

PU850

POLYURETHANE WATERPROOF MEMBRANE

DESCRIPTION

RLA PU850 is a one-component, moisture curing polyurethane waterproofing membrane that cures to form a tough elastic film with strong adhesion over most common building surfaces.

PU850 maintains exceptional flexibility and elastomeric properties, providing a durable waterproofing solution for under screed, external and underground applications.

FEATURES AND BENEFITS

- Excellent adhesion to most substrates
- Excellent thermal resistance
- Excellent cold resistance, remaining elastic to -40°C
- No accumulation of humidity under coating (breathable)
- Excellent mechanical properties
- Suitable for areas subject to light foot traffic
- Highly elastic
- Bitumen-free
- Will not bleed through porous materials
- Can be overcoated with RLA ATC – aliphatic top coat for external applications
- Compliant to AS4858 and AS4654.1 for use in internal and external applications

USES

- Unbonded, under screed applications to internal/external wet areas
- Shower Recesses, Bathrooms, Laundries
- Balconies
- Exposed rooftops and plant areas when covered with RLA ATC - aliphatic top coat
- Internal and external plant areas
- Retaining walls
- Planter boxes

SUBSTRATES

- Concrete
- Render
- Screed
- Masonry
- Fibre cement sheeting

NOTE: For suitability over any substrate or material types not listed above, contact RLA Technical Department for confirmation of suitability and surface preparation

SURFACE PREPARATION

- All surfaces are to be clean, sound, smooth, dry, and free from loose material, dirt, dust, oil, grease, wax residues, curing compounds, release agents, existing coatings, moss, algae, sharp protruding objects and all contaminating materials that could compromise the adhesion of the overlaid membrane system
- Structurally unsound layers and surface contaminants must be mechanically removed.
- Masonry surfaces to be pointed flush, and all surface defects including voids, holes, damaged and pitted sections, cracks and heavy undulations to be filled, made sound and level. Refer to the RLA range of surface preparation aids, surface levelers and repair compounds for suitable options
- All surfaces and substrates must be fit for purpose, constructed and installed to manufacturer's recommendations and relevant building standards in force at time of application
- Concrete to be allowed to cure for at least 28 days, and cement render/sand cement screeds allowed to cure for at least 7 days

STATIC CRACK TREATMENT

PU850 is not designed to span gaps/cracks. All static cracks $\geq 1\text{mm}$ must be filled prior to the membrane application. Clean cracks of any debris or loose material and fill with [RLA FLEX PRO](#) or [FLEX PRO 50FC](#) polyurethane sealant and tool off smooth. For dynamic cracks, expansion and control joints, contact RLA's Technical Department for recommendations.

PRIMING

PU 850 is recommended for application over primed surfaces:

POROUS/ABSORBENT SURFACES:

RLA PRIMER PU

Apply by brush or roller to the substrate at coverage of 1litre/5m² per coat

DAMP SURFACES/SURFACES WITH RESIDUAL MOISTURE > 80% RH when tested to ASTM F2170 or 5% moisture content when tested to ASTM F2659

RLA MOISTURE SEAL

Apply by brush or roller to the substrate at coverage of 1litre/4m² per coat

NOTE: Refer to RLA primer data sheets for specific application and coverage details

DETAILING & BONDBREAKER SYSTEM

Install bond breaker/fillet using [RLA FLEX PRO](#) or [FLEX PRO 50FC](#) sealant to floor/wall junctions horizontal and vertical joint transitions, drainage outlets, flanges and penetrations to where the membrane will be bonded to the substrate.

APPLICATION & COVERAGE

- PU850 is to be installed in line with current edition, relevant volume and sections of the NCC (National Construction Code of Australia) pertaining to internal, external and general waterproofing applications within the scope of use for the product
- Lightly mix product with a low speed mixer before use
- Using a brush or medium nap roller, apply an even and consistent first coat to the surface achieving a minimum wet film thickness of 0.75mm
- Once the first coat is dry, apply a second coat at right angles to the first coat to the surface achieving a minimum wet film thickness of 0.75mm.
- PU850 is to be applied in a minimum of 2 coats at a total minimum coverage of 1.5 litres/m² to achieve a dry film thickness (DFT) of 1.2mm
- RLA recommends regular testing of the depth of the coat with a wet film thickness gauge at regular intervals during installation.
- Recoating of PU850 must be done within 48 hours
- If exceeding 48 hours, surface must be lightly sanded, with a fine grade sandpaper and residues removed before recoating. Alternatively, prime the clean, prepared surface with a coat of [RLA PU PRIMER](#)

	Wet Film	Dry film	Total
1 st coat	0.75mm	0.6mm	0.6mm
2 nd coat	0.75mm	0.6mm	1.2mm

Coverage per 15litre pail: 10m²

Note: Coverage is dependent upon surface condition and will vary accordingly as uneven and porous surfaces will require greater coverage to achieve the specified film thickness.

DRY TIMES

Recoat	6 hours
Maximum recoat window	48 hours
Screeding	48 hours
Backfilling for subterranean applications	72 hours
Applying ATC (aliphatic top coat)	24hours
Full Cure	7 days

Note: Figures based on normal ambient temperatures of 23°C and 50% RH. Temperature, humidity and surface conditions can vary drying times

LIMITATIONS

- Do not apply when surface or ambient temperatures are below 5°C or above 35°C
- Not recommended for immersed applications
- Must not be used over damp, or high moisture content substrates unless first treated with RLA Moisture Seal
- Must not be applied if raining or if rain is imminent
- Not to be used as a wearing surface for regular foot traffic or vehicular traffic
- NOT SUITABLE FOR DIRECT TILING – Can be used in unbonded screed applications as per AS 3958
- RLA ATC - aliphatic top coat must be applied over when used in external applications as an exposed membrane finish
- Protection board, Drainage cells and geofabrics to be used for all below ground applications
- For detailed advice on applications not mentioned in this TDS, contact the RLA Technical Department

CLEAN UP

- Clean tools immediately after use with warm soapy water while the membrane is still wet.
- Clean skin and hands using RLA's Handy Wipes.

PACKAGING

15litre pail

SHELF LIFE:

- 12 months when stored in original unopened packaging
- To be stored in a dry area off the ground
- Do not store in direct sunlight.
- Keep away from heat sources or sources of ignition

HEALTH & SAFETY

For information and advice on the safe handling, first aid, storage and disposal of chemical products, users must refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

TECHNICAL DATA:	
Colour	Grey
Form	Viscous liquid
Specific Gravity	1.4g/cm ³
Shore A Hardness	65
Classification	Class III
Elongation	>500%
Tensile Strength	>5N/mm ²
Water Vapour Transmission ASTM E96 Desiccant method	0.8g/24h/m ²

WARRANTY STATEMENT:

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

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 the 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 in accordance with 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

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

WEBSITE: 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.

Version: 01

Issue date: 24/01/2025

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