

4432WD SEALCO GRIPSET RD ACRYLIC MEMBRANE

1. GENERAL

This section relates to the application of **Sealco Waterproofing Systems Ltd** products for exposed trafficable decks.

It includes:

- Gripset RD Acrylic as a liquid applied acrylic roofing membrane including 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

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 3114 Specification for concrete surface finishes
NZS 4121 Design for access and mobility: Buildings and associated facilities

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

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: Gripset RD Acrylic in exposed trafficable applications (with recoating conditions)

- 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**
Sealco work to be carried out by applicators approved by Sealco Waterproofing Systems Ltd to install the Gripset RD acrylic membrane system, 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 Sealco 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 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 Gripset Industries 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 RD membrane system, 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 RD 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 Sealco 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 RD. Available in 15 litre pails marked with the manufacturer's mark.

Materials - adhesive

2.6 TILE ADHESIVE - FLOORS - WITH SCHULTER DITRA TILE UNDERLayment
Laticrete 4-XLT, a ceramic tile adhesive for tiling over Gripset RD membrane. Available in 22.7kg bags marked with the manufacturer's mark.
Note: When Gripset RD is overlaid with tiles/stone the SchulterDITRA tiling underlayment system must be used. Do not lay tiles directly on to Gripset RD.

Materials

2.7 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.

2.8 HI-BUILD ACRYLIC MEMBRANE
Gripset RD Acrylic liquid applied acrylic membrane for exposed deck applications, with high elastomeric properties in 15 litre pails marked with the manufacturer's mark.

2.9 WEAR COAT MEMBRANE
Gripset RD Acrylic top coat comes with the fine sand particles required for the wear coat immersed in the Gripset RD Acrylic liquid.

2.10 TINTING PASTE
A pigment paste to tint Gripset RD Acrylic to the desired colour.

2.11 CLEAR PROTECTIVE COATING
Crystal Glaze clear coating with an anti-lichen and moss additive to provide additional protection.

Accessories - detailing

2.12 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 RD.

2.13 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 RD.

2.14 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 RD. Available in 120mm wide x 50m long rolls marked with the manufacturer's mark.

2.15 **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 RD. Available in 80mm wide x 10m long and 150mm x 10m long rolls marked with the manufacturer's mark.

2.16 **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 RD. Available in 3 sizes - small 120mm x 120mm, medium 250mm x 250mm and large 300mm x 300mm, marked with the manufacturer's mark.

2.17 **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

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

2.19 **RAINWATER AND FLOOR WASTE FITTINGS**
Sealco Waterproofing Systems drainRITE droppers, flowRITE scuppers and overflows specially designed proprietary fittings for Gripset RD system.

2.20 **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.

2.21 **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.

2.22 **TILING UNDERLayment - ANTI FRACTURE, UNCOUPLING TILE SYSTEM**
SchulterDITRA, a fleece backed, 3mm thick polyethylene membrane for underlayment of exterior tile work over Gripset RD 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 Sealco performance of the membrane and its long term durability.

Preparation - Gripset RD acrylic membrane

3.6 **SUBSTRATE CONDITION - GENERAL**
Ensure that the substrate is in a suitable condition to allow work of the required standard and will comply with the requirements of [NZBC E2/AS1](#) for relevant substrate and Gripset Industries Ltd requirements.

Ensure that substrate is well braced against movement and deflection. Ensure that the substrate falls to the outlets and water must not pond. Ensure all surfaces are smooth, clean, dry and free from dust and dirt with no projections of sharp materials that will cause damage to the membrane. Ensure metal surfaces are free from rust. Clean and treat any substrates affected by mould or fungus with a suitable fungicide.

Note: Do not use plywood as a decking substrate.

3.7 **SUBSTRATE CONDITION - CONCRETE**
Identify any live concrete cracks or designed movement joints for elastofabric reinforcement. Acid etch and/or diamond grid concrete surfaces as required to achieve a suitable surface. Ensure all substrates are clean, dry and fully cured.

3.8 **SUBSTRATE PREPARATION - CONCRETE**
Remove projections, remove all debris, leaving the surface dust-free, oil-free and clean, with nothing that could diminish the adhesion of primers. Grind off steps and sharp protrusions caused by formwork joints. Vacuum when preparation is complete to remove all dust.

3.9 **FALLS**
Exposed exterior membrane minimum falls.
1 : 30 minimum For roofs (to [NZBC E2/AS1, 8.5.1 a.](#))
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.](#))

3.10 **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 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 Primer 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 RD acrylic membrane

3.18 WEATHER CONDITIONS
Apply Gripset RD Acrylic membrane only in fair weather with air temperature above 10°C and below 25°C. Ensure substrate is dry at time of laying and has maximum moisture content of 20%. Do not lay in hot or humid conditions as this will affect the curing of the membrane.

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 INSTALL BOND BREAKING AND DETAILING ACCESSORIES
Install Elastoproof internal and external corners, elastic joint band and collars using Gripset RD to embed into place. All detailing work to be in accordance with Gripset Industries guidelines, product data sheets and specifications.

3.21 APPLY GRIPSET RD ACRYLIC BODY COAT
Apply coat of Gripset RD Acrylic membrane to enable the installation of elastofabric reinforcement to all fibre cement board joints, abutments and internal angles, ensuring no air entrapment or bridging, to Gripset Industries Ltd product data sheets, method statements and specifications. Ensure the base coat is fully dry before installation of the following application.
Live cracks in concrete or designed movement joints in substrates must be reinforced with elastofabric reinforcement tapes.

3.22 APPLY GRIPSET RD ACRYLIC BODY COATS
Apply two body coats of Gripset RD Acrylic to Gripset Industries Ltd product data sheets, method statements and specifications at a rate of 0.8 -1.0 litres/m² per coat. Each coat to be applied in opposite directions. Ensure good even coverage and film thickness.

3.23 APPLY NON SLIP TOP COAT
Apply the top coat of the Gripset RD Acrylic to Gripset Industries Ltd product data sheets, method statements and specifications at a rate of 0.8 -1.0 litres/ m² per coat. Ensure good even coverage and film thickness. The Gripset RD Acrylic top coat comes with the fine sand particles required for the wear coat immersed in the Gripset RD Acrylic liquid.

3.24 TINTING GRIPSET RD ACRYLIC
Add tinting paste to Gripset RD Acrylic and disperse thoroughly using a mechanical stirrer. Minimise any air entrapment. Tinting to be light colours only with a light reflectance value of 40% or more.

3.25 **APPLY CRYSTAL GLAZE PROTECTION COAT**
Apply SEALCO Crystal Glaze, a clear coat protective to protect Gripset RD Acrylic from stains; (e.g. pot plant leaf stains, spillages, lichen and moss). Coverage 6m² / litre applied evenly by roller or sprayer.

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

3.27 **TILING - USING SCHULTER DITRA SYSTEM**
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.
Note: When Gripset RD is overlaid with tiles/stone the SchulterDITRA tiling underlayment system must be used. Do not lay tiles directly on to Gripset RD.

Accessories

3.28 **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 RD membrane systems.

3.29 **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.

3.30 **TILING UNDERLAYMENT - ANTI FRACTURE, UNCOUPLING TILE SYSTEM**
Install SchulterDITRA underlayment system over Gripset RD membrane system in accordance with SchulterDITRA product data sheets and specifications.
Adhere to substrate using PSA adhesive.
Note: When Gripset RD is overlaid with tiles/stone the SchulterDITRA tiling underlayment system must be used. Do not lay tiles directly on to Gripset RD.

Completion - generally

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

3.32 **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.

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

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

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 **SEALCO MEMBRANE**
Location: ~
Supplier: Sealco Waterproofing Systems Ltd

Substrate: ~
Primer: ~
1st body coat: Gripset RD Acrylic
2nd & 3rd coat: Gripset RD Acrylic
Top coat: Gripset RD Acrylic wear coat
DFT: 1.8 - 2.0mm
Detailing: ~
Tile adhesive: Laticrete 4-XLT (general purpose)
Grout: Permacolour ~
Finish: SEALCO Crystal Glaze Clear
Tint colour: ~

Accessories

4.2

PAVER SUPPORTS - ADJUSTABLE WITH LEVELLING HEAD

Location: ~
Supplier: Sealco Waterproofing Systems Ltd
Brand: SEALCO ecoJack Adjustable Paver Supports with levelling head