



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 adhesion properties to porous and non-porous surfaces
- Protective coating against corrosion, rot and salt damp
- 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 at exposure of 7,600mm² per litre
- Excellent sound deadening properties

Application

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

Waterproofing uses

- Retaining walls and underground surfaces
- External cellar and basement walls
- Planter boxes and garden beds
- Fish ponds and stock troughs
- Water tanks and water storage areas
- Gutter repairs
- Roofing and membrane repairs
- Protective coating over metal and timer surfaces

Note: When exposed to long term UV, surface crazing may occur.

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 zinalume (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.



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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.

Note: Refer to data sheets for above primers before using

Detailing

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

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

Membrane application

General

For waterproofing applications product is to be applied in a minimum of 2 coats at a total minimum coverage of 1.5litres/m²; forming a minimum 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 or brush.

Installing Elastoproof Bond breaker Joint Band

Measure and cut Elastoproof Joint Band for all wall/floor junction areas and expansion/movement joints. Apply first coat of Gripset 51 membrane to approximately 150mm extending up walls and on to floors, and embed Elastoproof Joint Band into wet bed of liquid membrane, ensuring fabric edges are fully wet out and no air bubbles exist behind the fabric. For movement joints apply Gripset 51 to 150mm to both sides of joint and embed Elastoproof joint band. Rear rubber section of Elastoproof Joint Band is not bonded to substrates. At sections where Joint Band is to be joined, a minimum 50mm overlap is required. Elastoproof Prefabricated Corners are available for both internal (90°) and external (270°) junctions, enabling Joint Band to overlap and avoid joint at critical areas. If Prefabricated corners are not used, Elastoproof Joint Band is to have bottom leg cut and folded; ensuring fabric is completely bonded with Gripset 51 membrane.

For floor pipes protruding floors, Elastoproof Collars are to be fitted over the neck of the pipe, embedding fabric edges into wet bed of Gripset 51 membrane. For floor wastes that are finished level with the floor, Elastoproof Inverted Collars are to be fitted or alternatively the Gripset 51 membrane with Gripset RF Fabric embedded is to be dressed down into the waste outlet at a minimum 50mm.

Once Elastoproof Joint Band is in place, apply Gripset 51 membrane to the total floor and walls A continuous seamless membrane should be the final finish to the total area upon completion of the waterproofing membrane application.

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.



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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.

Precautions

- Not to be used as a trafficable coating
- Not to be finished directly over with tiles, renders, screeds, paints or other surface finishes
- Do not apply to areas when rain is imminent
- 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 rising damp or negative hydrostatic conditions
- Do not apply when surface temperature is below 5°C or above 35°C
- Material Safety Data sheet (**MSDS**) available
- For further information about this product contact technical department of Gripset Industries

Packaging

- 300ml cartridge; 5 litre and 15 litre oval pails; 200 litre drums

Clean up

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

Technical data

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

Contact details

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Product disclaimer

This Product Data Sheet (PDS) summarises our best knowledge of the product, including how to use and apply the product based on the information available at the time. You should read this PDS carefully and consider the information in the context of how the product will be used, including in conjunction with any other product and the type of surfaces to, and the manner in which, the product will be applied. Our responsibility for products sold is subject to our standard terms and conditions of sale. Gripset Industries does not accept any liability either directly or indirectly for any losses suffered in connection with the use or application of the product whether or not in accordance with any advice, specification, recommendation or information given by it.