ROMANO
Indoor & Outdoor Solutions

SPEC SHEET

RLA / WATERPROOFING

PU850 Polyurethane Waterproofing Membrane



RANGE
Tiling
TYPE
Waterproofing
USE IT FOR
Under screed, external and below ground waterproofing
COLOURS
Grey
SIZES
15 L
MATERIAL
Moisture curing polyurethane
STANDARDS
AS 4858, AS 4654.1, Class III
COVERAGE
10 m2 per 15 L pail (1.5 L/m2 total)

WARRANTY (DOMESTIC USE)

Manufacturing defects: product replaced free of charge

Conditions: used as directed on the technical data sheet; proof of purchase; covers the product itself, not labour. Summary of the RLA technical data sheet guarantee, checked 7 November 2026. Full terms from Romano or the brand.

FEATURES

- One part polyurethane
- Highly elastic Class III membrane
- For under screed and external areas

DIMENSIONS

The dimension drawing and full specifications from RLA follow on the next page.

RLA POLYMERS

TDS
Technical Data Sheet

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 ≥1mm 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.

NANPAO

Pages from RLA's own specification. Ask us about this product, we're happy to help.
Romano Indoor & Outdoor Solutions, 4/126 Canterbury Rd, Kilsyth South VIC 3137. 03 9720 4633. sales@romanoios.com.au

RLA POLYMERS

TDS
Technical Data Sheet

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 RESDUAL 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
1st coat	0.75mm	0.6mm	0.6mm
2nd 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

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