



ecoRain[®]
Rainwater Utilisation Systems



WATER QUALITY

Hidden benefits of ecoRain® tanks

ecoRain® tanks are hidden below ground, are strong and durable, with an almost indefinite life span, and they help to improve water quality.

Out of sight:

Underground tank does not take up valuable land.

Load bearing tank:

The load-bearing capacity of the concrete tank allows it to be located almost anywhere on site.

Continuous filtration:

Self-cleaning filter and skimmer lower contaminant build-up..

Highly efficient:

Collects up to 95% of annual rainwater run-off.

Low maintenance:

Self-cleaning filter requires maintenance only twice a year.

Sustainable:

Extends the capability of existing water supply systems to keep pace with population growth.

Bushfire protection:

Can provide fire fighters with access to valuable water resources.

Improved water quality:

Underground concrete tanks are an ideal method of storing water, providing an almost germ-free environment away from light and warmth.

Range of sizes:

Three standard tank sizes (3000, 5000 and 10,000 litres)

Three standard systems



ecoRain3™

Capacity 3000 litres. Suitable for small dwellings (external taps only).



ecoRain5™

Capacity 5000 litres. Suitable for internal use in small dwellings (toilet, washing machine) or high outdoor usage (garden irrigation).



EcoRain10™

Capacity 10,000 litres. Suitable for combined internal and external water usage, or for small multi-dwellings.

Complete system solution

■ Tank ■ Filter ■ Pump ■ Control

Underground storage

Rainwater is best stored underground, where reduced warmth and light ensure an almost germ-free environment. The best storage tank material is concrete because concrete cisterns are strong, durable, last indefinitely and also neutralise rainwater.

Mains pressure supply

Water is drawn from the tank with a submersible pump. The pump is activated by the control system whenever a tap is turned on.

Tank top-up in dry spells

To cover water demand during dry periods, the Rocla ecoRain® system is fitted with mains water back-up.

When the tank runs low, the system automatically switches to mains water, ensuring continuity of supply. When the tank begins to refill with rainwater, the controller then switches back to tank supply.

Alternatively, the system can be supplied with a tank top-up device that detects low water level in the tank and automatically tops it up from the mains supply.

■ Self-cleaning filter

After the rain is collected from the roof, the filter system removes leaves, debris and fine particles and washes them into the stormwater system.

There is no need for a "first flush" system to remove debris, which wastes rainwater. Pollutants are filtered out continuously and are swept into the stormwater drain along with small amounts of rainwater.

The system is self-cleaning and requires maintenance only twice a year. The filter insert can be easily removed and cleaned in a dishwasher.

A major benefit of the filter system is that the screen prevents mosquitoes from gaining access to the tank.

■ Controlled inlet velocity

To avoid re-suspension of fine sediments that gather on the bottom of the tank, the velocity of the incoming rainwater is reduced by doubling the diameter of the inlet pipe and diverting the flow towards the water surface. Another important function of the inlet is the introduction of oxygen into the cistern to avoid anaerobic conditions.

■ Removing pollutants

Once a maximum level is reached in the tank, the siphon constantly skims off the water surface and removes floating pollutants like pollen. The two inlets are slit-shaped to increase the skimmer effect and prevent rodents from entering the tank from the stormwater drain.



Range of filters available for various capacities and system designs



Special inlet design slows the velocity of rainwater entering the tank and prevents it from stirring up sediments



Skimmer removes floating pollutants and prevents rodents from entering tank

ecoRainPlus™ rainwater utilisation system

Packaged solution for higher volumes

The Rocla ecoRainPlus™ rainwater utilisation system is designed for high run-off flows. Large roofs such as those on factories and shopping centres have the potential to collect large amounts of valuable rainwater for use in industrial processes as well as for use in toilets and for irrigating gardens.

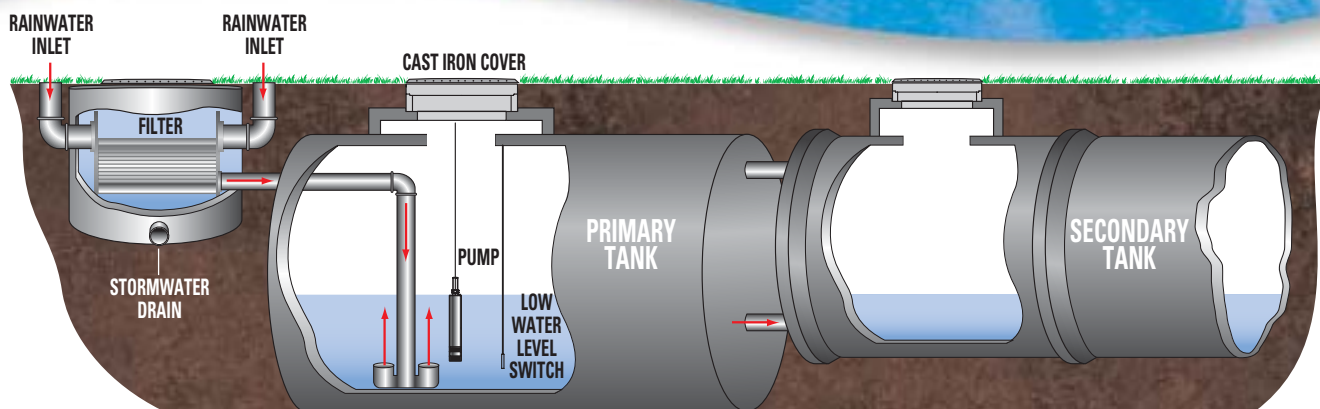
The complete ecoRainPlus™ system can utilise a variety of pumps, controllers and mains supply systems to optimise the package and tailor the system for any application. Storage volume is unlimited.

High-volume filters continuously filter all of the roof water. The filter is mounted in a separate filter pit that distributes the filtered water to the storage tanks and continuously removes filtered material through the overflow outlet, also located in the filter pit.

The ecoRainPlus™ system is ideal for residential and industrial developments that already require stormwater detention, allowing the stored water to be pumped back for applications such as toilet flushing and irrigation of landscaped areas.



The ecoRainPlus™ system utilises a variety of tanks, pumps, controllers and mains supply systems to tailor the package to the application.



Self-contained water supply for homes, business and industry



ecoRain® underground tanks don't take up valuable land, spoil the view or hinder access

The Rocla ecoRain® rainwater utilisation system is more than a rainwater tank. It's a complete, self-contained water supply system that harvests rainwater for daily use.

Rainwater is collected from the roof, stored out of sight in an underground concrete tank, then pumped back to garden taps, toilets and laundry. When the tap is turned on, an automatic electric pump provides instant, mains-pressure rainwater.

During long dry spells, the ecoRain® Control System draws directly from mains water.

The ecoRain® system is suitable for:

- Domestic use
- Multi-residential developments
- Shopping centres
- Large factories
- Public amenities
- Sports ovals
- Golf courses
- Schools
- Council parks
- Landscape irrigation
- Combined detention and retention

Rainwater can be used to maintain gardens and landscaping, for flushing toilets, washing clothes, vehicles, etc. This helps to save valuable drinking water and reduce stormwater run-off, while reducing water bills.

Developers embrace savings

Bunnings goes green with ecoRain® systems

The Rocla ecoRain® rainwater utilisation system is helping Bunnings to "go green" at its latest Queensland stores by capturing stormwater runoff for reuse. The new Bunnings Warehouse and Garden Centre at Stafford in Brisbane, for example, includes two separate ecoRain® systems - one for recycling roof runoff for toilet flushing, plus a larger system to recycle runoff from the outdoor nursery.

Wilbow breaks new ground in water saving

Melbourne-based international developer Wilbow Corporation raised the benchmark for water conservation by offering housing lots ready-fitted with ecoRain® systems. Allotments in the first stage of its Vaucluse Estate development were provided with a 10,000-litre ecoRain® tank. The public response was so positive that Wilbow committed to including the tanks in subsequent stages of the 25ha development.





ecoRain[®] Rainwater Utilisation Systems

For further information on the Rocla ecoRain[®] rainwater utilisation system or other products from Rocla Water Quality

Call Rocla on
131 004

E-mail your inquiry
solutions@rocla.com.au

Or visit our website
www.waterquality.rocla.com.au

- Sydney
- Dapto
- Dubbo
- Newcastle
- Glen Innes
- Grafton
- Canberra
- Melbourne
- Avoca
- Traralgon
- Wodonga
- Brisbane
- Toowoomba
- Mackay
- Cairns
- Adelaide
- Perth



Rocla Pty Limited
ABN 31 000 032 191
Trading as Rocla Water Quality
A member of the Fletcher Building Group
® Trade mark of Rocla Pty Limited
© Rocla Pty Limited June 2006

The contents of this brochure are copyright and may not be reproduced in any form without the prior written consent of Rocla Pty Limited. Recommendations and advice regarding the use of the products described in this brochure are to be taken as a guide only, and are given without responsibility on the part of the company or its employees. Individual designs involving the use of these products should be undertaken by a competent engineer.