

Description

Gripset GC4 is one of the key innovative lines within the Gripset GC sheet membrane range providing multi benefits in the built environment from the one membrane system. GC4 is a high quality waterproof membrane and acoustic underlay in the one sheet, providing numerous advantages that offers unique performance and time saving features on construction projects. Application time is cut up to one third over traditional acoustic underlay-waterproofing methods while providing a high strength waterproofing system that provides vapour barrier, anti-fracture, crack bridging and de-coupling properties over floor surfaces it is applied to.

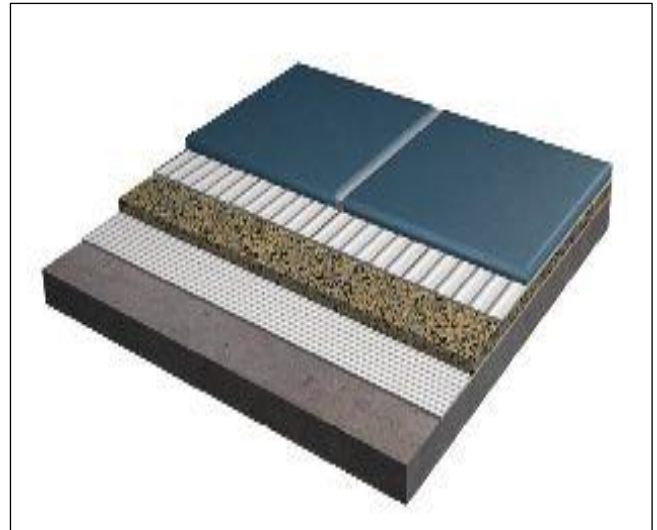
GC4 is ideally suited for internal and external wet areas, providing an isolating layer between surface finishes and the substrate it is applied to, reducing the transfer of impact sound caused from general footfall. Once applied it is immediately waterproof and able to be finished over with floor finishes to enable construction projects to benefit from flow in the work schedule without delays of waiting for areas to be re-coated and dry. Consisting of an impermeable tear resistant core layer with a fleece facing on the top face and acoustic rubber underlay on the rear face, the unique properties of the GC4 membrane enable it to form a fast and reliable waterproof tanking and impact sound reduction system for numerous applications, enabling surface finishes such as tiles to be applied immediately after the membrane system has been installed.

Further details are available in the Gripset GC manual for specifications and fixing details for waterproofing and impact sound applications where this system can be used.

Features & Benefits

- * Compliant to AS/NZS 4858:2004, meeting the requirements of AS3740 "Waterproofing Wet Areas in Residential Buildings"
- * Enables the sound impact underlay system to be installed simultaneously as part of the waterproofing application.
- * Enables the acoustic and waterproofing application time to be one third of that using traditional acoustic mats and liquid membranes, providing work flow on time critical projects
- * Provides an immediate waterproof finish upon completion, allowing wet area floor finishes to be applied same day.
- * Resists surface cracks and provides an anti-fracture system on floor substrates
- * Provides a uniform waterproof surface finish
- * Suitable for internal and external applications
- * Crack bridging and de-coupling properties
- * Durable, tear resistant and able to resist perforation
- * Suitable for use with underfloor heating
- * Alkali resistant
- * Able to be finished over with a range of surface finishes
- * Patent protected and offers 20 year waterproofing system (**)

** Refer to Gripset GC manual and specification details



Application

Gripset GC4 is suitable for commercial and residential applications

Waterproofing Uses

- * Internal wet areas, wet floors, showers, laundries
- * Commercial showers, change rooms, wash down areas
- * External podiums, balconies, roof tops
- * Plant rooms
- * Internal anti-fracture flooring system for tiles over concrete
- * Vapour sealing for floor substrates

Surface Preparation

Surfaces must be prepared thoroughly before commencing application. All substrates must be structurally sound, smooth, stable, dry, and clean.

Rough surfaces and voids to be evened or filled first and all brick/block surfaces to be pointed flush. (refer to Gripset 11Y for concrete/masonry repairs). All general surface defects to be repaired.

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 objects, 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.

Priming

The types of substrates where Gripset GC4 is applied will determine the grades of adhesive and primer to be used. The following guideline is to be referred to:

Porous Substrates

- On porous surfaces such as concrete, priming is not required. Surface can be lightly pre-dampened if highly absorbent.

- For porous substrates with a surface prone to forming a surface dust after correctly preparing, e.g. fibre cement sheeting, aerated concrete or similar, surfaces should be primed with Gripset GP primer to seal any surface dust from compromising adhesion of the membrane.

- Porous substrates in external areas containing any residual moisture are to be primed against moisture vapours using either Gripset E60 or Gripset P10 primers before applying.

Non porous substrates

- Priming is not required over non porous surfaces when using the GC All Purpose Adhesive

Refer to individual data sheets for primers. Further information on suitable adhesives and primers for building surfaces and GC4 applications should be directed to the Technical Services department of Gripset Industries

Detailing

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

Voids, gaps and undulating surfaces in concrete/masonry	Filled and evened with Gripset 11Y repair mortar compound.
Static cracks >1mm	Filled with Gripset SB, followed by Gripset RF reinforcement
Live cracks:	Filled with Gripset SB followed by Elastoproof Joint Band
Bond Breaker:	Elastoproof Joint Band to wall/floor junctions and wall/wall junctions.
Movement or Expansion Joints:	Elastoproof Joint Band
Penetrations, Pipes, Drain outlets:	Elastoproof Collars, Gripset SB with Gripset RF Reinforcement & Butyl Squares

Membrane Application & Coverage:

Gripset GC4 is supplied in a 10m x 1m wide roll. When applied in lengths less than roll size, cut to measure dimensions needed for the application and re-roll the sheet in preparation for laying into adhesive bed. The GC4 is to be adhered on all floor areas to be waterproofed, abutting edges of the walls of these areas.

FIXING DETAILS – POROUS SUBSTRATES

Apply **Gripset GC Pro Adhesive** using a medium nap roller onto the surface, ensuring 100% coverage of adhesive to where the membrane is to be laid. Minimum wet film thickness of adhesive should be 1mm. Unroll the GC4 membrane into the wet bed of adhesive and using a flat steel float, smooth roller or similar, press the sheet into the adhesive to ensure a firm bond to the adhesive bed, removing any air pockets or excess adhesive. Sheet joins are butt joined and then sealed using Elastoproof Butyl Waterproofing Tape laid centrally over the abutment.

With pipe penetrations, the GC4 membrane is to be cut to enable the sheet to slide over penetrations. This is best achieved by measuring the pipe diameter and in the position where the sheet will cover the pipe, a cross “+” should be cut that is the pipe diameter length and sliding this over the pipe. Adhere the GC4 sheet into the bed of adhesive and trim any of the loose membrane around the upturn of the pipe from the section where the cross “+” was formed ensuring the GC4 membrane is firmly bonded around the pipe. This is then covered with the Elastoproof Collar (*refer Installing Elastoproof Bond Breaker System section*)

For leak control flanges, overlay sheet over the flange and once fixed to the floor surface, cut around perimeter edges of the flange ensuring the edges of the GC4 sheet are well bonded to the floor substrate before the butyl square seal is used (*refer Installing Elastoproof Bond Breaker System section*)

Once the GC4 sheet has covered the floors, the Elastoproof system is to be adhered at wall/floor junctions as the bond breaker.

FIXING DETAILS – NON-POROUS SUBSTRATES

All fixing details are the same except that the **Gripset GC All Purpose Adhesive** is to be used for fixing the GC4 to substrates. This adhesive is applied using a 2mm notch toothed trowel onto the surface, ensure 100% coverage of adhesive to where the membrane is to be laid

Adhesive Coverage

When applying the adhesives to surfaces, a minimum 1mm wet bed of adhesive is to be formed. **NOTE:** Adhesive coverage is dependent upon surface condition and will vary accordingly as uneven surfaces will require greater coverage to achieve the required bed thickness

GC Pro Adhesive

General consumption for use in waterproofing applications for the GC Pro Adhesive is 1.2m² per litre applied with a medium nap roller.

A 15Litre pail of Gripset GC Pro Adhesive will cover approx. 18m² of area to adhere the GC4 sheet to the surface. Allow extra for installing the Elastoproof Bond Breaker System.

GC All Purpose Adhesive

Consumption of GC All Purpose Adhesive is 1.2m² per kg applied with a 2mm notch tooth trowel.

A 16kg pail of GC All Purpose Adhesive will cover approx. 19m² of area to adhere the GC-4 sheet.

Installing Elastoproof Bond Breaker System

Elastoproof Prefabricated Corners are available for both internal (90°) and external (270°) junctions, enabling Joint Band to overlap and avoid joints at critical areas. To install the Corners, apply a coat of GC Pro Adhesive or Gripset 38 FC membrane to all internal/external corners extending 150mm up walls and onto installed GC4 sheet on floor. Embed Prefabricated Corners into a wet bed of adhesive.

Measure and cut Elastoproof Joint Band for all wall/floor junction areas allowing for a minimum 50mm overlap onto corner sections. Apply coat of GC Pro Adhesive or Gripset 38 FC Membrane to approximately 150mm extending up walls and onto floor sheet of the GC4 membrane, and embed Elastoproof Joint Band into wet bed of adhesive, ensuring fabric edges are fully wet out and no air bubbles exist behind the fabric.

At sections where Joint Band is to be joined, a minimum 50mm overlap is required. Once in place, the GC Pro Adhesive or Gripset 38 FC membrane is to be brushed or rolled over the face and onto all edges of the Joint Band adhering to the GC4 sheet, to fully seal the lip of the Joint Band and GC4 sheet.

For floor pipes protruding floors, Elastoproof Collars are to be fitted over the neck of the pipe bonding the collar to the GC4 membrane within a wet bed of GC Pro Adhesive or Gripset 38 FC Membrane. Once fixed seal edges of the collar to the GC4 sheet by brushing out the GC Pro Adhesive or Gripset 38 FC Membrane. For leak control flanges, Elastoproof Butyl Squares are to be fitted directly over ensuring the interface between GC4 sheet and edge of flange is covered.



Installing Elastoproof Prefabricated Corners



Installing Elastoproof B50 Bond Breaker Joint Band



Elastoproof Butyl Square over leak control flange

General

The above instructions are for general applications, primarily wet areas, using the Gripset GC4 system. There are additional details and requirements for other waterproofing applications using this system. Refer to the GC4 product manual or any Gripset specification issued for further details. All other enquiries regarding this system are to be directed to Gripset Technical Services.

The full range of Gripset membranes is compatible with the GC4 sheet. For situations where any other of the Gripset membranes are to be applied over the GC4 sheet, apply after the fixing instructions above have been completed.

Tiling & Surface Toppings

Tiling or laying of screeds over the GC4 System can commence once the adhesive/membrane for installing the Elastoproof bond breaker system is dried. This is usually 1 hour after the application is complete but may take longer in cooler conditions. If using Gripset 38 FC, minimum dry time before tiling can commence is 4 hours but may take longer in cooler conditions.

When screeding over the GC4 membrane, it is recommended to incorporate the Gripset 11Y additive into the screed to enhance adhesion to the substrate. Alternatively, Gripset C-Bed pre-bagged screed can be used directly onto the membrane. A proprietary acrylic or latex bonding additive is to be incorporated into general mortar beds that are applied onto the GC4 membrane. Sheet should be pre-dampened prior to any screeding or self levelling applications.

Tile adhesives or self-levelling compounds being directly fixed to the GC4 membrane are to be polymer modified. Pre-mixed adhesives and cement based compounds without any polymer enhancement are not to be used for direct adhesion to the membrane.

For use of other adhesives over the GC4 membrane system contact the technical department of Gripset Industries for details of compatibility.

Note: All tiling is to be carried out to AS3958.1 – 2007 "A Guide To The Installation of Ceramic Tiles"

Storage conditions

- * Best stored at room temperature in dry conditions, indoors.
- * Do not stack heavy items onto the membrane
- * Do not store in direct sunlight
- * Protect against mechanical damage

Packaging

- * Cardboard carton, consisting of 1 Roll: 10m x 1m
- * 27 cartons/pallet
- * GC Pro Adhesive: 15Litre pails
- * GC All Purpose Adhesive: 16kg pails

Precautions

- * Not to be used as a trafficable surface or a long term exposed membrane surface. Must always be covered with suitable finishes.
- * To be adhered with recommended Gripset adhesives as specified in the data sheet.
- * Flood testing able to commence after 24 hours of finished application.
- * When pre-dampening surfaces, surface to be free of ponding water
- * Do not apply when surface temperature exceeds 35°C. Ensure surfaces are free of frost and ice.
- * Not to be used in areas where solvent or petroleum based products may be spilled.
- * All finish coatings over this membrane must be water based and solvent free.
- * Safety Data sheet (SDS) available.

Clean up

- * GC4 Sheet is non-hazardous substance.
- * May be disposed of as building site waste
- * GC Pro Adhesive can be removed with water while wet.
- * Once dried product needs to be removed mechanically or by solvent
- * GC All Purpose Adhesive to be removed mechanically or by solvent

TECHNICAL DATA

Based on test results carried out to ETAG022-2

Sound reduction Tested in accordance with (DIN EN ISO 10140)	7dB @ 3.5mm thickness Tile covering
Thickness	Available 3.5mm, 5.5mm, 10.5mm
Reaction to fire (EN13501-1)	Class E
Water vapour diffusion resistance	S _d =97m
Tensile Strength - AS4654.1/AS1145.3	13.52 MPa
Lap Joint Tensile Strength	4.52MPa
Elongation AS4654.1/AS1145.3	180%
Dimensional Stability	Longitudinal-0.14%, Transverse -0.15%
Crack bridging ability	2.0mm
Bond strength on concrete	>1.4MPa
Joint bridging ability	Watertight over 2mm gap
Resistance to temperature EN1296	Resistant (70°C, 4 weeks)
Resistance to alkalinity EN1847	Alkali resistant (50°C, 16 weeks)
Radon Barrier	Pass

Notes

It is recommended before commencing the application; that adhesion of products to be used (e.g. primers, membranes, coatings adhesives etc) is tested over a typical area of the prepared surface to ensure satisfactory adhesion. It is the responsibility of the applicator to carry this out and accept the substrate suitability before any application starts. Gripset Industries offers a service for pre testing adhesion to surfaces for large commercial areas or unusual substrates. For further details contact Gripset Industries.

Details contained in product data sheets are general. For any situation or items not covered in this data sheet, it is the responsibility of the applicator to check with Gripset Technical Services before commencing the application. A written confirmation will then be issued by Gripset Technical Services.

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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.

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