

4424WD WPS DEK-MASTER PVC TRAFFICABLE MEMBRANE

1. GENERAL

This section relates to **Waterproofing Systems Ltd** dek-MASTER PVC 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 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:

PVC Polyvinyl chloride

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
AS/NZS 2269 Plywood - Structural - Specifications

1.4 MANUFACTURER/SUPPLIER DOCUMENTS

Waterproofing Systems Ltd documents relating to work in this section are:

Dek-Master Product Manual
Standard detailed drawings

For copies of the above documents, or for technical assistance, contact your local **Waterproofing Systems Ltd** representative:

Northland, Auckland	021 - 917 773
Waikato, Bay of Plenty, Gisborne	021 - 457 953
Hawkes Bay, Manawatu	021 - 402 434
Wanganui, Taranaki, Wellington, Wairarapa	021 - 402 434
Marlborough, Nelson, Christchurch, Dunedin, Otago	0275 - 445 534
Southland, Central Otago	0275 - 445 532

Manufacturer/supplier contact details

Company: **Waterproofing Systems Ltd**
Web: www.waterproofing.co.nz
Telephone: 03-366 9495 (Head office) or 0508 (2WATER) 292837
Facsimile: 03-366 9496 (Head office)

Warranties

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.



- 1.6 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.

Requirements

- 1.7 QUALIFICATIONS
Roofing work to be carried out by licensed applicators approved by Waterproofing Systems Ltd. Approved applicators may be found at:
Web: www.waterproofing.co.nz
Telephone: 03-366 9495 (Head office) or 0508 (2WATER) 292837

- 1.8 NO SUBSTITUTIONS
Substitutions are not permitted to any specified **Waterproofing Systems Ltd** system, or associated components and products.

- 1.9 PROJECT REGISTRATION
Contact **Waterproofing Systems Ltd** to confirm that the project has been registered.
Web: www.waterproofing.co.nz/register
Telephone: 03-366 9495 (Head office) or 0508 (2WATER) 292837
If the project has not been registered, telephone and provide all required details.

Performance

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

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

- 1.12 TEST
Flood test horizontal applications with a minimum 50mm depth of water for 24 hours. Make good any lack of watertightness when the surface is completely dry.

- 1.13 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 **Waterproofing Systems Ltd** recommendations.

- 1.14 QUALITY ASSURANCE
Maintain quality necessary to assure that work is performed in accordance with this specification and the qualifying requirements of **Waterproofing Systems Ltd**.

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



2. PRODUCTS

Materials

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

Components

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

Accessories

- 2.6 OUTLET ACCESSORIES
Waterproofing Systems Ltd moulded polyethylene roof outlets and overflows designed for PVC membranes.
- 2.7 PVC OUTLETS
Waterproofing Systems Ltd range of mechanically fixed PVC outlets specifically designed for dek-Master PVC membrane.
- 2.8 EDGE TRIM
Aluminium drip edge trim in 3m or 5m lengths
- 2.9 U-CHANNEL
Safety edge U shaped channel for edge finishing.
- 2.10 AIR VENTS
Polyethylene or spun aluminium one-way air vents. Recommended to vent approx 45sqm per vent.

3. EXECUTION

Conditions

- 3.1 STORAGE
Take delivery of **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 of 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 **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 degrees Celsius 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 **Waterproofing Systems Ltd** documents, including fillets, sumps, outlets and projections, and ensure work is of the required standard.
- 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 duroPRIMER PU to **Waterproofing Systems Ltd** requirements, to block moisture vapour.
- 3.7 PLYWOOD SUBSTRATE
Plywood to be minimum 18mm thick square-edged sheets and complying to AS/NZS 2269, 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. Provide 20mm timber fillets at the base of all upstands and 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,. 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.

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.
- 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 ADHESIVE
Apply adhesive to the substrate at a rate of 2spm per litre if using water based pro-adhesive apply with a notched trowel. 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, squeegee or roll top of the membrane to increase adhesion

3.11 BONDING LAPS

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 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.

Finishing

3.14 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.

3.15 ACCEPTANCE

Sign off acceptance of completed areas using the **Waterproofing Systems Ltd** Quality Control sheets.

3.16 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

3.17 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.

3.18 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

Substitutions are not permitted to the following, unless stated otherwise.

4.1 DEK-MASTER TRAFFICABLE PVC DECK MEMBRANE

Location: ~
Brand: dek-Master
Thickness: 1.5mm
Width: 1.8 metres
Colour: ~

5. **DISCLAIMER**

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.