

# Viking WarmRoof System

Version: WR-PTS-V1

## Product Description:

Viking WarmRoof System is installed onto a plywood or concrete substrate. In some instances, it may be used to overlay existing roofing systems (See Vikings overlaying membranes guidelines) not all roofing systems can be overlaid. A vapour barrier is laid directly to the substrate. The Vapour barrier's primary function is to stop moisture transferring from the substrate or interior to the insulation layer.

The insulation layer is a rigid polyisocyanurate (PIR) closed-cell foam sheets. The PIR boards are adhered to the substrate with a two-part Polyurethane foam called F.A.S.T Adhesive. This product come in a dual cartridge with a mixing nozzle attachment. Or maybe installed with mechanical fasteners and insulation plugs to the substrate. The top facer is made up of a fibre glass. This allows good adhesion of the waterproofing membrane. This can be Viking's Enviroclad, Epiclاد or Torch-On Membranes.

In areas of high traffic areas use a high-density cover board over the PIR board. The membrane will be installed over the coverboard. The coverboard can be F.A.S.T adhered or mechanically fixed.

*For membrane accessories see individual membrane PDS or installation guides.*

The Viking Warm Roof System insulates a building from the outside as the insulation is installed on top of the roof structure. The system includes rigid polyisocyanurate (closed-cell foam) sheets with a waterproofing membrane adhered on top (Viking Enviroclad, Epiclاد or Torch-On (seeing the craft paper Fibre glass facer can be torched to). A Vapour barrier is recommended to be installed in all regions and cool stores.

A Viking Warm Roof moves the dew point to the outside of the building, meaning no damp or rotten materials inside the roof cavity. The cavity is free of insulation making it clear for wiring and negating the need for ventilation. A F.A.S.T. adhesive option is available to secure panels to the substrate (avoids mechanical fasteners and therefore some thermal bridging).

Viking Warm Roof is suited to low-slope roofs, and is ideal for overlaying any old roof surface, preventing the dumping of the old roof and exposing the building's interior as the roof is replaced. Electricity savings from the building's new energy efficiencies can amortise the reroof cost as quickly as 8 years after installation (depending on the Polyiso thickness and colour of membrane). Significantly higher R-values are achieved with Polyiso panel (uniformly across the entire roof; not just in parts). The system's thermal performance helps achieve Green Star points for a building. The rigid insulation sheets add structural integrity to the roof while the wide-sheet membrane means fewer seams and greater waterproofing integrity.

## Purpose and use

The Viking WarmRoof System has been appraised for use as an insulating roof on buildings within the following scope:

- Compliance with NZBC Acceptable Solution E2/AS1, Paragraph 1.1 regarding building height and maximum floor plan areas.
- Suitable for limited access flat roofs with concrete, timber, or steel structural decks, subject to specific structural design.
- Roofs must be designed to drain water to gutters and drainage outlets complying with the NZBC.
- Roofs must be constructed with suitable falls, as outlined in Paragraph 15.3 and 15.4 of the BRANZ Appraisal.
- Not intended for use with integral roof gardens.
- Suitable for buildings in NZS 3604 Building Wind Zones, up to and including 'Extra high'.

**Conditions:**

1. The product is suitable for use as a roof and deck waterproofing membrane in compliance with NZS 3604:2011 and NZBC Acceptable Solution E2/AS1, Paragraph 1.1, or NZBC Acceptable Solution E2/AS1, Paragraph 1.1 regarding building height and floor plan area, subject to specific structural design.
2. Suitable for use in NZS 3604:2011 Wind Zones, up to and including 'Extra High'.
3. Weathertightness design of junctions for each specific structure is the responsibility of the building designer.
4. Suitable for use in all Climate Zones as defined in NZBC H1/AS1 and all Exposure Zones as defined in NZS3604.
5. Proprietary accessories are available to ensure a complete watertight roof system.

**Compliance with the New Zealand Building Code**

The product will, if employed in accordance with the supplier's installation and maintenance requirements, assist with meeting the following provisions of the building code:

- Clause B1 Structure: Performance B1.3.1
- Clause B2 Durability: Performance B2.3.1, B2.3.1(b)
- Clause E2 External moisture: Performance E2.3.1, E2.3.2
- Clause F2 Hazardous building materials: Performance F2.3.1
- Clause H1 Energy efficiency: Performance H1

**Design Requirements:**

Product specification and incorporation of Viking Enviroclad, Epiclad, or Torch-On Membranes into the building design should be carried out by a qualified designer/architect/engineer or a building professional who is qualified to design the buildings covered under the scope of use of this product. Access to the technical specifications, installation details, and standards referenced in BRANZ Appraisal No. 713 is necessary to ensure compliance with the design limitations outlined in this PTS.

**Installation Requirements:**

Installation of the Viking WarmRoof System must be carried out in accordance with the Viking Torch-On Membrane System Technical Literature and under the supervision of a Licensed Building Practitioner (LBP) with the relevant License Class. Installation should adhere to all relevant technical information related to the selected installation method, including details provided in the current BRANZ Appraisal No. 713, MasterSpec, and Viking Roofspec Standard Details.

**Maintenance Requirements:**

The membrane roof system must be regularly checked (twice annually) for damage, rubbish, and debris, particularly around drainage points. Any identified damage, such as small punctures and tears, must be repaired, and coatings reapplied as recommended by Viking Roofspec Ltd. It is important to exercise caution during inspections to prevent moisture ingress, and repairs should be undertaken when required. Drainage outlets must be maintained to ensure their effective operation.

**Quality Assurance:**

Viking provides quality assurance documents that are recommended to be followed and signed off by installers and builders upon project completion. These documents can be obtained from Viking Managers or the Viking website. The Viking WarmRoof System also obtained a BRANZ Appraisal (No. 656).

Viking Enviroclad, Epiclad, and Torch-On Membranes have their respective Product Data Sheets (PDS) and installation guides. And suitable for all membranes excluding Dec-K-ing

- Branz Appraisal No. 656
- Viking PTS WarmRoof System
- Viking PDS WarmRoof System
- Viking WarmRoof/WarmSpan System Details

July 2023

## PRODUCT TECHNICAL STATEMENT



### Warranty Information:

The Viking WarmRoof System is backed by a 20-year product warranty provided by Viking Roofspec, along with a Certificate of Workmanship issued by Viking Approved Applicator companies. Specific projects may be eligible for Viking's Full System Warranty (FSW) process, which warrants the full installation of the product and workmanship in one document (conditions apply). Only Approved Applicator Companies with installers licensed to Level 2 of Viking training may install the system for Viking Full System Warranty projects.

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