

Viking Vapour Barrier

Viking Roofspec Supplier Code: VWR725a Version: 1.0

Introduction

This Data Sheet is to serve as a reference guide for Viking Roofspec Licensed Installers who are already familiar with Viking Roofspec's systems and are responsible for Viking roof-system installations.

The following guide contains precautions, best uses and application procedures for the correct installation of Viking Vapour Barrier VWR725a.

Viking Vapour Barrier VWR725a is used as a Vapour Barrier for all Viking Warm Roof systems throughout NZ. It features a white coloured polypropylene film surface to enhance weathering performance and resistance to foot traffic. When mechanically fastening the Viking PIR Polyiso Insulation panel the self-adhering properties allow it to seal around the fasteners, preventing air and moisture from entering the roofing system. The polyfilm surface also serves as an excellent substrate for insulation attachment using Viking Soudal Adhesive.

Viking Vapour Barrier will typically be installed beneath a mechanically fastened Viking PIR Polyiso Insulation panel. If subsequent layers are installed immediately this means the Vapour Barrier primer adhesion to the substrate will not be required. *If the Vapour Barrier is left exposed to high winds or installation of the subsequent layers are by adhesion, then priming of the substrate <u>will be</u> required.

Properties

Primer*	CAV-GRIPIII or CCW-702 Primer (SES301)
Thickness:	1.01mm
Substrates	structural concrete, plywood, or metal decks
Roll size / Weight:	30.48mt x 990mm / 31kg
Lap min. coverage:	50mm
Coverage per roll:	28.6M ²
Exposure Period:	60 Days if T-joints sealed with an internal bead of Carlisle Lap Sealant SES012A

Installation

Concrete, Plywood and Warmspan¹ / WarmRoof

Fully Bonded and Adhered System

Surface Preparation:

- Concrete shall be in place for a minimum of 28 days and the substrate must be dry.
- All surfaces / substrates shall have a smooth finish and be free of voids and sharp protrusions. In the event of rain, concrete must be allowed to dry before primer is applied if required.

Primer:

 Surfaces to be covered with VWR725a must be clean and dry. Prime with CAV-GRIPIII or CCW-702 Primer. Apply primer by spray, brush, or with a long-nap roller at the applicable coverage rates. Primer is satisfactorily cured when it will not transfer when touched. Only prime areas to be waterproofed the same day. At 24°C, allow CAV-GRIPIII to dry for a minimum of 15-20 minutes. Re-prime if area becomes dry or dirty



Application:

- Apply VWR725a from low to high point in a shingle fashion so that laps will shed water. Overlap all edges at least 50mm. End laps shall be staggered. Seams and end laps must be rolled with a 40mm wide pressure seam roller.
- Place membrane carefully to avoid wrinkles and fish-mouths. Immediately after installation, roll with a 70-kg weighted steel roller. When VWR725a is used as a temporary roof (max. 60 days), the following procedure should be performed:
- T-joints MUST be sealed with an internal bead of Viking Lap Sealant SES012A

Repairs:

Inspect VWR725a membrane for tears, punctures, fish-mouths, air bubbles, and voids due to
misalignment at Laps. Remove damaged membrane. Prime exposed substrate and allow
primer to dry. Apply a new section of VWR725a to primed substrate, extending onto adhered
membrane by min. 150mm on all sides. Pressure roll VWR725a repair section to ensure a
good seal. Slit fish-mouths and overlap the edges. Place a section of VWR725a over the repair
and extend 150mm in all directions. Pressure roll repair section to ensure a good seal.

Installation at Angle Changes:

- To ensure proper installation, the vertical wall must be clean of debris and residual asphalt. Prime the vertical surface, ensuring the primer extends at least 50mm up the vertical wall. After installing the VWR725a, use a 40mm seam roller on the vertical surface to ensure contact with the wall.
- Apply the VWR725a up the vertical surface 50mm above finished height of the insulation

* Ensure the integrity of the Viking Vapour Barrier VWR725a at terminations in cases of use for temporary roofing (max. 60 days).

Insulation Installation:

 Ensure that the VWR725a surface is dry prior to installing insulation. Install / Adhere Polyiso Board to Vapour Barrier using STP900b Fast Adhesive





Warmspan²

Mechanically fixed System

Only use this method if you are installing WarmSpan² on the specified Plywood or Steel tray substrate. This method of installation can only be used for same day Polyiso Installation with mechanical fixings.

Surface Preparation:

• All surfaces / substrates shall have a smooth finish and be free of voids and sharp protrusions.

Primer:

• No primer required with the install of Mechanical fixing methodology the Vapour Barrier is a Selfadhering SBS based membrane

Application:

- Apply VWR725a from low to high point in a shingle fashion so that laps will shed water. Overlap all edges at least 50mm. End laps shall be staggered. Seams and end laps must be rolled with a 40mm wide pressure seam roller.
- Place membrane carefully to avoid wrinkles and fish-mouths. Immediately after installation, roll with a 70-kg weighted steel roller.
- Apply the VWR725a up the vertical surface 50mm above finished height of the insulation

Insulation Installation:

 Ensure that the VWR725a surface is dry prior to installing insulation. Install Polyiso Board to Vapour Barrier using Mechanical Fixings

*Refer to WarmSpan² Product Data Sheet





Precautions

- 1. Do not apply primer or vapour barrier to frozen substrates. Best results are obtained when temperatures are above 7°C.
- 2. Viking Vapour Barrier VWR725a may be installed in temperatures as low as 0°C based on the following criteria
 - a. Concrete decks can be a heat sink (releasing heat back into the cold atmosphere), so warming the concrete prior to installation will support optimum adhesion of the VWR725a.
 - b. All materials (VWR725a and Primer) must be stored in temperatures above 21°C immediately prior to installation.
 - c. For best results, CAV-GRIPIII will allow for the shortest flash off time (15-30 minutes).

Note: Propellant in CAV-GRIPIII will revert to a liquid when the cylinder temperature falls below 7°C. If this occurs, simply warm the cylinder up above 21°C and the propellant will revert to a gas.

- d. In temperatures below 7°C, priming the seams is recommended to ensure seam performance.
- 3. Do not apply primer or VWR725a to damp or contaminated surfaces.
- 4. VWR725a is not recommended for use over sealants that contain tar or polysulfide. If these materials are present, they must be removed, and the surfaces must be thoroughly cleaned.
- 5. As with all self-adhering SBS asphalt products, cold temperatures can affect this product's adhesion. When ambient temperatures are below 7°C, the rolls and primers must be stored at 21°C prior to installation.
- 6. Although Viking Vapour Barrier seals around mechanical fasteners, the fasteners must remain in place. Puncturing the membrane with a fastener, and then removing it, will create a hole.

Approved Substrates

Viking Vapour Barrier can be used over structural concrete, plywood, CLT, exterior gypsum decks, timber, steel decks or other approved substrates in conjunction with Viking Roofspec systems.

As always substrates must meet Viking Roofspec Substrate Checklist requirements for the specified Viking membrane system to be installed.

Top 6 Vapour Barrier Installation Errors

- 1. Viking Vapour Barrier membrane not kept at proper temperature before installation: It is critical to keep the temperature of the Vapour Barrier membrane above at least 16°C, as low temperatures can negatively affect adhesion. If the membrane's temperature is below 5°C during installation, adhesion will be significantly diminished.
- 2. Primer not kept at proper temperature before installation: Primers must be kept above at least 16°C prior to installation. CAV-GRIPIII Low-VOC Adhesive/ Primer is particularly susceptible to cold; if the cylinder drops below 7°C, the gas propellant will change to a liquid and the cylinder will stop spraying. If this should occur, warm the cylinder above 21°C and the propellant will return to a gas.
- 3. Viking Vapour Barrier VWR725a not properly rolled in: SBS (Styrene-Butadiene-Styrene) asphalt adhesive is pressure-sensitive. To ensure proper contact, VWR725a field sheets must be rolled with a 50kg to 70kg roller, and vertical surfaces must be rolled with a hand roller.
- 4. *No primer on substrate: If not mechanically fixing PIR Insulation immediately then priming is likely to be required when installing VWR725a on all surfaces.



Storage

Handling and storage of all materials whether on or off site is under the control of the Viking Roofspec Licensed and Trained Installers. Dry storage must be provided for all products, do not let products get crushed under weight of stacking pallets on top of each other.

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