all previous coatings or any traces of grease, rust, release agents, cement laitance and any other material which could reduce adhesion.

### **SURFACE PREPARATION:**

All dust deposits from this preparation must also be removed, i.e., by vacuum.

Ensure that the substrate is adequately dampened before application of RLA 1KOMPÖNENT.

New concrete and render must have cured for a minimum of 28 days.

For good adhesion strength and performance, RLA 1KOMPÖNENT should be applied by trowel; this achieves good coverage and consistency throughout the application.

### **Concrete and Masonry Substrates:**

Please note that cracks that do not move or continue to spread (Static cracks) up to 4mm in width must be treated and filled with [RLA TRULEVEL FINE FINISH](#).

Cracks GREATER than 4mm that static the use of [RLA TRULEVEL RAPID PATCH](#)

Cracks greater than 2mm and subject to movement must be referred to the builder or engineer for structural assessment and method of rectification to perform as an expansion joint.

### **DO NOT INSTALL IF CRACKS ARE LIVE AND SUBJECT TO MOVEMENT.**

All floor and wall sheets must be installed following the manufacturer's specifications.

Sheet floor systems suitable for wet area applications require sealant/adhesive application to seal sheet joints at the installation time to comply with the manufacturer's instructions. Floor sheet joints that use polyurethane sealants at installations must be cured for a minimum of 7 days before the application of the membrane. All sheet joints must be isolated from the membrane by a minimum 75mm wide bond breaker tape that covers the entire width & length of the sheet joint.

## SURFACE PREPARATION:

### CONTINUED

As floor sheet joints are more prone to movement over joist supports, apply an extra 1000-micron (1.0mm) wet coat extending a minimum of 35mm on either side of the bond breaker tape. A further two coats at 1000 microns each must be applied over the entire area to be waterproofed.

## EXPANSION JOINTS:

Expansion joints must be a minimum of 6mm. Ensure expansion joints are isolated from the membrane using bond breaker tape that covers the entire width and length of the joint.

An extra 1000-micron (1.0mm) wet coat that extends a minimum of 35mm on either side of the bond breaker tape must be applied as an extra coat.

A further two coats at 1000 microns wet coat each is required for the entire area to be waterproofed.

## PRIMING:

### POROUS SUBSTRATE:

Adequately dampen the substrate before application and ensure the surface is damp but not wet.

### NON-POROUS SUBSTRATE: 1

Mechanical abrasion such as sanding or grinding is required; pre-soak or dampen the surface once complete.

### FOR NON-POROUS:

For substrates such as steel or plastics, Please Contact RLA Technical department for further details.

Depending on ambient conditions, allow 4-6 hrs drying time between coats.

## MIXING:

RLA 1KOMPONENT is a 1-part cementitious powder product, which requires adding and mixing water. The water ratio can be adjusted to obtain your desired consistency and workability for the desired application.

### APPLICATION IS BY ROLLER / BRUSH

The mixing requirement is **5.6 litres of water per 20kg bag.**

### APPLICATION IS BY TROWEL

The mixing requirement is **4.0 litres of water per 20kg bag.**

## MIXING:

Add powder into the water while mixing with a mechanically powered high-shear stirrer.

Always add the powder to the liquid to avoid lumps & incomplete mixing. Continue mixing until uniform and a lump-free state is acquired.

## DO NOT MIX BY HAND

## APPLICATION NOTES:

*ROLLER THICKNESS BASED ON 10mm MICROFIBRE ROLLER*

HORIZONTAL		
	FLAT TROWEL	ROLLER/BRUSH
<b>No. Coats</b>	2	3
<b>Total Min DFT Thickness -mm</b>	2mm	2mm
<b>Total Max DFT Thickness-mm</b>	3mm	3mm
<b>Spread rate</b>	1.27 kgm <sup>2</sup> per mm of thickness	1.04 kgm <sup>2</sup> per mm of thickness

VERTICAL		
	FLAT TROWEL	ROLLER/BRUSH
<b>No. Coats</b>	2	3
<b>Total Min DFT Thickness -mm</b>	2mm	2mm
<b>Total Max DFT Thickness-mm</b>	2mm	2mm
<b>Approx-Spread rate</b>	1.27 kgm <sup>2</sup> per mm of thickness	1.04 kgm <sup>2</sup> per mm of thickness

- Apply the first and second RLA 1KOMPONENT coats to a **minimum Wet Film thickness of 1.5mm,** pressing down to ensure maximum adhesion to the substrate.
- Once hardened and after removing any surface condensation, apply the second coat of RLA 1KOMPONENT.
- Ensuring final coats are applied in an even and continuous layer of a **minimum of 2 mm thick and a maximum of 3mm Dry Film Thickness,** completely covering the substrate
- A wet film gauge should be used to regulate adequate coverage of each coat.
- This TDS and its instructions may not be suitable for every application; this is a guide to assist in meeting the installation requirements.



Quality ISO 9001 SAI GLOBAL

RLA 1KOMPONENT

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Version:01

Issue Date 14/02/2023



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## PRODUCT DATA:

TECHNICAL	
Appearance	LIGHT GREY
Classification	CLASS ONE
Shelf life	12 Months
Packaging	20kg Poly-lined Bag
Mixing Ratio ROLLER /BRUSH	5.6 LTRS/ per 20 kg bag
Mixing Ratio FLAT TROWEL	4.0 LTRS/ per 20 kg bag
Temperature range	+5°C to +35°C
Working temperature	-20 °C to +90 °C
Bulk Density	≈0.95kg/dm3
The specific weight of the Roller/Brush	≈1.33kg/dm3
The specific weight of the Trowel	≈1.52kg/dm3
Pot Life	≥ 1 hr
Substrate residual Humidity	≤ 4%
Minimum total thickness	≥ 2 mm
Maximum Thickness per layer	≤ 1.5 mm
Waiting time between 1st & the 2nd coat	4-6 Hours
Waiting time before laying the covering*	≥ 24 hrs
Coverage with a FLAT trowel application	≈1.27 kg/m <sup>2</sup> per mm of thickness
Coverage with brush application	≈1.04 kg/m <sup>2</sup> per mm of thickness
Coverage with roller application BASED ON A 10MM MICROFIBRE ROLLER	≈1.04 kg/m <sup>2</sup> per mm of thickness

### NOTE:

*All values are taken at +23 °C & 50% RH with no ventilation.*

## PRODUCT DATA:

FLOORING APPLICATION PERFORMANCE	
VOC INDOOR AIR QUALITY (IAQ) - VOLATILE ORGANIC COMPOUND EMISSIONS	
HIGH-TECH	ISO13007-5
Initial adhesion	≥ 1.0 N/ mm <sup>2</sup>
Adhesion after contact with water	≥ 0.5 N/ mm <sup>2</sup>
Adhesion after heat ageing	≥ 1.0 N/ mm <sup>2</sup>
Adhesion after freeze-thaw cycles	≥ 0.5 N/ mm <sup>2</sup>
Adhesion on contact with lime water	≥ 0.5 N/ mm <sup>2</sup>
Adhesion on contact with chlorinated water	≥ 0.5 N/ mm <sup>2</sup>
Coefficient of resistance to water vapour diffusion (μ)	≤ 875
Crack Bridging in standard conditions	≥ 0.75 mm
Crack Bridging at low temperatures (-5 °C)	≥ 0.75 mm
E-modulus	17.2 u/mm <sup>2</sup>
Conformity	CM 01P
Waterproofing	No visual penetration below the membrane
ADDITIONAL TESTING RESULTS	
Depth of penetration of water under positive pressure 5 bars	No visual penetration below the membrane
Water impermeability in negative pressure 1.5 bars	No visual penetration below the membrane

### NOTE:

*The above information was obtained using the lower ratio of 4.0 litres of water per 20kg bag of RLA 1KOMPONENT.*



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## **IMPORTANT NOTES:**

- Must not be installed directly onto wet, contaminated, or friable surfaces.
- Min dry film thickness (after two coats) is 2.0mm.
- Check regularly with a wet film gauge during the application of coats.
- **DO NOT** apply in temperatures lower than -5°C and greater than +35°C, as cold or damp conditions will adversely affect curing.
- When used in areas subject to ambient conditions below freezing temperatures,
- This membrane is suitable for use as an exposed finish or as a top-coating exterior membrane on surfaces subject to light pedestrian or maintenance traffic only.
- All external membrane applications covered with a reinforced tile bed or screed must be separated from the membrane by a minimum of 1 layer of 200um plastic sheet.
- The installation of a protection board against ballast, such as river pebbles or similar loose-laid unbound coverings, must be isolated from the membrane by a compatible drainage cell and filter fabric system.
- Must not be applied over lightweight concrete.

**Don't hesitate to contact the RLA Technical department for further details.**

## **RECOATING:**

Ensure the surface is free of all contaminants, including tile adhesive residue, dust, oil, grease, or other contaminants. The membrane surface must be washed thoroughly, rinsed, and dry.

## **PAINTABILITY:**

RLA 1KOMPONENT is paintable – refer to the paint supplier's recommendations.

## **CLEAN UP:**

Clean tools immediately after use with warm soapy water while the membrane is still wet.

## **SHELF LIFE / STORAGE:**

12 months when stored in original unopened packaging  
To be stored in a dry area off the ground.

## **PACKAGING SIZES:**

20kg BAGS

## **SAFETY & HANDLING:**

- Do not breathe dust; wear suitable respiratory protection.
- Use in well-ventilated areas.
- Avoid contact with skin and eyes.
- Wear eye protection and suitable gloves and clothing.
- Do not eat, drink, or smoke while using this product.
- Take off contaminated clothing and wash it before reuse.

**The Safety Data Sheet is available upon request.**  
**Please get in touch with the RLA Technical department for further details.**

## **FIRST AID:**

- If poisoning occurs, contact a doctor or the Poisons Information Centre.
- If swallowed, DO NOT induce vomiting; give a glass of water and immediately call the Poisons Information Centre and a doctor.
- For advice or if you feel unwell, contact a Poisons Information Centre: Australia ph. 131126, New Zealand ph. 0800 764 766 or a doctor at once.
- If on SKIN, remove all contaminated clothing immediately and wash skin with soap and water.
- If in EYES, rinse carefully with water for several minutes. Remove contact lenses; if present, then continue rinsing.
- If eye irritation persists, get medical advice/attention.
- If inhaled, remove them to fresh air, and keep them at rest in a position comfortable for breathing.

**WARRANTY STATEMENT:**

RLA Polymers guarantees this product against manufacturing defects and guarantees it to be manufactured to our published specifications.

We certify that this product is suitable for use when fully cured and will perform as described in our technical data sheet or other published materials.

RLA Polymers will replace the product free of charge when purchased from any legally verifiable source and where a product is proven to have been stored, handled, and install according to instructions published on our packaging and within the stated shelf life. The Installation of all materials must be carried out per the relevant Australian Standards.

Warranty doesn't apply if damage, loss, failure to follow instructions, or other circumstances are out of our control.

Sufficient time and access to investigate any complaint must be accorded to RLA Polymers.

The consumer is responsible for any expenses incurred in making a claim.

A claim form can be requested by:

**PHONE:** 1800 242 931

**EMAIL:** [info@rlapolymers.com.au](mailto:info@rlapolymers.com.au)

**MAIL:** 215 Colchester Road Kilsyth Victoria 3137 (Attention Customer Service)

**WEBSITE:** [www.rlapolymers.com.au](http://www.rlapolymers.com.au)

**AUSTRALIAN CONSUMER LAW:**

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality, and the failure does not amount to a major failure. The benefits under our warranty are in addition to other rights and remedies available to the consumer under the law in relation to the goods and services to which the warranty relates.

**DISCLAIMER:**

All statements and technical information contained herein are based on tests we believe to be reliable, but the accuracy thereof is not guaranteed.

Users assume all risk and liability resulting from the use of the product and must confirm the suitability thereof by their own tests. Conditions of Sale contain a limited warranty against manufacturing defects.