

## Information sheet

# INSTALLING A RAINWATER TANK IN NSW

### What plumbing needs to be done?

A plumber will be able to give you some great advice about water tanks, such as the best location and size. You will also be able to get an idea of how much the entire project will cost. A licensed plumber is required by law wherever a tank is connected to the mains water supply, such as a tank to toilet system. A plumber is also required to connect your gutters to your tank and install an overflow to stormwater. Some tank installations (particularly large tanks) may require a building permit. Check with council.

### Preparation

**Delivery:** In most situations, you can arrange delivery with the manufacturer or retailer. It is important to ensure that there is clear access from the street to where you want to put your tank.

**Foundations:** The ground where a tank is going to be located needs to be levelled. Larger tanks will also require either sand or concrete foundations. The tank manufacturer's instructions will guide you, but a plumber should also be consulted when deciding where to put your tank to maximise the catchment area.

**Gutters:** The guttering on your roof is a major part of catching water and will need to be cleared of any leaves or debris. Damaged guttering should be repaired. On some existing houses, the guttering may need to be adjusted to direct the water to the corner of your house where the tank will be installed.

### When should I install my tank?

The best time to install a rainwater tank is when you don't need it. Fitting your tank at the beginning of the wet season will ensure that you have as much water as possible to sustain you during the dry.



### What accessories will I need?

**Pumps:** Most rainwater tank systems will require a pump to generate adequate pressure. Washing machines and some irrigation systems require a level of pressure similar to mains water. When connecting your rainwater supply to your toilet or laundry, leading plumbers recommend a pump which will automatically switch to mains supply when your tank water runs dry. In times of water restrictions you must ensure you are not using mains supply on your garden. You also need to provide electricity to the pump close to the tank. Be mindful of neighbours as pumps can be quite loud: nylon blade pumps are quieter than ones with metal blades.

**First flush diverters:** These devices are useful to divert the first 20 litres of rainfall from entering your tank. This will prevent pollutants on your roof from getting into the tank. For example, many roofs have lead flashing which can be dangerous unless it is painted to prevent contamination.

**Backflow prevention valve:** Regulations stipulate that backflow devices must be installed to prevent tank water from entering the mains system. A backflow prevention valve stops water from your tank from entering back into the mains supply. Most households have backflow prevention devices installed at the water meter. Some pumps also act as a backflow prevention so extra valves are not required. Ask your plumber for further advice.

**Connections, pipes & fittings:** Make sure you ask your plumber about the additional extras you need as they can increase the total cost. Your quote should also include all measures to meet government standards.

**Mosquito proofing:** A rainwater tank can be an attractive refuge for insects and other creatures, especially as a breeding ground for mosquitoes. There are a range of products that you can install on your downpipes and overflows to prevent insects from getting into your water.

**Leaf shedding gutter protectors:** Leaves and debris often build up in gutters which affects water flow during heavy downpours and can potentially contaminate your water supply. Gutter protectors, filters and regular maintenance can help to solve this problem.

**Tank stands:** A tank stand can provide additional pressure if you choose not to install a pump and makes it easier to fill watering cans and buckets at the tank. The type of tank stand or foundation you need will depend on the material, size and weight of your tank. Ensure that you ask your tank manufacturer before you purchase the tank, as the stand may be included. Some stands require building permits so you should consult your local council.

**Trickle top up systems:** If the tank contains mains water it can not be used on the garden during water restrictions. Trickle top up systems use a float valve to measure how much water you have in your tank. When the water level gets too low, mains water will trickle into the tank to top it up.

### How should I maintain my water tank?

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. This can be dangerous so contact a professional if you need help doing this.

### What about BASIX?

The Building Sustainability Index (BASIX) stipulates that a new home in NSW must include an alternative water supply to mains water. A rainwater tank is one way to satisfy this requirement. BASIX also covers renovating old homes ie properties that plan to install a swimming pool must use a tank to supply water to the pool. These standards vary according to region, see [www.basix.nsw.gov.au](http://www.basix.nsw.gov.au) for more details.

### Will I be charged for the water in my tank?

There are currently no taxes or charges for using the water that you store in your own tank. This makes installing a tank a great way to cut down on the variable cost of your water bill.

### Further information

**EME Group:** [www.emegroup.com.au](http://www.emegroup.com.au)

**enHealth:** [www.nphp.gov.au](http://www.nphp.gov.au)

**Rainwater Harvesting Association of Australia:** [www.rainwaterharvesting.org.au](http://www.rainwaterharvesting.org.au)