

Viking Epiclاد (EPDM) Rubber Waterproofing Membrane



Product Description

Viking Epiclاد is a synthetic rubber waterproofing membrane system made from EPDM rubber polymer. Epiclاد is supplied as a single-ply, flexible synthetic rubber sheet in roll form.

Epiclاد is highly resistant to UV, ozone and weathering. It possesses strong elasticity, tensile and elongation properties - a timber building's substrate will flex and move, especially during the change in seasons. Epiclاد will not split or tear under this kind of movement. It is known as its 'elongation at break' property (480%) which means it copes significantly better than other membranes put under equal duress.

Epiclاد has wide-sheets (fewer seams), so it is ideal for more expansive, open commercial and residential projects, such as roofs, waterproofing under decks, balconies, parapets, wider gutters, pond liners and reservoirs. It is particularly useful for areas with irregular angles, curves and contours as it is a very pliable material and can readily mould to difficult designs and shapes. Epiclاد is formulated to suit a wide-range of climatic conditions, including inland and coastal.

Epiclاد is potability certified, meaning drinking water can safely be collected off an Epiclاد roof. Other features:

- BRANZ Appraised No. 307 (2013).
- Backed by a 20-yr product warranty, and is eligible for Viking's Full System Warranty, which covers the product and installation warranties in one document. (*conditions apply)
- Available in black.
- 1.14mm and 1.52mm thicknesses, roll length 15.2m, roll width, 3.0m, 6.0m.
- Can be painted with approved paint systems - design flexibility.
- Manufactured in the USA by Carlisle Syntec Systems Inc. - the USA's largest EPDM sheet rubber manufacturer.

Scope of Use:

Viking Epiclاد Membrane has been appraised for use as a waterproofing membrane for buildings within the following scope:

- Scope limitations of NZBC Acceptable Solution E2/AS1, Paragraph 1.1; and,
- With timber supporting structures designed and constructed in accordance with the NZBC; and,
- With nominally flat or pitched roofs constructed to drain water to gutters and drain outlets complying with NZBC; and,
- With substrates of plywood sheet.

Viking Epiclاد Membrane has also been appraised for use as a waterproofing membrane for external reinforced

concrete and plywood roofs and decks for buildings within the following scope:

- Up to 3 storeys with a maximum height from ground to eaves of 10m and with a floor plan area limited only by seismic and structural control joints.

New Zealand Building Code (NZCB):

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 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

Product Criteria

Design Requirements

Product specification and incorporation of Viking Epiclad Membranes into the building design shall be carried out by a designer/architect/engineer or a building professional who:

- Is qualified to design the buildings covered under the 'Scope' of use of this product.
- Has ready access to the technical specifications including installation details and standards referenced in the BRANZ Appraisal No. 307 (2013) where the design limitations are outlined for the scope of this PTS.

The Viking Epiclad system comes with a range of accessories including sumps, scuppers and overflows.

Installation Requirements

- Installation shall be carried out only by a Viking Roofspec trained and licensed installer.
- Installation shall be undertaken in accordance with all relevant technical information related to the selected installation method, including information contained within the BRANZ Appraisal No. 307 (2013).
- Long term properties of the material may be affected by contact with petroleum-based products such as oils, greases and solvents.

Maintenance Requirements

- No maintenance of the membrane is normally required provided significant substrate movement does not occur.
- In the event of damage to the membrane, the membrane must be repaired by removing the damaged portion and applying a patch as for new work.
- Drainage outlets must be maintained to operate effectively.

Warranties

Viking Epiclad is backed by a 20-year product warranty. For specific projects, Epiclad can be eligible to be covered by Viking's Full System Warranty. This warranty covers the product and installation in one document.

Company Product Information

Environmental

Epiclad has a potable water certificate - drinking water can be collected off an Epiclad roof.

CAD Details

Please visit our website www.vikingroofspec.co.nz or our masterspec listing for our latest CAD Roofing details.

Physical Properties

Both the 1.14mm and 1.52mm thick EPDM membranes are available in standard (STD) and Fire Retardant (FR), which may be utilised to comply with specific Underwriters Laboratories (UL) code requirements. Refer to the Carlisle Code Approval Guide, published separately, for specific UL approved assemblies.

Physical Property	Test Method	Spec.Metric (Pass)	Standard	FR
Tolerance on nominal Thickness, %	ASTM D 412	± 10	± 10	± 10
Tensile Strength, min (MPa)	ASTM D 412	9	10.7	10.7
Elongation, Ultimate, min, %	ASTM D 412	300	480	480
Tear Strength, min, %	ASTM D 624 (Die C)	26.3	35.0	35.0
Factory Seam Strength, min	Modified ASTM D 816	Membrane Rupture	Membrane Rupture	Membrane Rupture
Resistance to Heat Ageing* Properties after 4 weeks @ 116° Tensile Strength, min, (MPa)	ASTM D 573	8.3	10.3	10.3
	ASTM D 412			
Elongation, Ultimate, min, %	ASTM D 412	200	225	225
Tear Strength, min (kN/m)	ASTM 624	21.9	37.6	37.6
Linear Dimensional Change, max, %	ASTM D 1204	±1	- 0.4	- 0.4
Ozone Resistance* Condition after exposure to 100 pphm Ozone in air for 168 hours @ 40°F Specimen is at 50% strain	ASTM D 1149	No Cracks	No Cracks	No Cracks
Brittleness Temp, max (deg C)	ASTM D 746	- 45	- 55	- 55
Resistance to Water Absorption* After 7 Days in immersion @70°C Change in mass, max %	ASTM D 471	+ 8 - 2	2.0	2.0
Water Vapour Permeability* Max, perm-mils	ASTM E 96 (Proc B or BW)	0.10	0.05	0.05
Resistance to Outdoor (Ultraviolet) Weathering * Xenon-Arc 7560 kj/m²	ASTM G 26	No Cracks	No Cracks	No Cracks
total radiant exposure at 0.70 W/M² irradiance, 80°C black panel temperature	No Crazing	No Crazing	No Crazing	

* Not a Quality Control Test due to the time required for the test or the complexity of the test. However, all tests are run on a statistical basis to ensure overall long-term performance of the sheeting.