



Viking
RoofGarden

bring your
roof to life

Roofspec
Viking

Taking care of detail

www.vikingroofspec.co.nz



Viking Roof Garden: **stunning environmental impact**

**Helping improve the quality of life
in our urban environments and
reducing the impact on our
limited resources.**

The Viking Roof Garden System is designed to do just that offer both functional and aesthetically appealing benefits.

What is a roof garden?

A roof garden is a roof that is partially or completely covered with vegetation and a growing medium, planted over a waterproofing membrane. It is a system that provides environmental benefits such as cleaner air, reduced stormwater discharge and energy conservation.

Built to last

All waterproofing and drainage components have been developed as a proven system backed by a 20 year product warranty. The soil and vegetation are supplied by a specialised green roof vegetation partner.

Stormwater management

One of the key benefits of roof gardens is the reduction of stormwater run-off. The soil acts like a sponge to absorb, delay and slowly release stormwater, reducing peak loads on city drainage infrastructure.

Air and water purification

Roof gardens help to purify the air by converting the CO₂ into oxygen thus reducing greenhouse gases. Additionally, the soil acts as a filter to assist with purifying the water and neutralising any potential acid rain impact.



How does the Viking Roof Garden System benefit you? help save the planet while you save on costs

Longer roof life

A roof garden protects the roof membrane from climate extremes and physical abuse which increases the life of the roof and its long term performance.

Insulation – Both sound and temperature

Tests have shown that a roof garden's soil and plants can reduce indoor noise pollution. A roof garden will also assist in keeping the building warmer in winter and cooler in summer. Sound and temperature insulation performance can be further enhanced with Polyiso rigid insulation panels incorporated underneath.

Reduces urban heat and energy consumption

Impermeable urban surfaces such as concrete and bitumen, absorb a significant amount of heat during the day that is radiated back into the air. This increased outdoor temperature results (especially evident in cities); in more energy being required to air-condition a building.

Roof gardens help insulate and sometimes shade buildings and the plants on the roof gardens transpire, cooling the surrounding air, further reducing the energy consumption of the building.

Aesthetic value

A roof garden's wonderful look ties the building into the natural environment, providing a haven for bees and birds in metropolitan areas; and for commercial buildings, a pleasant outdoor area for staff.

Space saving

Using the roof surface to accommodate an extensive roof garden means you are utilising the building's 5th wall to create outdoor public space instead of displacing further real estate.

A considerably large green footprint has been left... on the roof

The Viking Roof Garden System has drastically transformed the look of this home.

THE CHALLENGE

An Auckland homeowner wanted to leave an extra green footprint when designing a kitchen-dining-living room extension at their Mt Eden character villa.

The extension resulted in a larger-than-normal proportion of the site being occupied by building. This required the designer to think outside the box as the disproportionately large roof area ran the risk of putting too much pressure on the public stormwater system during periods of heavy rain; leading to surface flooding.

It was vital to the homeowner, that his new roof solve this potential issue as well as have insulation properties, require little maintenance, stand the test of time and have a unique aesthetic presence.

THE SOLUTION

To address the possible stormwater issue and add an element of difference to their home, the homeowner decided to install a full Viking Roof Garden System, using Viking Enviroclad as the waterproofing membrane.

The soil of a roof garden system acts like a sponge to absorb, delay and slowly release stormwater while acting as a filter to purify the water. The oxygen produced by the planted vegetation helps to insulate and shade the building; reducing the energy consumption of the building and greenhouse gases. It also minimises the exposure of the actual waterproofing membrane to climatic extremes, increasing the life of the roof and its long term performance.

With approximately 120m² of roof garden surface area supporting an average of 500mm deep of growth medium; this took a huge amount of pressure off the public services, by providing an absorbent catchment





facility of approximately 60m³. This feeds rain water into the stormwater system in a more controlled manner than would be the case if a sudden downpour pelted the impermeable surface of a traditional roof.

To add to this, some of the water from this roof will feed into a grey-water tank used for watering gardens; cleaning cars and flushing toilets.

THE RESULT

The Viking Roof Garden System has drastically transformed the roof of this extension and overall look of the entire home.

The homeowners really like the fact they are able to do their part when considering how their home and water usage affects public services, all while minimising the physical abuse his roof would have endured otherwise. This decision has led them making a considerably large, green, eco-friendly footprint.

An additional advantage is that the waterproofing and drainage components of a Viking Roof Garden System are backed by a 20 year product warranty.

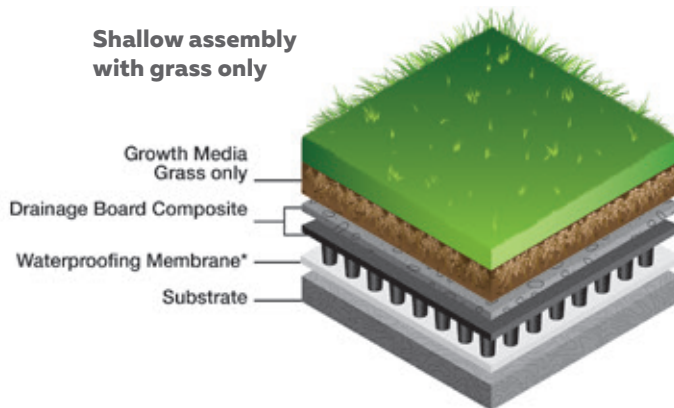


What are the options for your roof garden?

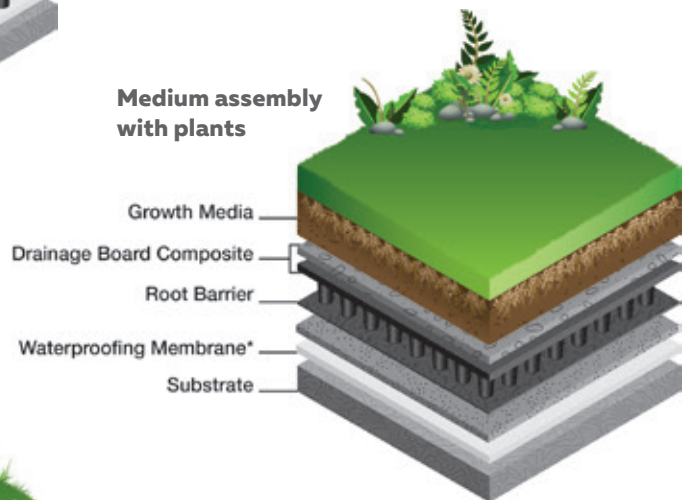
proven options to suit your needs

Viking Roofs spec offers a range of roof garden systems and works closely with all project stakeholders to create a custom roof system that meets New Zealand building code requirements and the needs of the building owner.

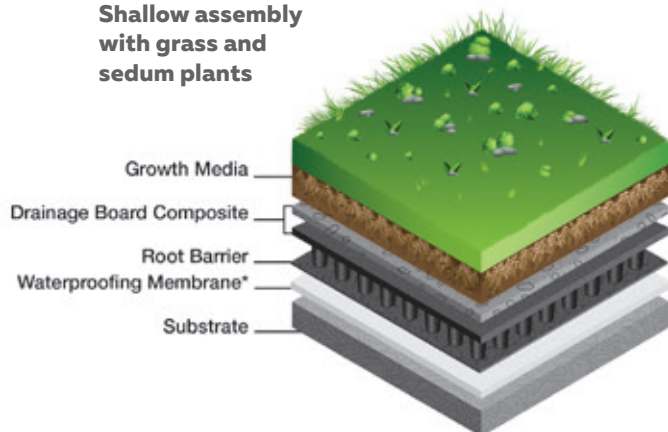
Shallow assembly with grass only



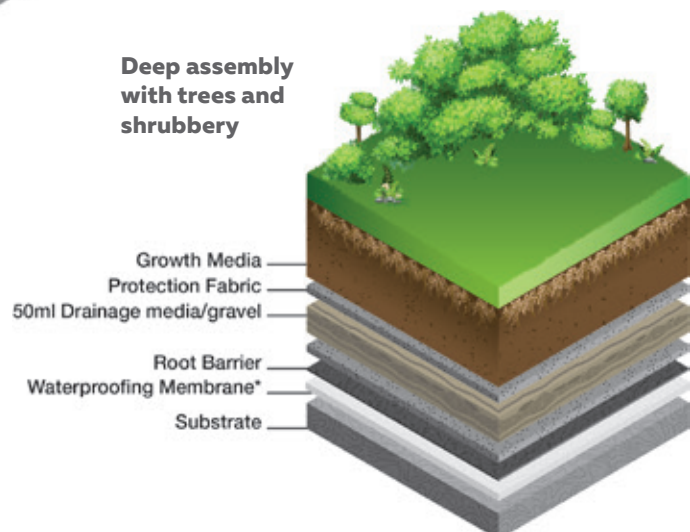
Medium assembly with plants



Shallow assembly with grass and sedum plants



Deep assembly with trees and shrubbery



*Waterproofing membrane - minimum thickness of 2mm for deep and medium assemblies, minimum 1.5mm for Shallow assemblies

TECHNICAL INFORMATION SHEET

Viking Roof Garden System Components

The Viking Roof Garden System incorporates heat weldable, or torch-applied sheet waterproofing membrane technology with complementary layers and accessories (outlined below) to provide a high performance, watertight system.

Plants and Soil

The type and location of a building will impact on the specification of your roof garden. Certain plant and soil types are more conducive to a roof garden environment than others. We can recommend suitable plant and soil compositions to meet your needs.

Drainage Board Composite

This layer incorporates a combination of a moisture retention fabric that retains water from the soil above to draw on and a sheet with 'dimples', designed to retain the required amount of water in the upward-facing cups whilst slowly releasing the balance into the stormwater system. A protective fabric is bonded to the bottom for abrasion resistance.

Root Barrier

This polypropylene sheet is formulated to resist root penetration protecting the most important layer below, the waterproofing membrane.

The root barrier is loose laid although heat welded at the seams.

Membrane Option A Viking Enviroclad Membrane

Enviroclad is a wide sheet (3.0m) thermoplastic single-ply membrane with heat-welded (vulcanised) seams that create stronger, flatter laps. This technology allows for quicker installation time while assuring watertight integrity.

Membrane Option B Viking Roof Garden FLL Anti-Root Torch-On Membrane

The Viking Roof Garden FLL Anti-Root Torch-On Membrane two-layer system is designed to specifically deal with invasive roots. Aside from the chemical properties infused in the bitumen during manufacture, ensuring roots don't penetrate into the building, this membrane's exceptional rot-proof polyester reinforcing mesh has been designed to avoid shrinkage and withstand extreme structural movement.

Aluminium Garden Edging

This is a 3m long L-shaped accessory with a series of vertical drainage slits running along its length to tastefully encase the garden assembly perimeter while separating it from walkways and transitions to drains



Aluminium Drainage Box

The drainage box fully protects the roof's drains from abrasive ballasting. The lid allows easy access to the outlet for maintenance.



Product Specification

CODE	DESCRIPTION	METRES
SRG001	Drainage Board Composite	1.2 W x lineal
SRG002	Root Barrier	3.6 W x lineal
STP510	Enviroclad Membrane	3.0 W x lineal
SRG004	Alum Edging	3.0 L x 75mm W x 100mm H*
SRG005	Alum Drainage Box	0.53m2 x 100mm H*

* other dimensions available on indent

masterspec



**Contact us here
to meet your needs**

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