

Watering feature beds: manual systems



The secret of successful watering

Watering large feature beds successfully relies on keeping the soil evenly moist. This means that deep-rooted trees and shallow-rooted underplants will all get the water they need. Ideally, this means keeping the soil evenly moist to a depth of approx. 50 cm.

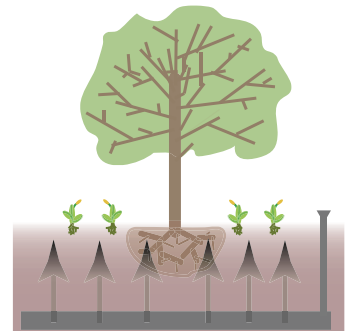
Different ways of watering feature beds.

You may be able to water a feature bed in two ways, depending on how the bed was designed.

Subterranean irrigation

Many large feature beds are fitted with a subterranean irrigation system, e.g. the Mona Link System. If the bed is to be fitted with such a system you should consider the following.

- The capacity of the system. Can it deliver enough water to the plants to keep them healthy between each watering? In a well-lit atrium during the spring and summer, you may need to give 10 - 20 litres of water for every square metre of soil surface. Are there enough tanks to achieve this? If not, you will need to add more tanks or supplement the irrigation by top watering.
- If your feature bed has a mixture of trees and underplants, watering by subterranean irrigation alone may not be sufficient. Water from the irrigation system will reach the tree's roots, but may not rise far enough to reach the roots of the small plants near by. If this is the case, you will need to top water as well.



However, if you only have large trees, such as in tree pits or purpose-built tree

containers, then you may find that subterranean irrigation is the ideal solution.

Top watering with a hose-pipe

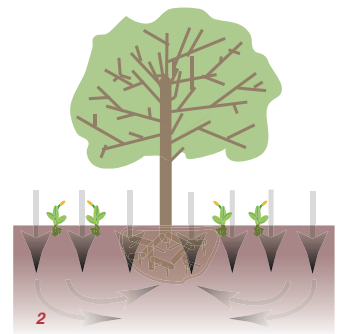
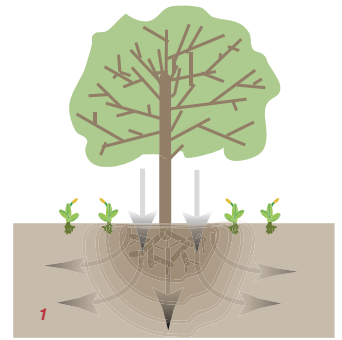
The principle for watering feature beds is to keep the soil evenly moist to provide enough water for all the plants in it. This means **watering the soil, not individual plants.**

Spot watering individual plants is bad practice as it is time consuming and actually results in underwatering over time.

The reason for that is because if you only water around the plants, the rest of the soil gets very dry. When that happens, the water you add will be drawn away from the wet area into the dry soil quicker than the plant can get at it. This will result in having to make more frequent plant replacements.

Picture 1 shows what happens when you spot water around a large tree. The water will pass straight through the soil, beyond the roots and into empty soil. The small plants will be in very dry soil and the tree will not be able to make use of most of the water that it has been given.

Picture 2 shows the ideal way to water a feature bed. The water is added uniformly ensuring that soil is evenly moist to a depth of approximately 50 cm. This means that small plants and the large tree all get the water they need.



Adding the right amount of water

You might be surprised at how long it takes to deliver enough water to a feature bed to get it to the correct moisture level. However, once it is at the right level, you will need to water much less often.

With a dry soil, you will need to add 10 - 20 litres of water for every square metre of soil surface. That means a bed that is 4 m X 3 m (i.e. 12 square metres) will need between 120 and 240 litres of water. The amount of water needed will depend on factors such as soil type, e.g. peat based media or loam based media.

How do you know when you have added enough water?

If you use a hose-pipe to apply water (and for many feature beds, that is the only practical way of applying water), you will need to know the rate at which the hose-pipe delivers water. To do this, time how long it takes to fill a 10 litre watering can or bucket.

For example, if it takes 30 seconds to fill a 10 litre bucket, then the flow rate is 20 litres per minute. If you need to apply 120 litres of water, it will take 6 minutes. Therefore a feature bed with an area of only 12 square metres will take **at least** 6 minutes to water to ensure that the soil is evenly moist to the right depth.

The flow rate through a hose-pipe will vary considerably according to the water pressure at the tap and the diameter of the hose.

Once an even moisture level has been attained, you will find that the bed will only need to be watered every few weeks. In the winter, you might be able to go a month or more between watering.