Coliban WATER

savewater!®

Information sheet

Rainwater Tanks

In cities and towns with mains water, rainwater tanks are generally used for:

- **Watering small domestic gardens.**
- **Mains water substitution for flushing toilets.**
- **Cold water laundry use.**

But are generally NOT recommended for storing drinking water.

General information

Rainwater tanks come in a range of materials, sizes, shapes, styles and colours.

Issues to consider when buying a tank include:

- The intended use of the water, e.g. for toilet flushing, the number of people in the household.
- Whether it is to be above-ground or in-ground.
- The appropriate size and shape.
- Durability and transportability.
- The purchase price of the tank and the cost of installation.
- Tank accessories to maximise effectiveness and minimize ongoing maintenance.

How much water will I collect?

This is determined by the area of roof connected to the tank via the storm water down pipe. As an example:

- An average house has a roof area of approximately 160 square metres (m^2).
- Assume that 25% of this roof area can be easily connected to a rainwater tank, i.e. 40 m^2
- Each m2 of roof area collects 1 litre (L) of water for every 1 millimetre (mm) of rainfall received.
- Assume a typical rainfall event of say 10 mm of rain.
- Water collected is:
  40 m^2 x 10 mm = 400 L collected by the tank.
- For a more accurate assessment visit www.greenplumbers.com.au and search for rainwater tank summary

Guide to tank size

In general, the size of tank needed for toilet flushing and cold water laundry use is smaller than one used for garden watering. Multiple use tanks need to be larger to meet all user demands.

Toilet flushing

- A tank with a minimum size of 2,200 litres or bigger is recommended.

Garden watering

- Tank water for the garden will mostly be used in the summer when rainfall is low, which means that the tank will not be refilled very often.
- A normal garden hose connected to a tap supplied by mains water will use approximately 1,000 litres per hour. Rainwater tanks have a typical flow rate of 5 - 10 litres per minute (300 to 600 litres per hour) and a small tank (less than 4,000 litres capacity) will provide very limited garden watering over an extended dry period.
- Consider your garden watering requirements and try to purchase the largest tank that you can afford. However as a rule of thumb, it is suggested that a tank of between 4,000 and 5,000 litres is installed.
- Where space is an issue, you may wish to consider installing two smaller tanks.

Rainwater tank accessories

Apart from the tank itself, there are a few "accessories" which may need to be considered if you are going to install a rainwater tank.
These include: tank stands; first flush separation devices; leaf shedding gutter protectors; mosquito proofing; trickle top up systems; backflow prevention devices; tank to toilet connections; filters and disinfection units and an electric pump for additional water pressure should this be a requirement.

Installation of a rainwater tank

Some rainwater tank installations can be carried out by a competent home handy-person. However you need to be aware that Plumbing Industry Commission guidelines recommend that a **licensed plumber is engaged** to install your rainwater tank.
Wherever a tank needs a connection to the mains water supply, such as for a top up system or a connection to the toilet, a professional plumber is required by law. Some tank installations (particularly for large tanks) **may require a building permit** – contact your local council before installing a rainwater tank.

Maintenance of a rainwater tank

Remember that "prevention is better than the cure", so keep your gutters free from debris with a range of devices or just by cleaning them out regularly. The tank itself needs regular external inspections for leaks and an internal inspection for sludge every few years - if there is a build up of sludge it needs to be removed.
Contact a professional if you need help doing this.

Cost of a tank

The cost of a tank will vary greatly depending on the type, shape, and material. Below is a costing obtained from one local supplier (Bendigo) to give an indication of approximate cost.

Trim tank 1000 litre (.8mW x 1.93mH)	$525
Standard 2,250 litre (1.32mW x 1.65mH)	$590
Trim tank 2,500 litre (1.22mW x 2.2mH)	$695
Tall tank 4,500 litre (1.75mW x 1.87mH)	$895
Squat tank 4,500 litre (2.13mW x 1.26mH)	$930
Standard 9,000 litre (2.49mW x 1.87mH)	$1490
Standard 22,700 litre (3.5mW x 2.36mH)	$2645

Rebate – Tank Installation

Rainwater tank installations (minimum 600 litre capacity) in Victoria attract a rebate of $150, with an additional $150 if the tank is connected to allow toilet flushing with rainwater. In order to claim your rebate from the Victorian State Government, you will require a Certificate of Compliance which can only be issued by a licensed plumber. The current rebate is available until 30 June 2007.

Coliban Water has inserted tank price information and these were correct as at 1st October 2006. Please check your local supplier for latest price information.