Go Green, Go Hard, Go Now with WaterUps Wicking





WaterUps Wicking for Greener Cities for Commercial Developers and LGAs

With 2030 set to be climate change crunch time for Australia, now is the time for urban centres to make it green, to literally put down roots. It's never been more urgent to protect our homes and way of life from the extremes of heat, fire and flood.

WaterUps is the world's most scalable and versatile wicking solution for helping property developers and town planners future-proof estates and communities by creating fast growing and resilient urban greenery.

When it comes to downpour or drought, WaterUps is a unique solution that reduces root-rot in the wet and efficiently delivers water to where plants need it most in the dry. By stopping plant beds from drying out, WaterUps makes biophilic design much more attainable.

Designed and manufactured in Australia from 100% recycled plastic, there's no other system like it. From rooftops to building interiors and exteriors, ground level surfaces, trees and stormwater rain gardens, WaterUps provides exciting, cost-effective and sustainable solutions.

Who Is Using WaterUps

National Capital Authority:

Trialling WaterUps in-ground Tree Reservoir system

Western Sydney Airport:

Trialling WaterUps in-ground Tree Reservoir system

Parramatta Public School: Rooftop gardens retrofit

Sydney Royal Botanical Gardens: Calyx and Community Greening projects

Local Councils:

Various local Sydney and South Australian councils, Woollongong, Forbes, Horsham, Hobart, Perth, and Ipswich for pop-up parks, street trees, planter boxes, community spaces and gardens

Social Housing:

Hume Housing, Link Wentworth, Bridge Housing



World leading wicking technology – massive water savings

WaterUps solutions incorporate our world-leading wicking technology to water plants from underneath. Water is added to the water reservoir via an inlet pipe at the soil surface. WaterUps wicking cells support the soil to keep it aerated. The feet that support the cell are filled with perlite that wicks water to the soil above through capillary rise. Fertiliser can also be added this way.

The standard wicking cell is 40cm x 40cm containing 4 wicks. Compared to top-down irrigation systems, WaterUps uses 80% less water.

The WaterUps SIC keeps soil moist

Our Sub-irrigation Channel (SIC) contains 1 WaterUps Channel (1340mm L x 470mm W x 160mm H) with 3 WaterUps Wicking cells. The channel reservoir can hold 110L for every $1m^2$. SIC Extension Kits allow you to build any length or width garden bed.

This makes fast work of building sustainable garden beds and retrofitting existing planters, providing the perfect soil environment for healthy plant growth. Variations are available for street trees and large trees via the WaterUps Tree Reservoir.





Smart Automatic Watering – No Wastage, No Danger

One of the biggest challenges with automatic watering systems – particularly in interior applications – is overwatering, wastage and water run-off being unsightly and a slip hazard.

An automatic system can be fitted to our WaterUps SIC reservoir to facilitate automatic refill. The water volume added is set according to the time of year with the flow preventing the water reservoir from overflowing.

WaterUps for Buildings



Green Rooftops

With its own in-built reservoir, WaterUps can capture and re-use rainwater for rooftop gardens and vegetation. It provides a reliable water source without the need for tanks, pumps and reticulated timers.

Using interconnected sub-irrigation channels, the water reservoir can be easily topped up at a single point. The system helps keep the plants alive in challenging rooftop garden growing environments, creating a thriving green insulation layer that protects against the sun's heat.

Large Pots or Raised Planters

For large pots or planters for trees on rooftops, building forecourts, foyers or undercover areas where plants don't catch much rain, WaterUps can provide a water efficient solution, enabling plants to have the optimal conditions for sustained growth. The scalable design means the solution can work in pots of all sizes. Bollard Tree Tubs made from stainless steel or aluminium are also available.

These raised planters with inbuilt wicking use 20% of the water of top-down irrigation – thus – require far less watering. Automated water top-up systems can be installed.

Mobile Planters for Multi-Purpose Spaces

WaterUps Mobile Planters give building foyers and other spaces the flexibility they need to provide a mini oasis that can be easily moved to create borders or designated areas. The Oasis 1240 and its mobile aluminium based with heavy duty castors make light work of moving up to 200kgs. Watering can be by hose or watering can.



Vertical Green Walls / Hanging Pot Plants

WaterUps can also provide wicking solutions for green walls and hanging baskets.

Exterior Garden Beds

Raised or inground garden beds have much to gain from WaterUps wicking. Even in ground, they use around 20% of top-down watering systems to water the same area. Automated systems can be set up with valves to cut off when the reservoir if full – thereby maximising water captured from rain.

Wicking Capillary Mats for potted colour displays

Many councils establish seasonal floral colour displays based on arrangements of potted plants sitting in metal framed planters. These generally require twice daily watering. With the WaterUps Sub-irrigated Capillary Wicking Mat re-watering is required generally on a weekly basis.

WaterUps for Land

Across Australia, many councils are addressing future overheating by increasing their tree canopy. Sydney, for example, aims to plant 5 million trees by 2030, increasing tree canopy from 16 to 40 per cent.

Many tree planting initiatives, however, will fail without adequate water in the first three years of a tree's life. In the photo below, note the wastage that has occurred in Noosa which has had a very dry summer.





Street Trees

The WaterUps Tree Reservoir is specifically designed for council and developer tree planting and revegetation projects to boost survival rates of young trees, while saving around \$580 per tree in the first 3 years of a trees life (due to reduced watering schedule.)

This tree reservoir pays for itself within the first month and delivers:

- 75% reduction in watering schedule for the first 18 months
- up to 80% less water usage than current above ground methods
- 30% increase in canopy growth year on year for the first 3 years.

Transport Corridors

Two of the biggest heat generators in our cities are roads and concrete pathways.

WaterUps solutions such as the Tree Reservoir and SIC can be used to establish resilient green corridors on the sides of roads and in central verges.

With governments encouraging more active transports, these dedicated transit routes will need to be designed to ensure adequate greenery and shade.

Rain Gardens

Rain gardens or bio-retention systems protect our waterways from being polluted with excess nutrients, rubbish and toxins from stormwater runoff. They are less effective after extended dry periods due to the essential plants dying off and weeds taking hold. WaterUps can be used to extend the effective life of rain gardens by retaining more rainwater and stormwater over a longer period, so the plants have a better, regular supply of water and work as intended. The water in the system provides an easy way to test the health of the system and water can be added in dry spells to ensure plants survive.



Lawns

Trials are currently underway in Queensland and Western Australia for WaterUps usage in lawn installations.

The Need for Now

With 70% of the world's population being urbanised by 2050, WaterUps enables urban greening projects to be implemented at the scale needed to help improve the outlook for our communities, humanity and our planet.

WaterUps solutions can:

- Save up to 80% in watering costs and time
- Create stronger, healthier root structures faster, enhancing plant resilience
- Improve canopy growth by at least 30% year on year in the first three years (due to stronger root systems)

It's the unique plant solution that enables our communities to go hard, go fast and go now with urban greening.



waterups.com.au

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