

Greening Ku-ring-gai's Rooftops

Information for residents



Green roofs offer many benefits such as increased insulation.
Find out what a green roof could do for you.

Roofs once considered 'dead-zones' can, with a bit of energy and creativity, be transformed into beautiful, lush gardens - offering habitat for wildlife, reducing energy consumption and capturing stormwater. Have you considered the potential of the space above you?

"They're an attractive way to slow stormwater run-off and provide a natural form of insulation. So they really are a win-win for Ku-ring-gai's environment and property owners."

Ku-ring-gai Mayor, Cheryl Szatow

INSTALLING A GREEN ROOF

Installing a green roof need not be as difficult as you might think. There are plenty of creative DIY options available but you should call in the professionals first to make sure you don't run into any structural or technical pitfalls.



WHAT IS A GREEN ROOF?

A green roof is a living, breathing space full of plant life resting on top of a roof. While green roofs come in all shapes and sizes they all contain the following elements:

- Waterproofing layer
- Growing medium
- Drainage system
- And of course, plants!
- Geo-textile layer

Most green roofs are shallow with a soil depth of less than 300mm. This is because they are easier and cheaper to install or retrofit onto existing buildings (as less weight is placed on the building than in deeper systems).

Engineering and technological advances are making deeper systems more attractive which is great news for the environment and for you. Deeper systems are able to support a wider variety of plant life (such as shrubs and trees) and create a better buffer against climate extremes.



An established green roof

"By creatively using our roofs and balconies as innovative garden spaces, we're ensuring our green city remains on the up – literally."

Green Roofs and Walls Inspiration Guide

What Green Roofs Provide

The Benefits to You and the Environment

- Increase biodiversity in your neighbourhood
- Reduce and clean storm-water run-off
- Extend roof life due to protection from weather and temperature changes
- Increase your home's property value
- Reduce the urban 'heat-island effect'
- Improve air quality by removing carbon dioxide
- Insulate your home from noise and heat
- Provide space for growing your own food
- Enjoy the health benefits of more green space

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CHOOSING PLANTS

Plants on green roofs have it pretty tough. They are subject to increased wind, living on an exposed edge, intensive sunlight, temperature extremes, extensive periods of drought (if not irrigated) and often excessive shading from adjacent buildings. And all this with only a shallow soil medium to support them. So when choosing plants, think hardy!

Plants should be:

- Wind and drought tolerant
- Have a shallow root system
- Easy to buy and grow
- Easy to maintain.

Australian natives have evolved to cope with Australia's unique environment so they make great alternatives to exotic plants. They also provide greater benefit to local wildlife. Ku-ring-gai Council Nursery at 430 Mona Vale Road, St Ives has an extensive range of native plants suitable for your green roof project.

Alternatively, if you have easy and safe access to your roof garden, you can even use it to grow your own edible plants (which would probably require an irrigation system).

LOCAL RESEARCH

Green roof systems in Australia are still in their infancy and more data is needed to test which Australian native plants will perform best in green roof systems. Ku-ring-gai Council recognised this knowledge gap and funded Macquarie University to conduct a study to test the performance of a suite of locally endemic species in a simulated green roof over an eight-month period.

WANT TO KNOW MORE?

There are lots of resources available to inform, inspire and motivate you about creating a green roof. Here are a few to get you started:

- [Green Roofs and Walls Inspiration Guide](#) Be dazzled by heaps of local designs in this online guide – also includes maps, photos and useful information.
- [Green Roofs Australasia](#) A website packed with news, information and inspiration about green roofs and walls.
- [Growing Green Guide](#) A detailed technical online guide for green roofs and walls.
- [Living Wall and Green Roof Plants for Australia](#) An online PDF publication from the Australian Government.

THE BEST PLANTS FOR KU-RING-GAI

Results of the local study confirmed the following species will perform well in the Ku-ring-gai area in a shallow, non-irrigated green-roof environment.

Blue flax lily
Dianella caerulea



Climbing guinea flower
Hibbertia scandens



Spiny mat rush
Lomandra longifolia



GET INSPIRED!

Green roofs are popping up all around Sydney. Why not visit a few and get inspired!

- **Darling Park** 231-239 & 241-249 Sussex Street, Sydney
- **Embarcation Park** 71 Cowper Wharf Roadway, Potts Point
- **KENS Site** 271 Kent Street, Sydney
- **Lawrence Hargrave Park** 9 Elizabeth Road, Elizabeth Bay
- **Paddington Reservoir Gardens** 251-25 Oxford Street, Paddington
- **Prince Alfred Park** Chalmers Street, Surry Hills
- **Wharf Terraces** 16 Lincoln Crescent, Woolloomooloo
- **Wynyard Park** York Street, Sydney

