

## MATRIX UNDERGROUND WATER TANKS FREQUENTLY ASKED QUESTIONS

### What Is It?

The Atlantis Matrix system comprises a number of plastic modular boxes which are combined to form a larger box. The boxes are like large milk crates, and consist of plastic panels that click together like lego. The boxes are wrapped in a geotextile felt-like fabric and then a plastic liner. The geotextile acts as a cushion to protect the liner and also acts as a filter to prevent soil entering the boxes and the liner waterproofs the system.

### How Much Does It Cost?

Typical supply-only price for the Matrix modules, geotextile and plastic liner is around \$250 per 1000 Litres, plus delivery and GST. Additional items include a pre-filter, \$550 and a pump, \$650. Typical total price for supply and installation of a 10,000 Litre system is around \$10,000. The rate decreases as the tank increases in size, so a 20,000 Litre tank costs around \$16,000.

### What Can I Use The Water For?

Tank water is generally used for watering the garden, pool top-up and also for laundry and toilet flushing. In urban areas it should not be used for drinking. The simplest system comprises a tank and small above-ground pump, which is connected to an irrigation system for garden watering. The tank water may be piped into the house for laundry and toilet flushing, but a switching device (Davy Rainbank or Onga WaterSwitch) is then needed to switch from tank to mains if the tank runs dry.

### How Much Do I Need?

We recommend a minimum size of 10,000 Litres for most houses. The average garden will use 1500 – 2000 litres per complete garden watering cycle, so a 10,000L tank might only give 5 waterings and so will last perhaps last only a few weeks. The most popular size tank is 20,000L.

### How Will I Fill The Tank?

Melbourne receives around 600mm of rain per year, which falls roughly equally at 50mm each month. The average house has a roof of minimum 200sqm, so the average house can capture 10,000L per month. Water will generally be captured over the six cold winter months and used over the hotter 6 summer months, so in 6 months the system could capture up to 60,000L – plenty to fill any size tank.

### How Big Will It Be?

A 20,000L tank will be around 4m x 4m x 2m deep, although since this is modular system the shape and size can be varied to suit your needs.

### Where Should I Locate It?

Identify the location and run of stormwater pipes. The stormwater system runs by gravity to the lowest point on the block to the legal point of discharge. Position the tank in this area.

### Can I Drive On It?

With a minimum of 300mm of soil cover the system can be located in the garden, under areas subject to vehicular traffic 500mm of crushed pavement is required. The Matrix system can also be engineered to be located under a building slab.