

6812WD SEALCO GRIPSET - 38 & 2P WATERPROOFING MEMBRANES

1. GENERAL

This section relates to the application of **Sealco Waterproofing Systems Ltd** products for internal tiled wet areas and tiled/covered decks including exterior tiling, paver and timber raft systems.

It includes;

- Gripset 38® single part SBR rubber membrane system
- Gripset 2P® fast cure liquid 2 part SBR rubber membrane
- accessories

1.1 RELATED WORK

Refer to ~ for ~

1.2 ABBREVIATIONS AND DEFINITIONS

Refer to the general section 1232 INTERPRETATION & DEFINITIONS for abbreviations and definitions used throughout the specification.

The following abbreviations apply specifically to this section:

DFT	Dry Film Thickness
SBR	Styrene Butadiene Rubber

Documents

1.3 DOCUMENTS

Refer to the general section 1233 REFERENCED DOCUMENTS. The following documents are specifically referred to in this section:

NZBC E2/AS1	External moisture
NZS 4121	Design for access and mobility: Buildings and associated facilities
NZS 3114	Specification for concrete surface finishes
AS/NZS 4858	Wet area membranes
BRANZ	Good practice guide: Tiling

1.4 MANUFACTURER/SUPPLIER DOCUMENTS

Manufacturer's and supplier's documents relating to this part of the work:

Sealco Waterproofing Systems Ltd Gripset Product Manual (2014 edition)

Standard detailed drawings

Gripset Product Data Sheets

[BRANZ Appraisal 469](#) - Gripset 38® and Gripset 2P® External Waterproofing Membranes

[BRANZ Appraisal 470](#) - Gripset 38® and Gripset 2P® Wet Area Membranes

Manufacturer/supplier contact details

Company: **Sealco Waterproofing Systems Ltd**

Web: www.sealco.co.nz

Email: admin@sealco.co.nz

Telephone: 03 366-9495 or 0508 (SEALCO)

Mobile: 027 544-5532

Warranties

1.5 WARRANTY - MANUFACTURER/SUPPLIER

Provide a material manufacturer/supplier warranty:

15 years:	For Gripset 38® in tiled application on concrete or fibre cement sheet
15 years:	For Gripset 2P® in tiled application on concrete or fibre cement sheet

- Provide this warranty on the manufacturer/supplier standard form.
- Commence the warranty from the date of completion of the application.

Refer to the general section 1237 WARRANTIES for additional requirements.

1.6 **WARRANTY - INSTALLER/APPLICATOR**
Provide an installer/applicator warranty:
3 years: For execution

- Provide this warranty on the installer standard form.
- Commence the warranty from the date of completion of the application.

Requirements

1.7 **QUALIFICATIONS**
Waterproofing work to be carried out by applicators approved by Sealco Waterproofing Systems Ltd to install the Gripset 38® and Gripset 2P® membrane systems, and who hold a Licensed Building Practitioner's licence for external membrane applications.

1.8 **NO SUBSTITUTIONS**
Substitutions are not permitted to any specified Gripset Waterproofing System, or associated components and products.

Compliance information

1.9 **INFORMATION REQUIRED FOR CODE COMPLIANCE**
Provide the following compliance documentation: -

- Manufacturer's, importer's or distributors warranty
- Installer's / applicator's warranty
- Producer Statement - Construction from the applicator / installer
- Other information required by the BCA in the Building Consent Approval documents.

Performance

1.10 **PERFORMANCE**
Accept responsibility for the weather-tight performance of the completed membrane system.

1.11 **PRE INSTALLATION MEETING**
Convene a meeting between the applicator, contractor, all associated consultants and Sealco Waterproofing Systems Ltd technical manager to ensure all parties know what is required for effective performance of the system.

1.12 **SPECIAL DETAILS**
Where a standard detail does not exist, or if a standard detail cannot be applied, an approved alternative must be obtained from Sealco Waterproofing Systems Ltd before proceeding with the installation.

1.13 **QUALITY ASSURANCE**
Maintain quality necessary to assure that work is performed in accordance with this specification and the qualifying requirements of Gripset Industries Ltd.

Ensure that the applicator's Quality Control sheets are completed fully and faithfully for each installation area.

2. PRODUCTS

Materials - primers

2.1 **GENERAL PURPOSE PRIMER - POROUS SUBSTRATES**
Gripset GP Primer, a general purpose primer and bonding agent used over porous substrates to enhance the bond strength of Gripset 38® and Gripset 2P® membrane systems, available in 15 litre pails marked with manufacturer's mark.

2.2 **SMOOTH SURFACE PRIMER - NON POROUS SUBSTRATES**
Gripset OP primer, a one part solvent free primer for use over non porous surfaces to enhance the adhesion of Gripset 38® and Gripset 2P® over substrates such as compressed fibre cement sheet, Secura/Scyon, plastics ,metals and any substrates that

will not absorb water or is smooth and shiny. Available in 15 litre and 5 litre pails marked with the manufacturer's mark.

2.3 **MOISTURE BARRIER PRIMER - MINERAL SUBSTRATES**
Gripset E60, a two component water based epoxy primer and protective coating for preventing moisture penetration and rising damp in mineral surfaces. Provides resistance in positive and negative applications. Both components supplied in 10 litre pails marked with the manufacturer's mark.

2.4 **MOISTURE BARRIER PRIMER**
Gripset P10 a high performance solvent free one component moisture curing polyurethane resin used to prevent the rise of residual dampness or active moisture. Available in 10 litre metal cans marked with the manufacturer's mark.

2.5 **SBR LATEX ADDITIVE - CEMENTITIOUS COMPOUNDS**
Gripset 11Y, a SBR latex additive used to enhance bond strength and waterproofing properties of cementitious compounds. Used on equal volumes with sand and Portland Cement (1:1:1) to create a high bonding waterproof primer and sealing slurry over porous / non porous surfaces for immersed, underground or exposed applications before the application of Gripset 2P®. Available in 15 litre pails marked with the manufacturer's mark.

Materials - screed

2.6 **SCREED**
Gripset C-Bed Screed, a polymer enhanced water resistant high bonding screed, providing controlled screed beds which do not require an additive. Screeds formed from 80mm to 0mm. Available in 15 kg bags marked with the manufacturer's mark and used in accordance with Gripset Industries technical literature.

Materials - adhesives

2.7 **TILE ADHESIVE - FLOORS AND WALLS**
Laticrete 4-XLT, a ceramic tile adhesive for tiling over Gripset 38® or Gripset 2P® membranes. Available in 22.7kg bags marked with the manufacturer's mark.

2.8 **TILE ADHESIVE FOR CONTINUOUSLY IMMERSSED APPLICATIONS**
Laticrete 245 Platinum, a ceramic tile adhesive mixed with 4257 latex additive, for tiling over Gripset 2P® membranes in continuously immersed applications. Available in 22.7kg bags marked with the manufacturer's mark.

Materials - membranes

2.9 **LIQUID WATERPROOFING MEMBRANE**
Gripset 38®, a single component elastomeric SBR liquid membrane for internal and external wet area applications before covering with tiles, screed, render etc. Complies with [AS/NZS 4858](#), as a Class II membrane. Available in 15 litre pails marked with the manufacturer's mark.

2.10 **QUICK CURING WATERPROOFING MEMBRANE**
Gripset 2P®, a two-part water based flexible waterproofing SBR membrane system comprising of Gripset 2P® liquid component plus 2P dry powder. Complies with [AS/NZS 4858](#), as a Class II membrane. Powder available in 15 kg bags and 2P liquid available in 10 litre pails, marked with the manufacturer's mark.

Materials - grouts

2.11 **GROUT - WET AREAS**
Spectralock Pro Premium stain resistant grout, suitable for wet areas including swimming pools and fountains. Available in 11.3 kg bags.

2.12 GROUT - NON WET AREAS
Permacolour grout for non wet area situations, for joint widths 1.5mm to 12mm. Available in 11.3 kg bags.

Accessories - detailing

2.13 RUPTURE RESISTANT SEAL - INTERNAL CORNERS
Elastoproof CN90, a rubber jointing band, for prefabricated 90° internal corners, size 200mm x 200mm x 120mm. Provides an elastic rupture resistant seal at internal corner junctions. Performs as part of the bond breaker in the application of Gripset 38® and Gripset 2P®.

2.14 RUPTURE RESISTANT SEAL - EXTERNAL CORNERS
Elastoproof CN270, a rubber jointing band, for prefabricated 270° external corners, size 200mm x 200mm x 120mm. Provides an elastic rupture resistant seal at external corner junctions. Performs as part of the bond breaker in the application of Gripset 38® and Gripset 2P®.

2.15 ELASTIC JOINT BAND - EXTERNAL AND INTERNAL CORNERS
Elastoproof B50, an elastic joint band for sealing wet area wall/floor junctions, for internal and external corners. Rupture resistant and waterproof. Performs as part of the bond breaker in the application of Gripset membranes. Available in 120mm wide x 50m long rolls marked with the manufacturer's mark.

2.16 REINFORCEMENT TAPE
Elastoproof Butyl Tape, a self adhesive butyl rubber based reinforcement tape used over non porous surfaces, for example, joints, abutments, junctions, etc, before the application of Gripset membranes. Available in 80mm wide x 10m long and 150mm x 10m long rolls marked with the manufacturer's mark.

2.17 COLLAR SEAL
Elastoproof Collar, an elastic, waterproof, rupture and vibration proof seal, for sealing of pipes and penetrations on vertical and horizontal surfaces. Applied prior to application of Gripset membranes. Available in 3 sizes - small 120mm x 120mm, medium 250mm x 250mm and large 300mm x 300mm, marked with the manufacturer's mark.

2.18 TAPE
Gripset RF Tape, a non-woven polypropylene fabric embedded in Gripset membranes for areas where reinforcement is required against minor shrinkage cracks or where enhanced tensile strength is needed. Available in 100mm wide x 100m long rolls.

Accessories

2.19 SEALANT
Gripset SB sealant in 600ml sausages marked with the manufacturer's mark.

2.20 RAINWATER AND FLOOR WASTE FITTINGS
Sealco Waterproofing Systems drainRITE droppers, flowRITE scuppers and overflows specially designed proprietary fittings for Gripset 38® and Gripset 2P® systems.

2.21 PAVER SUPPORTS - ADJUSTABLE WITH LEVELLING HEAD
SEALCO ecoJack Adjustable Paver Supports with levelling head, comprised of a base, height control ring, a threaded top and a 3mm high levelling disc. Extension ring provides adjustable height from 42mm to 451mm. Levelling head provides up to 5% slope justification.

2.22 TIMBER RAFT SYSTEM
Refer to appropriate carpentry section for specification of timber raft systems.
Note: EPDM impact isolation cradles are required to separate timber structure from membrane.

2.23 TILING UNDERLAYMENT - ANTI FRACTURE, UNCOUPLING TILE SYSTEM
SchulterDITRA, a fleece backed, 3mm thick polyethylene membrane for underlayment of exterior tile work over Gripset 2P® membrane system.
Specifically designed for tile and stone installations, SchulterDITRA serves as an uncoupling layer, slip layer and vapour management layer that accommodates moisture from beneath the tile surface. Adhered to substrate using a PSA adhesive.

3. EXECUTION

Conditions

3.1 GENERALLY
Comply with the requirements and instructions of Gripset Industries Ltd, including product data sheets, method statements and specifications.

3.2 STORAGE
Take delivery of pails of liquid membrane and accessories undamaged. Include for site handling facilities where required. Store in dry areas out of weather on a level surface, off concrete floors, out of direct sunlight or freezing conditions and with the required accessories under conditions that ensure no deterioration or damage.

3.3 CHECK SUBSTRATE
Check that the substrate will allow work of the required standard and will comply with the requirements of the NZBC. Complete any remedial work identified before commencing any work.

3.4 CURING OF NEW CONCRETE
Allow concrete to fully cure before applying membranes. Maximum moisture content of concrete 75% RH.

3.5 FILM THICKNESS
Ensure that the dry film thickness specified in the Gripset product data sheets and specifications is achieved. Film thickness is an important factor to the waterproofing performance of the membrane and its long term durability.

Preparation - Gripset 38® / Gripset 2P®

3.6 SUBSTRATE CONDITION
Ensure that the substrate is in a suitable condition to allow work of the required standard and will comply with the requirements of the [NZBC E2/AS1](#) for the relevant substrate and Gripset Industries Ltd requirements.
Ensure that the substrate construction is well braced against movement and deflection and structurally sound. Ensure that the substrate falls to the rainwater/water outlets and water must not pond. Ensure all surfaces are clean, dry and free from dust and dirt, oils or grease with no projections of sharp materials.
Acid etch and/or diamond grid concrete surfaces as required to achieve a suitable surface.

3.7 SUBSTRATE PREPARATION
Remove projections and all debris, leaving the surface dust-free, laitance free, oil-free and clean, with nothing that could diminish the adhesion of primers. Grind off steps or sharp protrusions caused by formwork joints. Ensure there are no concrete additions or release agents that could affect the adhesion of membrane. Vacuum when preparation is complete to remove all dust.

3.8 FALLS - EXTERNAL
Exposed exterior membrane minimum falls:
1 : 40 minimum For decks (to [NZBC E2/AS1, 8.5.1 b.](#))
1 : 100 minimum For gutters (to [NZBC E2/AS1, 8.5.1 c.](#))

3.9 **FALLS - INTERNAL**
 Tiled finishes minimum fall gradients to BRANZ Good Practice Guide - Tiling, clause 6.5
 Falls in floors.

1 : 50 minimum	For unenclosed shower bases (to NZBC E3/AS1, 3.3.5)
1 : 60 minimum	For enclosed shower bases
1 : 50 minimum	For Accessible Shower bases (to NZS 4121, 10.5.11.3 (b.))
1 : 60 minimum	For commercial kitchens or similar

3.10 **CONCRETE SUBSTRATE**
 Ensure concrete is dry and that new concrete has cured for at least 28 days. The relative humidity of concrete substrates must be 75% or less to [NZBC E2/AS1, 10.0](#) - Construction moisture before commencing membrane application. Fill surfaces and stone grind to remove imperfections to achieve a finish to [NZS 3114 U2/U3](#). Fill holes with a mortar patching compound.

3.11 **FIBRE CEMENT SUBSTRATE**
 Check fibre cement sheets are laid with staggered joints (brick bond), and laid tight-butted, with all edges fully supported. Ensure sheets are rigid, with joints flush, no lumps or hollows, smooth, clean, dry (20% maximum moisture content) and free of debris.

3.12 **PRIME SUBSTRATES - FIBRE CEMENT**
 Prime substrates thoroughly with Gripset GP or Gripset OP smooth surface primer, selecting whichever is appropriate ensuring a good even coverage and penetration as recommended by Gripset product data sheets and specifications.

3.13 **PRIME FIBRE CEMENT - SCYON SECURA BOARD**
 Prime Scyon® Secura® substrate thoroughly with Gripset OP Primer only, ensuring a good even coverage and penetration as recommended by Gripset product datasheets.

3.14 **PRIME SUBSTRATES - CONCRETE**
 Prime substrates thoroughly with Gripset GP or Gripset OP smooth surface primer, selecting whichever is appropriate ensuring a good even coverage and penetration as recommended by Gripset product data sheets and specifications.

3.15 **PRIME METAL SUBSTRATES**
 Prime metal substrates thoroughly with Gripset OP primer only, ensuring a good even coverage as recommended by Gripset product data sheets.

3.16 **ALLOW PRIMER TO DRY**
 Allow the primer to fully dry as recommended by Gripset Industries Ltd. Prevent contamination of the primed surface prior to application of the membrane. Apply primer in accordance with Gripset product data sheets.

3.17 **FILL VOIDS**
 Fill voids and gaps with Gripset 11Y additive primer and DM powder forming a repair mortar.

Installation - Gripset 38®

3.18 **WEATHER CONDITIONS**
 Apply Gripset 38® liquid membrane only in fair weather with surface temperature above 10°C and below 35°C.

3.19 **APPLY GRIPSET PRIMER**
 Apply Gripset primer system, ensuring that the application coverage rate is in accordance with the appropriate product data sheet.

3.20 **APPLY BOND BREAKING AND DETAILING ACCESSORIES**
 Apply Elastoproof internal and external corners, elastic joint band and collars using Gripset 38® to embed into place. All detailing work to be in accordance with Gripset Industries guidelines, product data sheets and specifications.

3.21 **APPLY GRIPSET 38® MEMBRANE**
 Apply Gripset 38® SBR liquid membrane to a total minimum of 1.5 litres/m² giving a DFT of 1.2mm in accordance with Gripset product data sheets and specifications, ensuring all subsequent coats are applied in different directions to the proceeding coat. Allow additional Gripset 38® for all detailing over and above the overall membrane application and specified dry film thickness.

3.22 **PROTECTION**
 Do not leave membrane exposed for prolonged periods to UV light and the possibility of mechanical damage. Cover with protection sheeting if required. Apply tiling and/or surface toppings once the Gripset 38® membrane is dried, generally a minimum of 24 hours, in accordance with Gripset 38® product data sheet requirements.

3.23 **TILING - WALLS AND FLOORS**
 Apply Laticrete 4-XLT tile adhesive to walls and floors in accordance with Laticrete product data sheets and specifications. Available in colours white and grey.
 Grout with Laticrete Pemacolour grout system.

Installation - Gripset 2p®

3.24 **WEATHER CONDITIONS**
 Apply Gripset 2P® liquid membrane only in fair weather with surface temperatures above 5°C and below 25°C.

3.25 **APPLY GRIPSET PRIMER**
 Apply Gripset primer system, ensuring that the application coverage rate is in accordance with the appropriate product data sheet.

3.26 **APPLY BOND BREAKING AND DETAILING ACCESSORIES**
 Apply Elastoproof internal and external corners, elastic joint band and collars using Gripset 2P® to embed into place. All detailing work to be in accordance with Gripset Industries guidelines, product data sheets and specifications.

3.27 **APPLY GRIPSET 2P® MEMBRANE**
 Apply Gripset 2P® SBR liquid membrane to a total minimum of 1.5 litres/m² giving a DFT of 1.2mm in accordance with Gripset product data sheets and specifications ensuring all subsequent coats are applied in different directions to the proceeding coat. Allow additional Gripset 2P® for all detailing over and above the overall membrane application and specified dry film thickness.

3.28 **PROTECTION**
 Do not leave membrane exposed for prolonged periods to UV light and the possibility of mechanical damage. Cover with protection sheeting if required. Apply tiling and/or surface toppings once the Gripset 2P® membrane is dried, generally a minimum of 24 hours, in accordance with Gripset 2P® product data sheet requirements.

3.29 **TILING - WALLS AND FLOORS**
 Apply Laticrete 4-XLT tile adhesive to walls and floors in accordance with Laticrete product data sheets and specifications. Available in colours white and grey.
 Grout with Laticrete Permacolour grout system.

3.30 **TILING - CONTINUOUS IMMERSED AREAS**
 Apply Laticrete 254 Platinum combined with 4237 Latex additive in accordance with Laticrete product data sheets and specifications. Grout with Laticrete Spectralock Pro grout system. Used for continuous water immersion situations such as swimming pools, spa pools, fountains and ponds.

Accessories

3.31 **PAVER SUPPORTS - ADJUSTABLE WITH LEVELLING HEAD**
 Install SEALCO ecoJack Adjustable Paver Supports with levelling head to Sealco Waterproofing Systems Ltd installation details. Install 1.5mm thick EPDM rubber as

impact isolation pads to prevent wear on the Gripset 38® or Gripset 2P® membrane system.

3.32 **TIMBER RAFT SYSTEM**
Refer to appropriate carpentry section for installation of timber raft systems.
Allow to install EPDM impact isolation cradles at 300mm centres to separate timber structure from membrane.

3.33 **TILING UNDERLAYMENT - ANTI FRACTURE, UNCOUPLING TILE SYSTEM**
Install SchulterDITRA underlayment system over Gripset 2P® membrane system in accordance with SchulterDITRA product data sheets and specifications.
Adhere to substrate using PSA adhesive.

Completion - generally

3.34 **CLEAN UP**
Clean up as the work proceeds.

3.35 **ACCEPTANCE**
- Arrange for an inspection of the completed work.
- Complete the applicator's Quality Control sheets and provide to them for the issuing of the Materials Warranty.
- Protect the membrane until completion of the contract works.

3.36 **LEAVE**
Leave this work in a sound and waterproof condition and free of any defect.

3.37 **REMOVE**
Remove debris, unused materials and elements from the site.

Commissioning

3.38 **WATERPROOF TESTING**
Conduct a flood test before tiling commences, to ensure membrane is watertight and suitable for use as a waterproofing membrane for wet areas. Meet the BCA compliance requirements for the test and documentation of the test. Refer to Gripset 38® and Gripset 2P® product data sheets for flood testing drying times.

4. SELECTIONS

For further details on selections go to www.sealco.co.nz
Substitutions are not permitted to the following, unless stated otherwise.

Materials

4.1 **WATERPROOFING MEMBRANE**
Location: ~
Supplier: Sealco Waterproofing Systems Ltd
Substrate: ~
Primer: ~
Membrane: Gripset 38®
DFT: 1.2mm (requires a minimum of 2 coats)
Detailing: ~
Tile Adhesive: ~
Grout: Permacolour ~

4.2 **WATERPROOFING MEMBRANE - QUICK CURING**
Location: ~
Supplier: Sealco Waterproofing Systems Ltd
Substrate: ~
Primer: ~
Membrane: Gripset 2P®
DFT: 1.2mm (requires a minimum of 2 coats)
Detailing: ~

Tile Adhesive: Laticrete 245 Platinum (for full immersion)
Grout: Spectralock Pro Premium ~

Accessories

4.3

PAVER SUPPORTS - ADJUSTABLE WITH LEVELLING HEAD

Location: ~

Supplier: Sealco Waterproofing Systems Ltd

Brand: SEALCO ecoJack Adjustable Paver Supports with levelling head