

Roofspec  
**Viking**

*Taking care of detail*

# Viking Roof Garden

Bring your roof to life





The focus on improving the quality of life in our urban environments and reducing the impact on our resources can be assisted with the installation of a Viking Roof Garden System. This system offers both functional and aesthetically appealing benefits.

A roof garden is a roof that is partially or completely covered with vegetation and soil, or a growing medium, planted over a waterproofing membrane. Specifying a system that provides environmental benefits such as clean air, reduced storm water and energy conservation is what an increasing number of building owners are asking for.



### Storm Water 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, therefore reducing peak loads on city drainage infrastructure.

### Air and Water Purification

Roof gardens help to purify the air by converting the CO<sub>2</sub> 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.

### 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 which is radiated back into the air. This increased outdoor temperature results in more energy being required to air-condition a building.

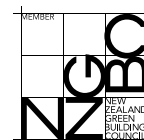
Roof gardens help insulate and shade buildings, and the plants on the roof gardens transpire, thereby cooling the surrounding air - further reducing the energy consumption of the building.

### 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.





## Viking Roof Garden System Components

The Viking Roof Garden System incorporates heat weldable, wide 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 system is a combination of (i) a layer of moisture retention fabric which absorbs and retains water for the soil above to draw on and (ii) a sheet of plastic with 'dimples', designed to retain the required amount of water in the upward-facing cups. A protection fabric is bonded to the bottom.

### Root Barrier

This polypropylene sheet is formulated to resist root penetration and therefore protect the most important layer below – the waterproofing membrane.

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

### Protection Fabric

This needle-punched polypropylene fabric (used for medium and deep assemblies) is stabilised to resist soil chemicals and mildew and to prevent abrasion of the waterproofing membrane

### Enviroclad Membrane

Enviroclad is the pinnacle in roofing membrane waterproofing solutions.

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

### Aluminium Garden Edging

This is a 3m long L-shaped accessory with a series of vertical drainage slits running along its length to separate the roof garden assembly from walkways and transitions to drains.



### Aluminium Drainage Box

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



### Comprehensive Quality Assurance

A Viking Roof Garden is backed by a 20 year warranty or specific projects may qualify for our Viking Full System Warranty.

The Full System Warranty covers both the materials and the workmanship in the one document for the building owner.

For more information visit [www.vikingroofspect.co.nz](http://www.vikingroofspect.co.nz) or call 0800 729 799

## Product Specification

Code	Description	Metres
SRG001	Drainage Board Composite	1.2 W x lineal
SRG002	Root Barrier	3.6 W x lineal
SRG003	Protection Fabric	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

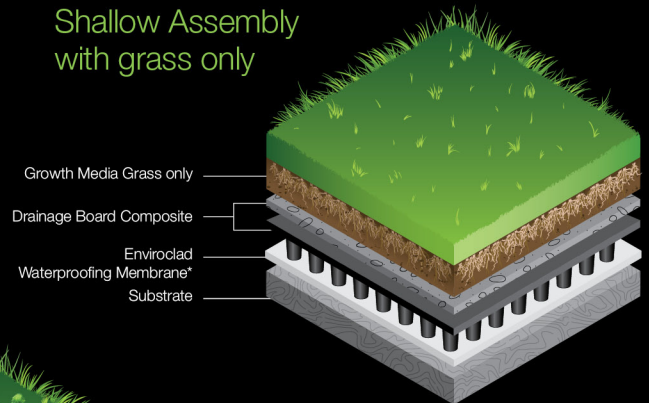




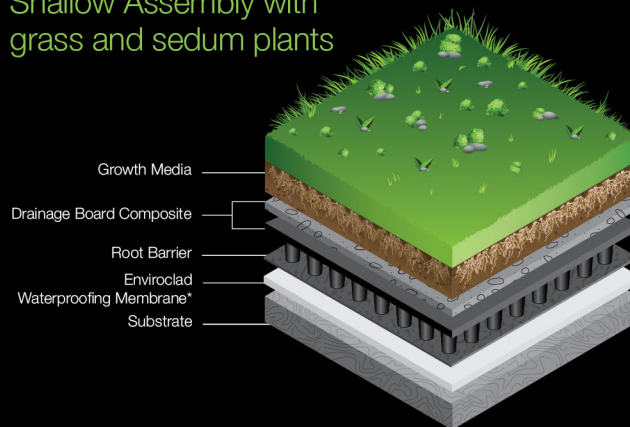
# Roof Garden Solutions

At Viking Roofspec, we offer a range of roof garden systems which can be adapted to meet your project requirements. We recognise that each roof garden is unique, so we'll work with all project stake-holders to create a custom roof system that meets New Zealand Building Code requirements and the needs of the building owner.

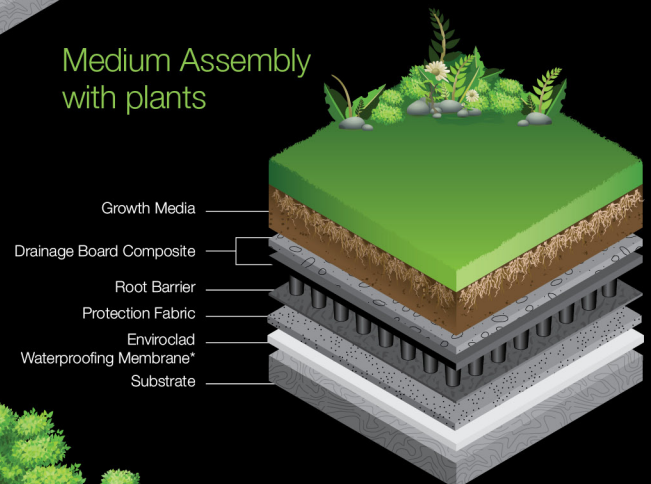
## Shallow Assembly with grass only



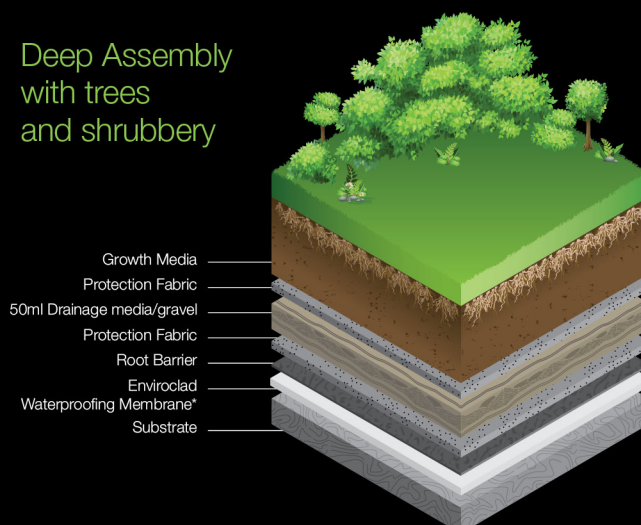
## Shallow Assembly with grass and sedum plants



## Medium Assembly with plants



## Deep Assembly with trees and shrubbery



\* Viking Enviroclad - minimum thickness of 2mm for deep and medium assemblies, minimum 1.5mm for Shallow assemblies

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