GRIPSET® C-1P

1 PART FLEXIBLE CEMENTITIOUS MEMBRANE

TDS

TECHNICAL DATA SHEET

Description

GRIPSET C-1P is a one component, fibre-reinforced flexible cementitious waterproof membrane. Incorporating specially graded aggregates and polymers, Gripset C-1P is capable of withstanding significant flexural strain while maintaining excellent crack bridging properties.

Gripset C-1P is highly versatile, providing a highly durable membrane option for a range of positive and negative waterproofing applications including underground, immersed and under tile areas

Features & Benefits

- Suitable for both positive and negative waterproofing applications
- Waterproof, withstanding continuously wet and immersed environments
- High adhesion strength
- 1 component, mixed on site with water, ready to use.
- Flexible and good crack bridging properties
- Withstands up to 5 bar positive and 1.5 bar negative hydrostatic pressure
- Withstands UV light exposure
- Can be applied by brush, roller, trowel or texture sprayed on horizontal and vertical surfaces without sagging
- Ability to apply over damp and green concrete
- Potable water approved to AS 40200
- Non-toxic, water based and solvent free,
- Compatible with tile finishes, concrete, render and masonry toppings
- Compliant to AS4858 for use in internal wet area applications

Application

- Gripset C-1P is suitable for commercial, industrial and residential applications

Uses

- Basement walls, internal and external sides
- Lift pits
- Retaining walls
- Planter boxes and earth shelters
- Slab edges and general landscaped areas
- Feature Walls
- Water features and swimming pools
- Potable water storage facilities, retention and water tanks
- Waterproofing system over concrete blocks, brick, masonry and mortars where crystal treatments are not suitable
- Waterproofing under tiles and pavers in external areas
- Sandwich sealing between existing and new concrete toppings
- Internal wet areas, bathrooms, laundries and tiled areas

Substrates

- Concrete, render and masonry
- Compressed fibre cement sheeting and plasterboard
- Aerated concrete panels and blocks

For further information and advice on surface/substrate suitability and preparation contact RLA Technical department

Surface Preparation

- All surfaces are to be clean, sound, smooth, dry, and free from loose material, dirt, dust, oil, grease, wax residues, laitance, curing compounds, release agents, existing coatings, moss, algae, sharp protruding objects and general surface contaminants that may compromise the adhesion of the overlaid membrane system
- Structurally unsound layers and surface contaminants to be mechanically removed by grinding, abrasive blasting or equivalent methods.
- Masonry surfaces to be pointed flush, and all surface defects including voids, holes, pitted sections, heavy undulations and non-structural cracks to be filled and levelled. Refer to Gripset 11Y enhanced repair mortar or the RLA range of repair mortars and levelling compounds for options
- Building surfaces 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

Priming

Gripset C-1P must be applied onto a pre-dampened or primed surface:

POROUS SURFACES

On porous concrete, masonry and mineral based substrates, surfaces can be pre wetted down with light water mist. When pre dampening, ensure there is no ponding or standing surface water before membrane application. Surfaces can be damp but must not have free water present

NON POROUS SURFACES:

Steel-trowelled and burnished concrete surfaces should be mechanically abraded to roughen surfaces to promote adhesion. Surfaces to be cleaned of all surface residues and pre dampened prior to the membrane application.

Alternatively, non-porous surfaces can be primed with GRIPSET OP PRIMER. Apply by brush or medium nap roller at a minimum coverage of 1 litre/10m²

Installation

Apply primer/dampen surfaces to the extent of the waterproofing application, in line with relevant standards and project specifications
Refer to individual primer data sheets for specific application details

Detailing & Bond breaker Systems

All critical areas of the waterproofing application including joints, junctions, movement zones, penetrations, drainage points and cracks are to be correctly sealed and detailed prior to membrane application.

Refer to the following table and individual product TDS for specific installation details

Detailing & Bond breaker Systems

Bond breaker & joint transitions (AS 3740 & AS 4654.1)	**Option A** ELASTOPROOF B50 JOINT BAND
	Option B BRW PF TAPE**
Pipes and penetrations	**Option A** ELASTOPROOF COLLARS
	Option B BRW PF TAPE**
	Option C RLA MAX SMP 25**
Leak control flanges and general fixtures/waterstops	**Option A** RLA MAX SMP 25**
	Option B BRW PF TAPE/BUTYL SQUARES**
Static cracks ≥1mm up to 6mm/ screw/nail holes	RLA MAX SMP 25**

**Not suitable for immersed applications

Bond breaker – Option A

- Measure and cut ELASTOPROOF B50 JOINT BAND bond breaker tape for joints/junctions to be sealed.
- Apply first coat of Gripset C-1P membrane by brush or roller in a 150mm wide strip applied centrally over the joint
- Install Joint Band into the wet coat, and using a brush, press down firmly over the face of the B50 Joint Band ensuring all creases or air pockets behind fabric edges are pushed out
- Apply a second coat of C-1P membrane to fully encapsulate the Joint Band and affix to the surface
- PREFABRICATED CORNERS are available for both internal (90°) and external (270°) junctions

Bond breaker – Option B

- Unroll BRW PF TAPE and measure the required lengths for joints to be sealed. Cut the tape using scissors or knife
- Gradually remove release paper and position the tape in place, placing centrally over the joint
- Press into place with a spatula, roller, or cloth, ensuring air pockets and creases are pushed out

Pipes and penetrations

- For floor pipes/penetrations protruding floors and walls, ELASTOPROOF COLLARS are to be fitted over the neck of the pipe and fixed into wet coat of 38FC Membrane
- Where Elastoproof Collars are not used, create flanges using lengths of the BRW PF TAPE. Cut a circular aperture into the centre of a length and slide over the penetration to seal and adhere to the substrate
- Alternatively, seal around base of penetration with a liberal bead of MAX SMP 25* and tool smooth

Leak control flanges, fixtures & waterstops

- Seal the base perimeter of the fixture/flange to the substrate with RLA MAX SMP 25* sealant and tool smooth
- Alternatively, seal areas with BUTYL SQUARES or lengths of BRW PF TAPE

Static cracks ≥1mm up to 6mm / screw/nail holes

- Clean and remove all loose material from inside the crack/screw hole
- Fill flush with surrounding surface using RLA MAX SMP 25 sealant and overlay with strips of RLA Waterproofing Bandage, Elastoproof B50 Joint Band or BRW PF Tape

*RLA WATERPROOF BANDAGE can be considered for use in conjunction with RLA MAX SMP Sealant for additional reinforcement

Mixing

- Gripset C-1P consists of a 15kg bag dry powder.
- Membrane is formed by mixing with water
- The water ratio can be adjusted to obtain the required consistency and workability based on the desired installation method

APPLICATION BY ROLLER / BRUSH

Mixing requirement is 4.2 litres of water per 15kg bag

When mixing in smaller quantities this equates to:

280mls of water per 1kg of powder; or

1 part water to 3.5 parts of powder

APPLICATION BY TROWEL

Mixing requirement is 3.0 litres of water per 15kg bag

When mixing in smaller quantities this equates to:

200mls of water per 1kg of powder; or

1 part water to 5 parts of powder

- Add the required clean water into a clean pail/drum
- Slowly add the dry powder component to the water and mix using an electric stirrer with paddle attachment, ensuring the mixing of components is continuous while the powder is added
- Continue mixing to form a homogenous lump free consistency
- Allow the mix to settle for 2-3 minutes then lightly re-stir before use

Important:

Always add the powder to the liquid to avoid lumps & incomplete mixing.

DO NOT MIX BY HAND

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Application

- Gripset C-1P 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
- Gripset C-1P can be applied by trowel, roller (low texture or medium-high nap) brush (slurry masonry brush) or spray unit
- C-1P is to be applied in a minimum of 2 coats (trowel) and 3 x coats (roller) to achieve a dry film thickness (DFT) of 2mm
- Apply subsequent coats at different directions to the previous coat
- A wet film gauge should be used to regulate correct coverage of each coat.

Important: For the blocking of vapours and negative entry of moisture on vertical surfaces, running or dripping water must be first treated with GRIPSET C-PLUG Do not apply Gripset C-1P to surfaces where standing water is present

Coverage

	FLAT TROWEL	ROLLER
No. of Coats	2	3
Wet film thickness per coat	1.5mm	1.0mm
Total minimum dried film thickness	2mm	2mm
Coverage rate	1.27kg/m² per mm dried film thickness	1.04kg/m² per mm dried film thickness
Coverage per 15kg bag	**5.5m²**	**7m²**

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.

Tiling

- When tiling directly over Gripset C-1P, polymer modified cement based adhesives must be used. Refer to Gripset C-LITE, C-MASTIC, C-RUBBER and C-STONE TDS for details
- For use of other adhesives over Gripset C-1P, contact the technical department of RLA Polymers for detail of compatibility
- If applying a screed, render or concrete topping over Gripset C-1P, GRIPSET 11Y to be incorporated as a proprietary bonding agent and water resistant additive into the mix. Alternatively see GRIPSET C-BED engineered screed

Drying times

Pot life:	1 hour
Re-coat:	2-4 hours
Tiling/ toppings:	24 hours
Exposure to water pressure	7 days
Immersion	10 days

Important:
Drying times are based on ambient temperatures @ 23°C and 50% RH.
Drying times may vary subject to ambient/surface temperatures, humidity and substrate porosity.
Drying/curing times will be extended in cooler conditions and periods of high relative humidity

Clean up

- In water while membrane is in a wet state
- Dried product will need to be removed mechanically

Shelf life and Storage

- 12 months when stored in original unopened packaging
- Avoid freezing conditions and off of cold floors
- Best stored at room temperature
- Do not store in direct sunlight

Packaging

- 15kg bags

Precautions

- Not to be used as a trafficable surface
- Do not apply to areas when rain is imminent
- Do not apply when surface or ambient temperatures are below 5°C or above 30°C
- For further information about this product contact RLA Technical Department

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

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Technical Data	
Form	Light grey powder
Colour	Wet: Dark Grey Dry: Dark Brown
Operating Temperature	-20°C to +70°C
Elongation (AS1145.3)	37% (Class 1)
Tensile Strength (AS1145.3)	>2MPa
Water Vapour Transmission (ASTM E96 Desiccant method)	0.7 g/m2 /24 hours
Water Absorption (AS 3558.1)	9%
Crack Bridging (ISO13007-5)	≥0.75mm
Compliance to AS4858	**PASS**
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**
Performance (ISO 13007-5)	
Tensile adhesion strength	
Initial	≥1MPa
Water immersion	≥0.5MPa
Freeze/thaw	≥0.5MPa
Crack Bridging	≥0.75mm

RLA POLYMERS

GRIPSET SEALED FOR GOOD

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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.

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.

GRIPSET C-1P TDS

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