



## Waterproof bitumen rubber membrane

### Description

Gripset 51 is a solvent free bitumen rubber liquid membrane that has excellent sealing and adhesion properties over a number of porous and non porous surfaces. Gripset 51 is a versatile membrane in both new and existing construction for under ground, fully immersed, internal and external areas. Besides offering excellent membrane properties, also can be used as a protective coating for timber and metal surfaces.

### Features & benefits

- Solvent free, non toxic and non flammable
- Flexible, accommodating normal substrate movement
- Ability to withstand continuously immersed areas
- Crack bridging properties up to 2mm
- High bonding properties to building substrates
- Bonds to asphalt and bitumen surfaces, ideal for repair of failed and aged coatings
- Compatible with cement for waterproofing slurries and mortars
- User and environmentally safe
- Approved for potable water to AS/NZS 4020. Also suitable for ponds and troughs
- Compatible with acrylic paint and Gripset membranes (*Before applying finishes over Gripset 51, wipe clean the surface after membrane has cured*)
- Excellent sound deadening properties

### Application

Gripset 51 is suitable for commercial, residential, industrial, rural and automotive applications.

### Waterproofing uses

- Retaining walls.
- External cellar and basement walls.
- Planter boxes and garden beds.
- Fish ponds, tanks and water features.
- Gutter repairs.
- Roofing and membrane repairs.

*When exposed to long term UV, surface crazing may occur. To enhance weather resistance, Gripset 51 can be coated over with [Gripset RD](#) weatherproof coating/membrane (for more details refer to Gripset RD specification).*

### Substrates

Suitable surfaces for bonding Gripset 51 over include:

- Concrete, render and masonry.
- Fibre cement, plasterboard and structural sheeting.
- Marine ply, timber sheeting and timber posts
- Clay and concrete blocks/bricks.
- Galvanised iron and zincalume (not raw steel).
- Bituminous and asphalt substrates.

When using over existing paints, membranes, coatings or other surface finishes confirm with Gripset Technical Services for suitability. Gripset 51 can be applied over damp surfaces free of surface water, however this will prolong curing.

### Surface preparation

Surfaces must be prepared thoroughly before commencing application. All substrates must be structurally sound, stable, dry, and clean, with substrate compressive strength a minimum 25MPa and cohesive strength a minimum 1.5MPa. Rough surfaces are to be evened or filled first (refer to Gripset 11Y). Building surfaces must be constructed to manufacturer's recommendations and relevant building standards in force at time of membrane application. All surfaces are to be free of sharp protruding surfaces, loose material, de-bonded coatings, curing membranes/agents, release agents, wax residues, foreign particles, laitance, algae and moss, grime, oils, animal fats or grease remains.

Structurally unsound layers and surface contaminants are to be mechanically removed by abrasive blasting, blast tracking, grinding or equivalent methods. For thorough surface preparation, refer to [Gripset SC](#) (algae and moss remover) and [Gripset DG](#) (water based oil degreaser) products.



## Application (continued)

### Priming

Gripset membranes must be applied onto primed surfaces

- [Gripset GP](#) primer – for general porous building surfaces.
- [Gripset 11Y](#) slurry/primer - for immersed areas, extremely porous surfaces, asphalt/bitumen, non porous and existing surfaces (non porous and existing surface suitability to be checked with Gripset Technical services before commencing)
- [Gripset P10](#) primer – for surfaces with residual or rising damp (refer to product data)
- Gripset 51 is self priming: porous surfaces diluted @ 1:3 with water; non porous surfaces diluted @ 1:1 with water

### Detailing

All critical areas such as joints, junctions, movement zones, penetrations and drainage points are to be correctly sealed prior to membrane application.

<b>Voids and gaps:</b>	Filled with either Gripset GP enhanced mortar or Gripset 11Y & <a href="#">Gripset DM</a> mortar repair compound. <i>These products are also recommended for forming waterproof fillet.</i>
<b>Cracks &lt;1mm:</b>	Filled with Gripset EF or Gripset SB, followed by <a href="#">Gripset RF</a> reinforcement.
<b>Cracks &gt;1mm:</b>	Filled with Gripset EF or Gripset SB, followed by <a href="#">Elastoproof</a> sealing system.
<b>Bond Breaker:</b>	Elastoproof Joint Band and corners (N or B grade) for junction detailing.
<b>Movement or Expansion Joints:</b>	Elastoproof Joint Band to be used. (Refer to Elastoproof brochure for selection of correct grade).
<b>Penetrations, Pipes, Drain outlets:</b>	Elastoproof Collars to be used. (Refer to Elastoproof brochure for available sizes).

### Coverage & application

For waterproofing applications, product is to be applied in a minimum of 2 coats at a total minimum coverage of 1.5 litres/m<sup>2</sup>; forming a dried film thickness of approximately 1.2mm. Apply subsequent coats at different directions to the previous coat. 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. Product can be applied by roller, brush, trowel, or spray unit.

**Note:** when applying by brush, roller or spray unit it is recommended to lightly stir product. If applying by trowel for high build applications do not stir.

### Mixing with sand/cement

Gripset 51 can be mixed with a sand/cement (3:1) to:

- Form waterproof fillets at wall/floor junctions (e.g. planters, garden beds etc)
- Filling voids and levelling asphalt and bitumen surfaces
- Thin build render coats on rough and uneven surfaces (e.g. block retaining walls)

As an alternative to standard mortar, Gripset DM a premium dry mortar compound can be directly used with Gripset 51 offering a superior quality finish. Wet to form a working mortar before being mixed with Gripset 51.

#### **Mixing Ratios of Gripset 51 and mortar**

**At 1:1** – based on parts by volume

Use Type A Portland cement and wash sand for these applications. Best results achieved mixing components together with an electric stirrer at medium speed

### Storage conditions

- Best stored at room temperature
- Avoid cold freezing conditions and off concrete floors
- Do not store in direct sunlight
- Shelf life is 12 months in original unopened container

### Packaging

- 4 litre and 20 litre pails
- 200 litre drum
- 300ml cartridge



**Precautions**

- Not to be used as a trafficable surface
- Do not apply to areas when rain is imminent
- Do not apply when surface temperature is below 5°C or above 35°C.
- Not to be applied over glass or glazed surfaces
- Not designed as a sealant for expansion or control joints
- Not to be used in areas where solvent or petroleum based products may be spilled
- Not to be used in areas subject to negative hydrostatic pressure
- All finish coatings over this membrane must be water based and solvent free
- Material Safety Data sheet (**MSDS**) available.
- For further information about this product contact technical department of Gripset Industries.

**Clean up**

- In water while wet
- Once dried product needs to be removed mechanically or by solvent

**Technical data**

<b>Appearance</b>	Wet Form – charcoal, Dry Form – Black
<b>Form</b>	Creamy viscosity – thixotropic
<b>Drying</b>	Tack free: 60-90 minutes
<i>Based on normal ambient conditions of 20°C</i>	Re-coat: 2-4 hours
<i>* Temperature, humidity and porosity will vary dry times</i>	Dry film: 24 hours
	Backfilling underground: 4 days
	Painting over: 5 days curing
	Immersed: 10 days curing
<b>Specific gravity</b>	1.15kg/litre
<b>Shore A Hardness</b> (ASTM D2240-97)	52
<b>Tensile Strength</b> (AAS1145-1989)	0.3 MPa
<b>Elongation</b> (AS1145-1989)	824%
<b>After Chemical Immersion</b> (AS1145-1989)	510%
<b>Water Vapour Transmission</b> (ASTM E96-95)	1.2g/24h/m <sup>2</sup>
<b>Crack Bridging</b> (ASTM C876:95)	Able to bridge cracks up to 2mm
<b>Potable Water</b> (AS/NZS 4020 – 1999)	Suitable
<b>When mixed with mortar</b>	(3 sand : 1 cement) / Gripset DM
<b>Water Absorption</b> (AS121 AppK)	1 part Gripset 51 : 1 part mortar – 1.66% (parts by volume)

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