

4424WD SEALCO DEK-MASTER VINYL TRAFFICABLE MEMBRANE

1. GENERAL

This section relates to **Sealco Waterproofing Systems Ltd** dek-MASTER vinyl membrane roofing, bonded to:

- construction plywood, including all underlays and accessories
- concrete, including all underlays and accessories.

1.1 RELATED WORK

Refer to ~ for ~

1.2 DOCUMENTS

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

- [NZBC E2/AS1](#) External moisture
- [AS/NZS 2269.0](#) Plywood - Structural - Specifications

1.3 MANUFACTURER/SUPPLIER DOCUMENTS

Manufacturer's and supplier's documents relating to this part of the work:
Dek-Master Product Manual
Standard detailed drawings

Manufacturer/supplier contact details

Company:	Sealco Waterproofing Systems Ltd
Web:	www.sealco.co.nz
Email:	jeff@sealco.co.nz
Telephone:	03 366 9495 (head office) or 0508 (SEALCO)
Mobile:	027 544-5532

Warranties

1.4 WARRANTY - MANUFACTURER/SUPPLIER

Provide a material manufacturer/supplier warranty.
15 years: for materials

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

Refer to the general section 1237 WARRANTIES for additional requirements.

1.5 WARRANTY - APPLICATOR

Installer's warranty for the system under normal environmental and use conditions against failure.
5 years: Execution warranty

- Provide this warranty on the installer's standard form.

Refer to the general section 1237 WARRANTIES for additional requirements.

Requirements

1.6 QUALIFICATIONS

Roofing work to be carried out by Licensed Building Practitioners who are also licensed applicators approved by Sealco Waterproofing Systems Ltd.

1.7 NO SUBSTITUTIONS

Substitutions are not permitted to any specified Sealco Waterproofing Systems Ltd system, or associated components and products.

- 1.8 PROJECT REGISTRATION
Contact Sealco Waterproofing Systems Ltd to confirm that the project has been registered.
Web: www.sealco.co.nz/register
Telephone: 03-366 9495 (Head office) or 0508 (SEALCO)
If the project has not been registered, telephone and provide all required details.

Performance

- 1.9 PRE INSTALLATION MEETING
Convene a meeting between the applicator, contractor, all associated consultants and Sealco Waterproofing Systems Ltd to ensure all parties know what is required for effective performance of the system.
- 1.10 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.
- 1.11 TEST
Flood test horizontal applications with a minimum 50mm depth of water for 24 hours. Make good any lack of water tightness when the surface is completely dry.
- 1.12 PERFORMANCE
Accept responsibility for the weather-tight performance of the completed roofing system, including all penetrations through the roof and junctions with walls and parapets. All penetrations to comply with [NZBC E2/AS1](#) and Sealco Waterproofing Systems Ltd recommendations.
- 1.13 QUALITY ASSURANCE
Maintain quality necessary to assure that work is performed in accordance with this specification and the qualifying requirements of Sealco Waterproofing Systems Ltd.

Ensure that Sealco Waterproofing Systems Ltd's Quality Control sheets are completed fully and faithfully for each installation area.

2. PRODUCTS

Materials

- 2.1 DEK-MASTER VINYL SHEET
Single ply vinyl sheet trafficable membrane, with fleece back, bearing the manufacturer's mark. Refer to SELECTIONS for type, thickness and colour range.

Components

- 2.2 OVERLAP SEALANT
Sealco Waterproofing Systems Ltd solvent based welding cement for chemical lap welds of the thinner dek-Master membrane.
- 2.3 LOW TEMPERATURE ADHESIVE
Sealco Waterproofing Systems Ltd neoprene based adhesive formulated for low temperature applications.
- 2.4 PRO-SERIES ADHESIVE
Sealco Waterproofing Systems Ltd water based adhesive for adhering to fleece back of the dek-Master vinyl membrane.
- 2.5 DEK-MASTER ADHESIVE
Sealco Waterproofing Systems Ltd fleece back contact adhesive for adhering dek-Master membrane.

Accessories

- 2.6 **OUTLET ACCESSORIES**
Sealco Waterproofing Systems Ltd moulded polyethylene roof outlets and overflows designed for vinyl membranes.
- 2.7 **VINYLRITE OUTLETS**
Sealco Waterproofing Systems Ltd range of mechanically fixed vinylRite outlets specifically designed for dek-Master vinyl membrane.
- 2.8 **DROPPER**
Sealco vinylRite dropper as supplied and required by Sealco Waterproofing Systems Ltd.
- 2.9 **SCUPPER**
WPS drainRite scupper as supplied and required by Sealco Waterproofing Systems Ltd.
- 2.10 **OVERFLOW DROPPER**
Sealco vinylRite overflow dropper as supplied and required by Sealco Waterproofing Systems Ltd.
- 2.11 **PENETRATIONS**
Specifically made and welded to substrate. Mechanically clamped and sealed around pipes and then over flashed.
- 2.12 **EDGE TRIM**
Aluminium drip edge trim in 3m or 5m lengths.
- 2.13 **U-CHANNEL**
Safety edge U shaped channel for edge finishing.

3. EXECUTION

Conditions

- 3.1 **STORAGE**
Take delivery of Sealco Waterproofing Systems Ltd dek-Master branded rolls, undamaged and allow for site handling facilities where required. Store membranes and accessory materials under conditions that ensure no deterioration or damage. Ensure all tapes and adhesives are within their expiry dates. Note: Some of the dek-Master materials are Class 3 flammable goods.
- 3.2 **CONFIRM LAYOUT**
Confirm layout as detailed on drawings. If not detailed on the drawings, confirm the layout to suit site conditions, and Sealco Waterproofing Systems Ltd specification.
- 3.3 **WEATHER**
Apply dek-Master membrane system in dry atmospheric conditions and only when the air or substrate temperature is 6°C and above.

Application - preparation

- 3.4 **PRELIMINARY WORK**
Ensure that preliminary work, including formation of falls, flashing rebates, grooves, ducts, provision of battens and fillets and fixing of vents and outlets to levels, is complete and properly constructed to enable the system to work as intended. Ensure timber fillets fit neatly and that mitres are neatly formed. This work and the substrate to be smooth, clean and dry.
- 3.5 **ACCEPTANCE OF SUBSTRATE**
Confirm that the substrate complies with the [NZBC E2/AS1](#) for the relevant substrates and Sealco Waterproofing Systems Ltd documents, including fillets, sumps, outlets and projections, and ensure work is of the required standard. Ensure the fall complies with E2/AS1 including correct fall to rainwater outlets to avoid ponding,
- Lay roofs to a minimum fall of 1:30 (2°) to [NZBC E2/AS1](#), 8.5.1 a.

- Lay decks to a minimum of 1:40 (1.5°) to [NZBC E2/AS1, 8.5.1 b.](#)
- Lay gutters to a minimum fall of 1:100 (0.57°) to [NZBC E2/AS1, 8.5.1 c.](#)

3.6 CONCRETE SUBSTRATE

Ensure concrete substrate has been allowed to cure for at least 28 days and has a moisture content of less than 75% RH before commencing application. Prepare the surface, including vacuum cleaning and acid etching as necessary to leave smooth, clean, dry and free of debris. Where moisture is present, apply Gripset P10 to Sealco Waterproofing Systems Ltd requirements, to block moisture vapour.

3.7 PLYWOOD SUBSTRATE

Plywood to be minimum 17.5mm thick square-edged sheets and complying to [AS/NZS 2269.0](#), minimum CD structural grade with the sanded C side upwards. Treated H3 with waterborne CCA treatment and kiln dried after treatment. Lay with staggered joints (brick bond) with all edges of the sheets fully supported. Do not install timber fillets at the base of all upstands as a 90deg corner is required for the Dek-master system. Chamfer all external edges with a minimum radius of 5mm. Fix with glue and 10 gauge x 50mm stainless steel countersunk head screws tight butted. Fit internal corner fillets. Fix at 150mm centres on edges and 200mm in the body of the sheets. Plywood and the timber substructure to have a maximum moisture content of 20% when the membrane is installed. Plywood must not be LOSP treated (no fillets required).

Application - laying dek-Master

3.8 GENERAL

Run out the dek-Master membrane and allow to relax for 20 minutes before laying. Do not stretch sheets when laying. Apply bond breaker tapes to plywood joints.

3.9 SET-OUT

Neatly set out rolls starting at the lowest point of the roof and run perpendicular to the roof pitch. Allow for 20mm side laps and end laps. Pre-plan the work to keep the number of membrane laps to a minimum. dek-Master rolls to be relaxed prior to installation.

3.10 APPLY DEK-MASTER ADHESIVE

Apply solvent adhesive to the substrate at a rate of 1.5m² / litre if using Pro-Series Adhesive. Apply adhesive with a 13 nap roller fleece. Leave to tack dry before bonding the two surfaces together making sure no air is trapped between the sheet and the substrate. Take care to ensure good even coverage of the adhesive. Broom or roll top of the membrane to increase adhesion.

3.11 BONDING LAPS

Sealco Waterproofing Systems Ltd using the Leister heat welder on both mating surface's at the back of the lap evenly at the same time whilst firmly rolling on top of the sheet with hand roller. Using the Leister heat welder make your final run by placing the nozzle between the sheets at the front of the lap area, heating both facing surface (to the point of mating surfaces) and creating a bonded lap (min 20mm). Firmly roll with lap roller immediately. Test lap joints on completion with lap probe.

3.12 INSPECT

Inspect and test welded lap joints on completion ensuring the lap is fully bonded.

3.13 DETAILING

Use Leister or Techspan heat gun to form all up turns, down turns, corners, penetrations and any other area that requires forming of the membrane. Use the heat gun to form and weld flashing patches to the exterior of the dek-Master PVC Membrane.

3.14 INSTALL DROPPER

Install WPS vinylRite dropper to Sealco Waterproofing Systems Ltd installation details.

3.15 INSTALL SCUPPER

Install WPS drainRite scupper to Sealco Waterproofing Systems Ltd installation details.

- 3.16 **INSTALL OVERFLOW DROPPER**
Install WPS vinylRite overflow dropper to Sealco Waterproofing Systems Ltd installation details.

Finishing

- 3.17 **FOOT TRAFFIC**
Foot traffic is to be limited during and after laying. Provide access boards for later operations and remove when no longer needed. Protect and maintain roofing until completion of the contract works.
- 3.18 **ACCEPTANCE**
Sign off acceptance of completed areas using the Sealco Waterproofing Systems Ltd Quality Control sheets.
- 3.19 **SUBSEQUENT WORK**
Make good any damage by later work by inserting a new whole or part new dek-Master sheet to maintain the appearance of the covering as originally laid.

Completion

- 3.20 **ROUTINE CLEANING**
Carry out routine trade cleaning of this part of the work including periodic removal all debris, unused materials and elements from the site.
- 3.21 **DEFECTIVE OR DAMAGED WORK**
Repair damaged or marked elements. Replace damaged or marked elements where repair is not possible or will not be acceptable. Leave work to the standard required for following procedures.

4. SELECTIONS

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

- 4.1 **DEK-MASTER TRAFFICABLE PVC DECK MEMBRANE**
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|---------------|----------------------------------|
| Location: | ~ |
| Manufacturer: | Sealco Waterproofing Systems Ltd |
| Type/brand: | dek-MASTER |
| Thickness: | 1.5mm |
| Width: | 1.8m |
| Colour: | ~ |