



technical data sheet

Description

Gripset GC1 is part of an innovative sheet membrane system that provides high performance waterproof and vapour barrier protection in the built environment. Consisting of an impermeable tear resistant core layer with a fleece facing on each side of the sheet, the unique properties of the GC1 membrane enable it to form a fast and reliable waterproof tanking system in numerous applications, enabling surface finishes such as tiles, screeds and toppings to be applied shortly after the membrane system has been installed.

The GC1 membrane surface enhances the adhesion for a range of finishes applied directly over the membrane while providing an outstanding anti-fracture system over floors by isolating surface finishes from cracks or shrinkage in the substrate.

Further details are available in the Gripset GC1 manual for a range of specifications and fixing details for waterproofing applications where this system can be used



Features & Benefits

- Provides an immediate waterproof finish upon completion, avoids delayed drying times
- Fast and reliable sealing method. Reduces labour and application time of waterproofing by >50% over traditional sheet and liquid systems
- Enables the direct application of toppings, tiles, screeds, self-levellers and other finishes same day as waterproofing application
- Resists surface cracks and provides an anti-fracture system on floor substrates
- Provides a uniform waterproof surface finish
- Suitable on horizontal and vertical surfaces
- Durable, tear resistant and able to resist perforation
- Alkali resistant
- Able to be finished over with a range of surface finishes

Application

Gripset GC1 is suitable for commercial and residential applications.

Waterproofing Uses

- Internal wet areas, wet floors, showers, laundries
- Sandwich sealing between existing and new slabs
- Internal anti-fracture flooring system for tiles over concrete
- Vapour sealing for wall and floor substrates
- Sandwich sealing between existing and new concrete toppings

Substrates

Substrates suitable for the GC1 system include:

- Concrete
- Render, screeds and general masonry surfaces
- Concrete blocks and clay brick
- CFC, cement sheet, plaster board surfaces
- Hardies Scyon[™] Secura[™] Internal Flooring
- Particleboard flooring (Structaflor etc)
- Plasters and general mineral surfaces
- Aerated concrete panels and blocks

Refer to GC1 fixing details for specified adhesives for different surfaces.

For further information on suitable surfaces and substrates contact technical department of Gripset Industries

Surface Preparation

Substrates to which the membrane is to be applied must be structurally sound and stable. All building surfaces which the membrane system is to be applied are to be installed as per manufacturers recommendations, in line with relevant building standards in force at time of the application. Surfaces must be smooth, dry and clean. Rough surfaces, voids, hollows and surface depressions to be evened or filled first and all brick/block surfaces to be pointed flush. All general surface defects including cracks to be filled and repaired -Refer to Gripset 11Y/DM repair mortar and Gripset SB Sealant. All surfaces are to be free of sharp protruding objects, loose material, de-bonded or existing coatings, curing membranes/agents, release agents, wax residues, foreign particles, laitance, algae and moss, grime, oils, animal fats, grease remains and any contaminants that could compromise the adhesion of the overlaid membrane system. Structurally unsound layers and surface contaminants are to be mechanically removed by abrasive blasting, blast tracking, grinding, high pressure cleaning or equivalent methods. Leak control flanges are to be rebated into floor surface enabling lip of flange to sit flush with surrounding substrate.

Priming

Priming over general surfaces is not required when using GC Adhesives. Surfaces can be sprayed with light water mist prior to adhesive application. Ensure surface is free of standing water.

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





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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.
Cracks <2mm	N/A
Cracks > 2m	Filled with Gripset SB or Gripset 11Y/DM Repair Mortar
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 sealant and Butyl Squares

Gripset GC1 is supplied in a 30m 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 GC1 is to be adhered on all floor areas to be waterproofed, abutting edges of the walls of these areas.

Fixing Details

Apply selected GC Adhesive using a medium nap roller or 2.4mm notch tooth trowel onto the surface, ensuring 100% coverage of adhesive to where the membrane is to be laid. Unroll the GC1 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 overlaps

Sheet joins must be a 50mm overlap. Once fixed, apply a liberal coat Gripset 38FC membrane over the lapped sheet joint to fully seal the lip of the overlapped section. (required for tiling screeding applications directly over GC1) **NOTE: For use in dry areas as an anti-**fracture system for tile underlay, overlaps are not required.

With pipe penetrations, the GC1 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 GC1 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 GC1 membrane is firmly bonded around the pipe.

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 GC1 sheet are well bonded to the floor substrate Once the GC1 sheet has covered the floors, the Elastoproof system is to be adhered at wall/floor junctions as the bond breaker.

Note: Refer to GC Pro Adhesive TDS for full installation details and suitability for selected applications

IMPORTANT: Avoid pedestrian traffic directly over the installed GC sheet while adhesive is still in a wet state. It is advisable to lay corflute or other protective board directly over the GC sheet to allow for traffic and when installing e Elastoproof Bond Breaker System.

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 Gripset 38FC membrane to all internal/external corners extending 150mm up walls and onto installed GC1 sheet on floor. Embed Prefabricated Corners into a wet bed of membrane.

Measure and cut Elastoproof Joint Band for all wall/floor junction areas allowing for a minimum 50mm overlap onto corner sections. Apply coat of Gripset 38FC to approximately 150mm extending up walls and GC1 sheet onto floor and embed Elastoproof Joint Band into wet bed of membrane, 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 Gripset 38FC membrane is to be brushed or rolled over the face and onto all edges of the Joint Band adhering to the GC1 sheet, to fully seal the lip of the Joint Band and GC1 sheet.

For floor pipes protruding floors, Elastoproof Collars are to be fitted over the neck of the pipe bonding the collar to the GC1 membrane within a wet bed Gripset 38FC Membrane.

Once fixed seal edges of the collar to the GC1 sheet and turn up and seal to pipe with a liberal coat of Gripset 38FC Membrane. Alternatively, apply a bead of Gripset SB sealant to seal the perimeter of the pipe and overcoat with liberal coat of Gripset 38FC membrane, turning membrane up at and sealing to the pipe. For leak control flanges, Elastoproof Butyl Squares are to be fitted directly over ensuring the interface between GC1 sheet and edge of flange is bridged. Seal edges and complete face of Butyl Square with liberal coat of Gripset 38FC membrane turning membrane down into the waste.

General

The above instructions are for general applications, primarily wet areas, using the Gripset GC1 system. There are additional details and requirements for other waterproofing applications using this system. Refer to the GC1 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 GC1 sheet. For situations where any other of the Gripset membranes are to be applied over the GC1 sheet, apply after the fixing instructions above have been completed.





Precautions

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Tiling & Surface Toppings

Tiling or laying of screeds over the GC1 System can commence once the Gripset 38FC membrane for installing the Elastoproof bond breaker system and sealing overlaps is dry, and the GC Adhesive is sufficiently bonded/stable to support traffic. Minimum time is 4 hours after the application is complete but may take longer in cooler conditions.

When screeding over the GC1 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 GC1 membrane. Sheet should be predampened prior to any screeding or self levelling applications.

Gripset C-Lite, C-Mastic or C-Stone tile Adhesives are recommended for direct fixing of tiles over the GC1 membrane

Alternate tile adhesives or self-levelling compounds being directly fixed to the GC1 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 GC1 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: 30m x 1m
- 28 cartons/pallet
- GC Pro Adhesive: 15Litre pails
- Gripset GC Pro 2: 20Litre kits Part A & Part B in 10litre plastic pails

Clean up

- GC1 Sheet is non-hazardous substance.
- May be disposed of as building site waste
- GC Pro Adhesives can be removed with water while wet.
- Once dried product needs to be removed mechanically or by solvent

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 adhesive as specified in the data sheet.
- Refer to safety precautions and wear suitable protective eye and hand protection when using the GC Pro Adhesive
- Flood testing able to commence after 24 hours of finished application.
- When pre-dampening surfaces, surface to be free of pooling water
- Do not apply when surface temperature is below 10°C or above 30°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 finished coatings over this membrane must be water based and solvent free.
- Safety Data sheet (SDS) available.

TECHNICAL DATA

Following data is based on test results carried out to ETAG022-2	
Weight	290g/m ²
Thickness	0.5mm
Reaction to fire (EN13501-1)	Class E
Water vapour diffusion resistance	Sd=97m
Tensile Strength - AS4654.1/AS1145.3	13.52 MPa
Elongation AS4654.1/AS1145.3	348%
Dimensional Stability	Longitudinal-0.14%, Transverse -0.15%
Crack bridging ability	1.5mm
Bond strength on concrete	>1.0MPa
Joint bridging ability	Watertight over 2mm gap
Resistance to temperature EN1296	Resistant (700C, 4 weeks)
Resistance to alkalinity EN1847	Alkali resistant (500C, 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.