

NATURAL HABITATS

Expression of Interest
Green Roofs

2014

NATURAL HABITATS HAS:

- A proven track record for producing innovative and award winning design solutions
- Over 100 highly skilled friendly staff there is always someone willing to help you
- Experience working in a wide range of conditions and cultures, our projects can be found throughout New Zealand and the South Pacific
- An in-house design studio of landscape architects and designers, working in a collaborative environment to generate considered design responses
- An in-house estimating team to ensure you get the best value; saving you time and money
- Landscape craftsmen with a diverse range of expertise in landscape construction and planting and a wide range of horticultural and building qualifications, they specialise in the delivery of a high quality landscapes that stand the test of time
- Landscape care teams with extensive horticultural knowledge, they can provide you with meticulous ongoing care, to ensure your landscape continues to look its best

“Good design is obvious. Great design is transparent.”

JOE SPARANO



ABOUT GREEN ROOFS

Green roof infrastructure is more than just soil and plants on a roof. It consists of specialised media, selected plant species, drainage and root barriers, which support the growing of vegetation on top of buildings. Whether you are after an extensive, semi-intensive or intensive Green Roof, we would love to help you green your life from the top down.

Green roofs not only radically reduce stormwater runoff and therefore the cost of disposal, they also provide greater insulation for a building, prolong the life of the roof membrane and reduce noise penetration. Installing a green roof makes a valuable contribution to the external environment, reducing water run off, and providing an inhabitable environment to promote biodiversity. and they are great to look at and use, increasing the worth of the real estate they are on and viewed by.

FINANCIAL BENEFITS:

- Increases sale value of project from tenant/market demand
- Carbon capture
- Savings on energy and storm water
- Reduction in project infrastructure cost
- Life-span of roof water proofing extended
- Food production and amenity opportunity
- Enhanced public perception of the company (green branding)
- Space saving

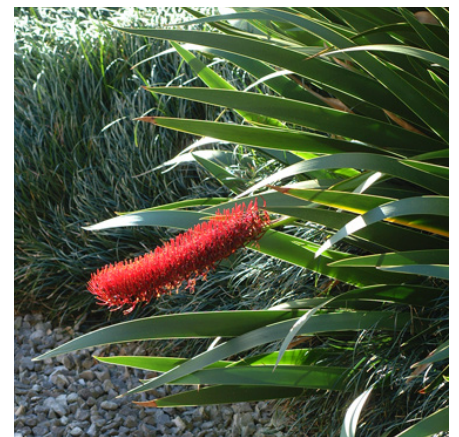
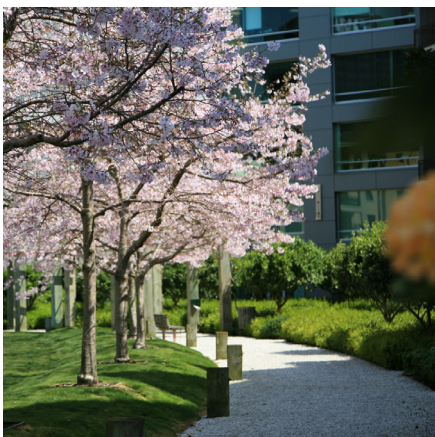
Natural Habitats pioneered Green Roofs in New Zealand in 1994. We have designed and installed many since then.

Green Technology:

Using natural processes and systems to solve urban development issues and enhance the value of a project.

“Make green a no brainer.”

BILL DUNSTER, ZED FACTORY



TYPES OF GREEN ROOF

Natural Habitats provides two broad types of green roofs: Intensive green roofs and Eco-Pillows.

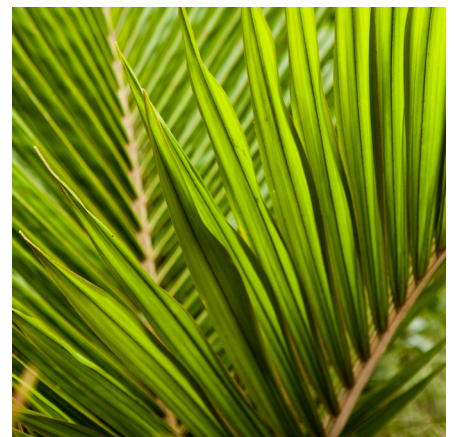
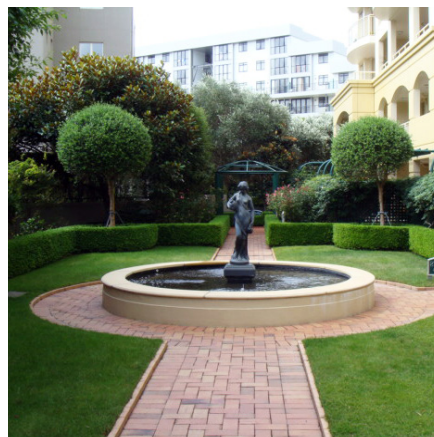
INTENSIVE GREEN ROOF

Saturated weight: Typically about 300kg/m² (excluding live loading)

Depth of media: Approx 100mm for lawn; 300mm for shrubs; 500mm for small trees

Plant selection: A large diversity, including lawn, shrubs and trees

Intensive green roofs are designed in the same manner as extensive roofs, however with a greater soil profile. They are usually designed to be used for recreation as well as to gain the other benefits. For these reasons they accommodate lawn, shrubs and trees. Weight-loading on the building structure can provide challenges, however these can be overcome with a number of strategies. Though they require more maintenance than extensive green roofs, the maintenance will normally not exceed that of an equivalent garden on the ground.



TYPES OF GREEN ROOF

ECO PILLOWS

Saturated Weight: 50kg/m²

Standard dimensions: 400mm W x 800mm L x 150mm D

Plant Selection: A diversity, including groundcovers, succulents, bromeliads, flaxes and many other species

The EcoPillow is our patented pre-grown green roof that offers all the proven benefits of a green roof while reducing structural costs and establishment risks. The EcoPillow's lightweight growing media means that a lush green roof can be provided with a reduced need for structural support, opening up the possibility of retro-fitting.

The EcoPillow media is highly absorbent, yet free draining, and will not degrade or slump over time. The media is contained by high-quality textiles and galvanized steel mesh. This solves the issue of media loss due to wind-scouring. It also allows pitched roofs to be vegetated without any risk of the media sliding.

BENEFITS:

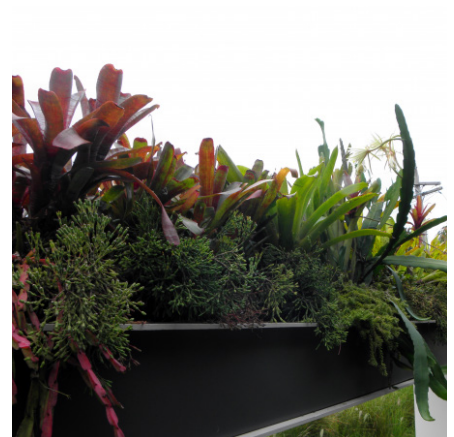
- Lower building cost as ultra light, 50kg/m² saturated
- Lower risk - no wind scouring or rain washout of loose media
- Being modular EcoPillows are faster to install
- Pre-grown so semi-mature plants means immediate impact
- Slashed maintenance cost as weeds cannot penetrate established plants
- Easily relocated, further enhancing its adaptability

Lighter, faster, with less risk, The EcoPillow by Natural Habitats is a no brainer for anyone wanting the benefits of Green Roofs for a wider range of projects and budgets.



“Creating a lightweight and modular product were design priorities. By reducing overall weight, we reduce the buildings need for additional structural support and open the possibility of retrofitting - something we feel the market is demanding.”

GRAHAM CLEARY, DIRECTOR OF NATURAL HABITATS



GREEN ROOFS

PORT WAIKATO ECO PILLOWS

LOCATION: PORT WAIKATO
CLIENT: ENGINEER

DEMONSTRATES THE BENEFITS OF ECO PILLOWS:

- How lightweight the Eco Pillow is at 50kg/m² allowing for retrofitment on buildings
- Quick to install with reduced maintenance during establishment, as weeds cannot penetrate the fully encased product
- Pre-grown modules, so semi-mature plants provide cover from day one

“Creating a lightweight and modular product were design priorities. By reducing overall weight, we reduce the builders need for additional structural support and open the possibility of retrofitting - something we feel the market is demanding” says Graham Cleary, Director of Natural Habitats.

Green Roofs radically decrease stormwater runoff, therefore reducing the cost of disposal and environmental concerns. They also provide greater insulation for a building, prolong the life of the roof membrane and reduce noise penetration.

Installing a Green Roof makes a valuable contribution to the external environment by providing habitats which promote biodiversity. They are great to look at and increase the real estate worth of the building they are on.

“This living roof of coastal native species, has been managed well in a very harsh. The result is a small but beautifully formed high rise landscape in an unexpected place that showcases the versatility of natives and new technology.”

**JUDGES COMMENTS FOR THE 2014
LANDSCAPING NEW ZEALAND LANDSCAPES
OF DISTINCTION AWARDS**



GREEN ROOFS

THE PARC

LOCATION: CBD, AUCKLAND

DEMONSTRATES:

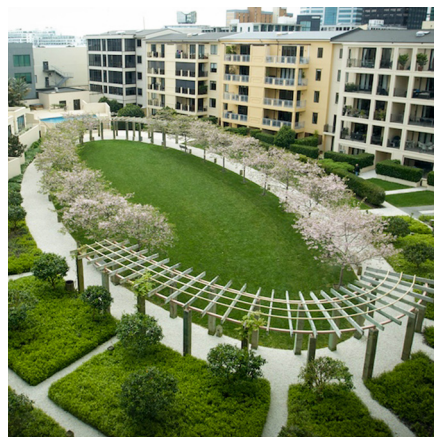
- 'The Parc' was one of the first green roofs of this size to be constructed in New Zealand in 2002 and may still be the largest at 3500m²
- Semi-intensive Green Roofs (depth 100-400mm) can thrive years down the track

This park is a private sanctuary with expansive lawn areas and pool. The design is visually stunning viewed from the above apartments and provide a degree of separation and privacy for the apartments on the ground level.

The structure underneath the garden was designed to support extra weight around the edges of the lawn where extra depth in soil was required for the establishment of trees. Growing media was specifically manufactured to be lightweight, while the depth of the lawn within the centre of the park is only 100mm.

“Testament to the design is that eight years after it still retains an integrity and drama.”

JUDGE, LANDSCAPING NEW ZEALAND AWARDS



GREEN ROOFS

JAGGED EDGE

LOCATION: QUEENSTOWN

CLIENT: WATERPROOF STRUCTURES

DEMONSTRATES:

- How Natural Habitats can custom design roof medium in accordance with weight loading, roof size, site conditions and plant altitude

Queenstown's most expensive super-home was several years in the making and our Queenstown branch was brought in at the end of the project to make the client's vision for their Green Roof a reality.

Planted with snow tussock these green roofs cloak the garage and guest rooms. It required sufficient drainage to maintain plant health and a medium that would ensure plants survived the harsh climate.



GREEN ROOFS

QUAY WEST

LOCATION: ALBERT ST, AUCKLAND CBD

CLIENT: QUAY WEST

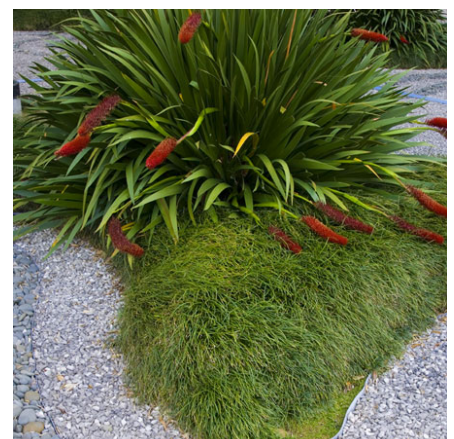
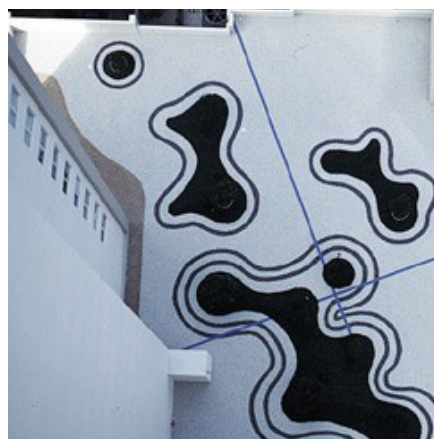
DEMONSTRATES:

- Natural Habitats were the New Zealand pioneers in Green Roof construction starting in 1994
- How a Green Roof can add value to your building

**1996 Landscape Industries
Association of New Zealand
Awards: Best Commercial**

Natural Habitats designed and built New Zealand's first Green Roof enabling Quay West to add an additional five floors to its development. This equated to \$4 million in real estate value.

This green roof is designed as a miniature version of the harbour it overlooks. Islands of planting and established pohutakawa mimic the form of Auckland's iconic isles such as Browns, Waiheke and Rangitoto.



GREEN ROOFS

KAWARAU VILLAGE, HILTON QUEENSTOWN

LOCATION: FRANKTON, CENTRAL OTAGO

CLIENT: HAWKINS CONSTRUCTION



DEMONSTRATES

- How we can custom design a light weight roof media to suit weight loading requirements and provide proper nutrients and drainage for the specified vegetation
- Natural Habitats can provide solutions to equal the most discerning clients

We constructed four Green Roofs totalling over 300m² on the luxurious Hilton Queenstown, Kawarau Village.

Natural Habitats was engaged to supply and install specialised green roof media, select plant species, drainage matting and filter cloth for all of the Green Roofs in the village, and effectively co-ordinated the project completing it within tight timeframes.

