



## Selecting the Right Tree

Trees are planted for future generations to enjoy as much as your present client so careful consideration should be given at the time of selection.

Remember ... right plant, right place.

Trees form a major part of a design; whether selecting a small tree for a garden, a specimen tree for a statement, trees to create an avenue, trees for screening, trees for purely ornamental flower or simply for providing shade in the summer months.

There are numerous factors to take into consideration whatever the desired effect is for every tree on every site. Selecting trees that suit the conditions will mean your tree choice will thrive and grow into a thing of beauty as all trees should.



### Site Conditions

Site conditions will have an effect on growth rate, watering requirements and eventual height of the trees.

#### Eventual height/space

- Always take into account the eventual height and width of the tree
- Choose a site that has plenty of room for your tree to reach maturity

#### Exposure

- Is the site windy/exposed?

#### Sun/Shade

- Is the site very sunny or very shady?

#### Soil conditions

- Is the soil clay, sand, chalk or loam?
- Does the soil drain well?

#### Soil pH

- Acid/Alkaline

#### Urban

- Tolerant of pollution?

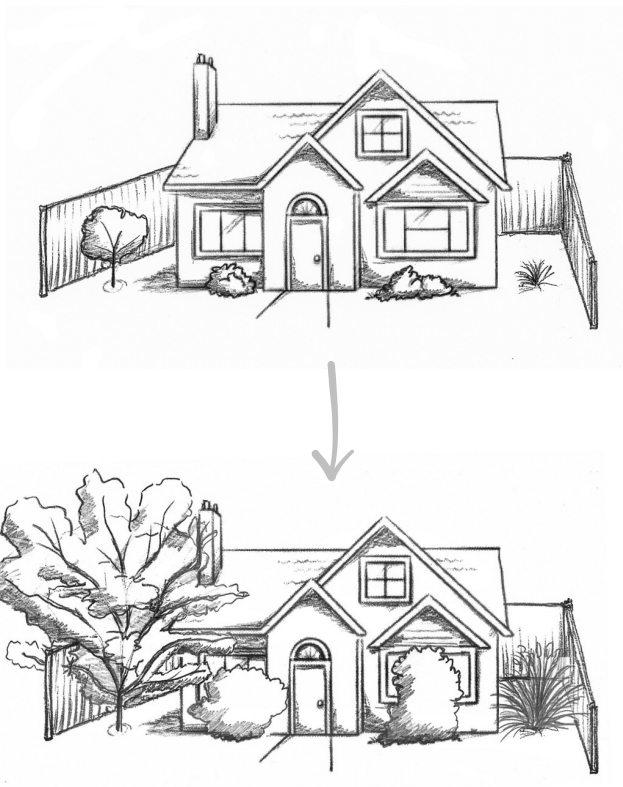
#### Rural

- Does the tree 'fit' into the surroundings?

### Client Requirements

#### Aftercare/Maintenance

- Who will maintain the tree after planting?



Please see our Tree Selection Factsheets to help decide on the right tree for your space and requirements ...

- Trees: Seasonal Availability
- Tree Forms, Shapes & Sizes
- Fastigate & Columnar Trees
- Trees for Screening
- Small Trees for Small Gardens
- Trees: A Touch of the Unusual
- Native Trees
- Trees with Ornamental Bark or Stems
- Berry Interesting: Trees with Berries
- Trees with Spectacular Autumn Colour



## Seasonal Availability

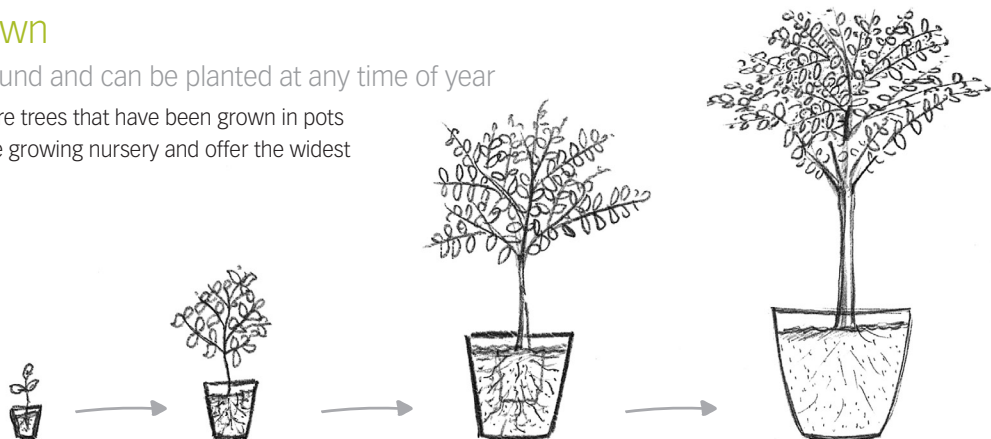
Trees are available in a variety of different ways and at different times of year.

This is critical information when requesting tree availability and when the tree will be planted.

### Container Grown

Available all year round and can be planted at any time of year

Container grown trees are trees that have been grown in pots for their entire life on the growing nursery and offer the widest choice of trees available.



### Containerised

Available all year round, once rooted can be planted at any time of year

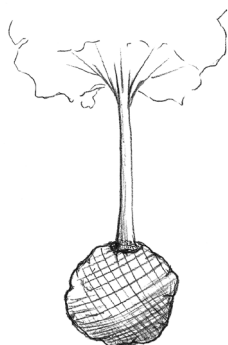
Containerised trees are trees that have been field grown and then placed in a container normally within the last 12 months to continue growing in the pot/container.



### Root Ball

Available in the dormant season from November to March

This term applies to trees that have been field grown with a ball of soil retained around the root system. The trees are removed from the field with the root ball in the dormant season, normally November to February to March.



Root ball trees should be planted while the tree is still dormant, normally November to February to March. It is recommended to protect the root ball if there is a delay in planting to prevent the roots from drying out. Do not remove the wire around the root ball although it can be loosened from around the stem of the tree.

Root ball trees offer a limited choice of tree selection due to seasonality.

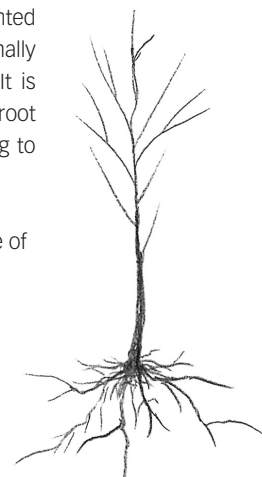
### Bare Root

Available in the dormant season from November to March

Bare root trees are also field grown and lifted whilst dormant. All soil is then removed from the root system.

Bare root trees should be planted while the tree is still dormant, normally November to February to March. It is recommended to protect the bare root system if there is a delay in planting to prevent the roots from drying out.

Bare root trees offer a limited choice of tree selection due to seasonality.





## Tree Forms, Shapes & Sizes

### Plant specifications are used for a reason - they work!

With plants now being sourced from across the UK, Europe and sometimes even farther afield, using simple plant specifications makes things easier all round. Used across the industry across all continents, specifications are recognised universally as industry standards. The best reason for using plant specifications is to enable customer, supplier and growers to speak the same language when ordering plants.

Trees form the backbone of any design and are an important visual element to a garden. With that in mind it is important to get the right form and shape at the start.

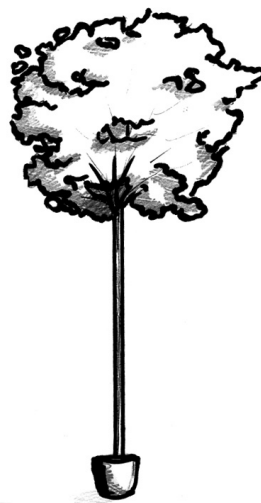
### FORMS

Trees are usually supplied in one of the following forms: Standard, Feathered and Multi-Stem. These are natural forms and are the most typical.

#### Standard

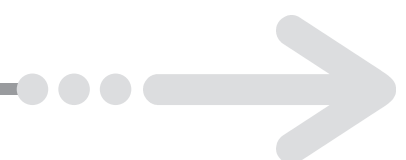
**Always classified by girth size**  
(circumference of the stem at 1m above ground level)

- Trees with an upright stem, clear of lateral growths with a branched crown
- Can range from small trees to semi-mature specimens - see table opposite



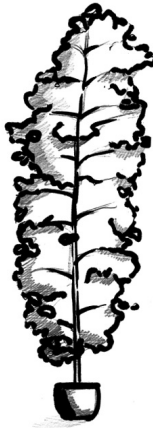
Standard

GIRTH	SPECIFICATION	APPROX HEIGHT	CLEAR STEM HEIGHT
4-6cm	Feathered tree	1.75-2m	-
6-8cm	Light Standard	2.5-3m	1.5/1.75m
8-10cm	Standard	2.5-3m	1.75/2m
10-12cm	Selected Standard	3-3.5m	min 2m
12-14cm	Heavy Standard	3.5-4m	min 2m
14-16cm	Extra Heavy Standard	4-6m	min 2m
16-18cm	Extra Heavy Standard	4.5-6m	min 2m
18-20cm	Semi-Mature	4.5-6.5m	min 2m
20-25cm	Semi-Mature	5-6.5m	min 2m
25-30cm	Semi-Mature	6-6.5m	min 2m
30-35cm	Semi-Mature	6-6.5m	min 2m
35-40cm	Semi-Mature	6.5-7m	-
45-50cm	Semi-Mature	7-7.5m	-

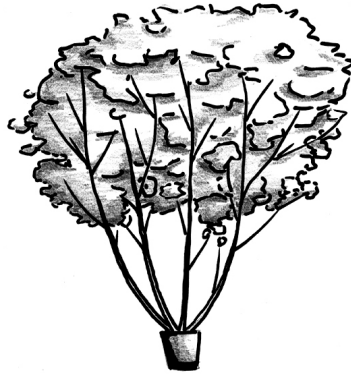




# Tree Forms, Shapes & Sizes



Feathered



Multi-Stem

## Feathered

**Always classified by height** (normally up to 2m)

- Trees with an upright central leading shoot and a stem with evenly spaced lateral growths down to near ground level

## Multi-Stem

**Always classified by height**

Multi-Stems are available in two different forms:

- Trees with one or more main stems arising from the same root system - a true multi-stem
- Three trees with separate root systems planted together in one pot/root ball to create a multi-stem effect. Not commonly available and not true multi-stem

## SHAPES

Trees may also be supplied in the following shapes: pleached, parasol, espalier and fan.

### Pleached

- A frame creating a two-dimensional effect with the branches spreading sideways in one plane (i.e flat)

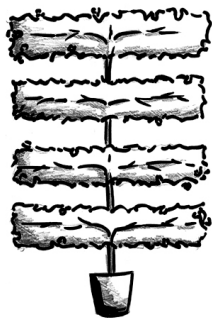
### Parasol/Umbrella

- Popular in Europe. The main branches are trained over a horizontal frame creating a parasol effect

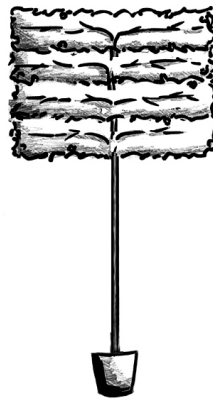
### Espalier & Fan

**Typical for fruit trees**

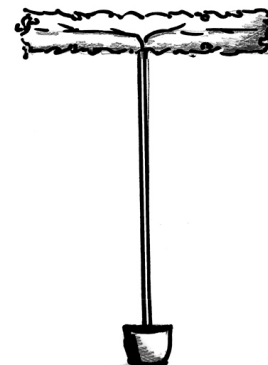
- Espalier is a tree with a central stem with a balanced (same number) of horizontal branches in one vertical plane on each side (i.e flat)
- Fan is a tree with a balanced fan-shaped system of branches in one vertical plane (i.e flat)



Espalier



Pleached



Parasol



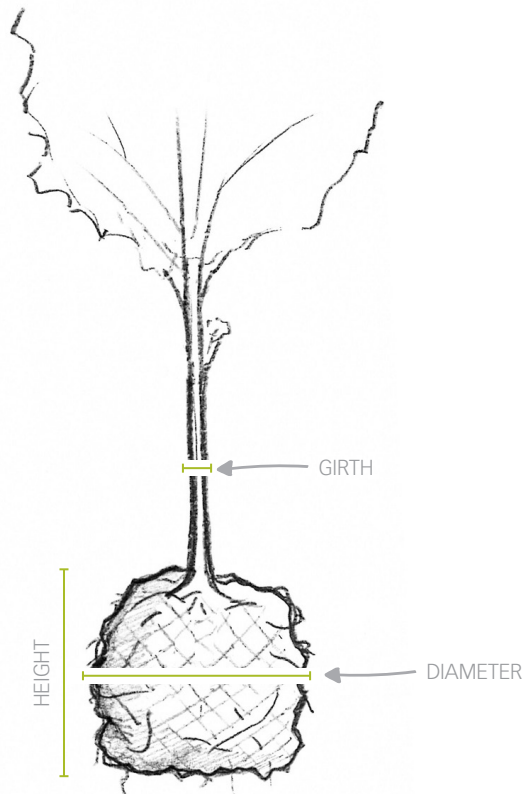
## Root Ball & Container Sizes

We are often asked what size hole should be dug in preparation for planting once a tree has been ordered.

Although we cannot give exact sizes, below are some approximate measurements based on our experience. All sizes given are estimated and are for use as a guide only.

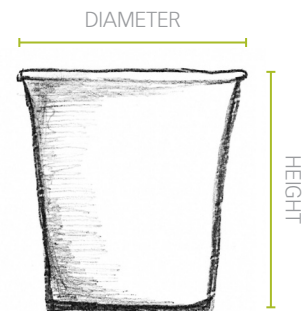
### Root Ball

TREE GIRTH	ROOT BALL diameter	ROOT BALL height
12-14cm	40cm	30-35cm
14-16cm	45-50cm	30-35cm
16-18cm	50cm	40cm
18-20cm	60cm	45cm
20-25cm	70cm	50cm
25-30cm	80cm	55cm
30-35cm	90cm	60cm



### Container

POT VOLUME	DIAMETER internal top	HEIGHT internal
10L	25cm	24cm
15L	29cm	26cm
18L	30cm	30cm
25L	36cm	30cm
30L	36cm	30cm
35L	39cm	37cm
45L	44cm	37cm
50L	44cm	39cm
60L	48cm	35cm
65L	49cm	38cm
70L	49cm	41cm
80L	54cm	38cm
90L	55cm	45cm
110L	58cm	38cm
130L	63cm	50cm
150L	62cm	56cm
160L	72cm	48cm
230L	77cm	52cm
285L	88cm	53cm
350L	90cm	68cm
500L	110cm	75cm



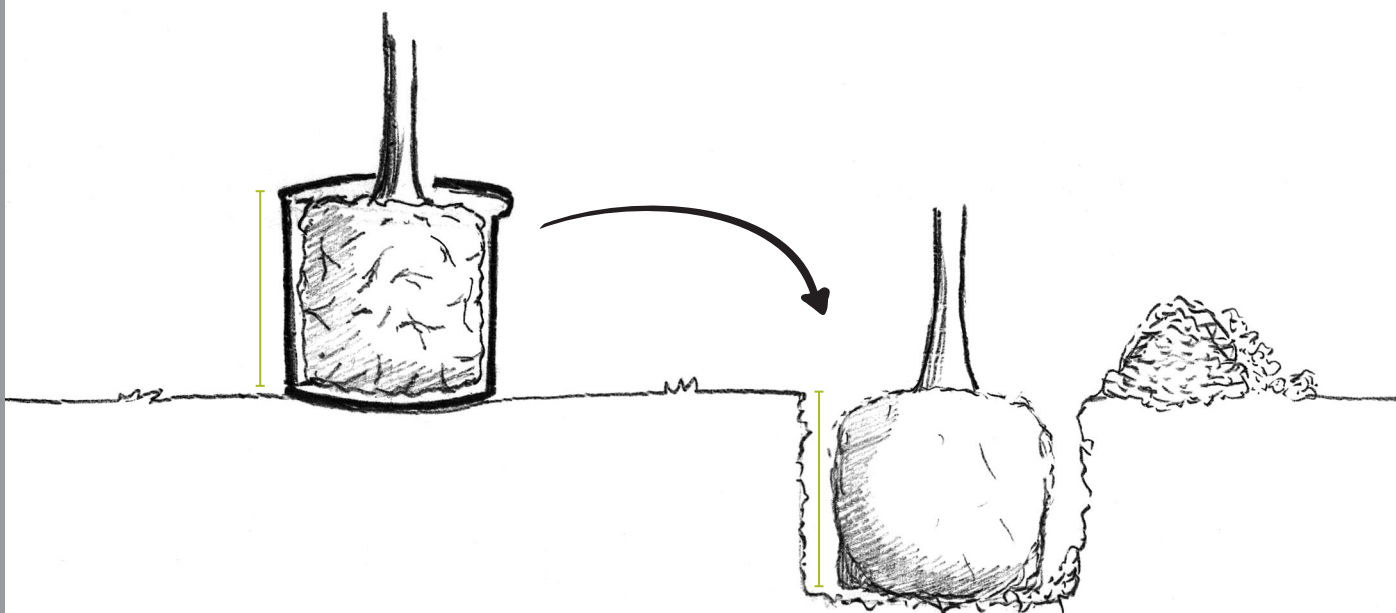


## Tree Planting Site Preparation

Preparation is key when planting a tree. A small amount of time spent preparing for planting will result in a healthy tree that will happily survive with less maintenance over the first few years and thrive for many years to come.

**It is good practice to have everything you need to hand and to prepare the site in advance.**

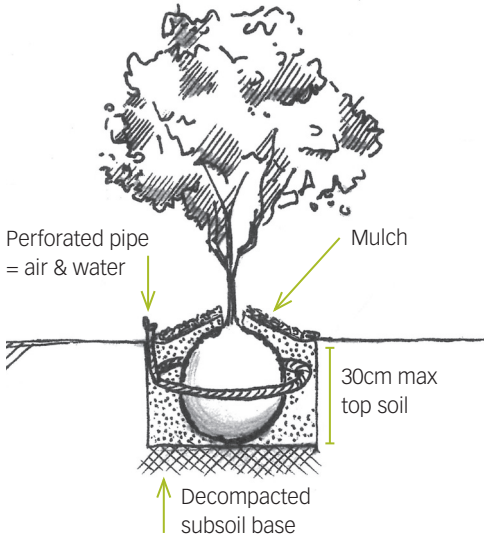
- Clear the area of weeds around the required planting space. Weeds will compete directly with your newly planted tree for water and nutrients
- Test how the existing soil drains and prepare the soil accordingly. Consider land drain work if required
- Measure the depth of the container or rootzone to be planted
- Dig the hole to the depth of the soil level of the tree if the tree is in the container or to the top of the root zone in bareroot and root ball trees
- If machine dug, break up the base of the tree pit to avoid plating and compaction but make sure it is very firm so will not sink in the future
- Never plant a tree too deep
- Dig the planting hole wider than the existing root zone. This allows tree roots to spread
- Prepare the planting hole beforehand ensuring that you loosen the soil at the base and side of the planting hole with a fork. This will encourage the roots of the tree once planted to seek out new soil
- Add organic soil/planting compost and integrate with the existing soil and mix in well
- Keep tree roots out of the wind, sun or frost before planting
- Ensure that the tree roots are given a thorough soaking before planting



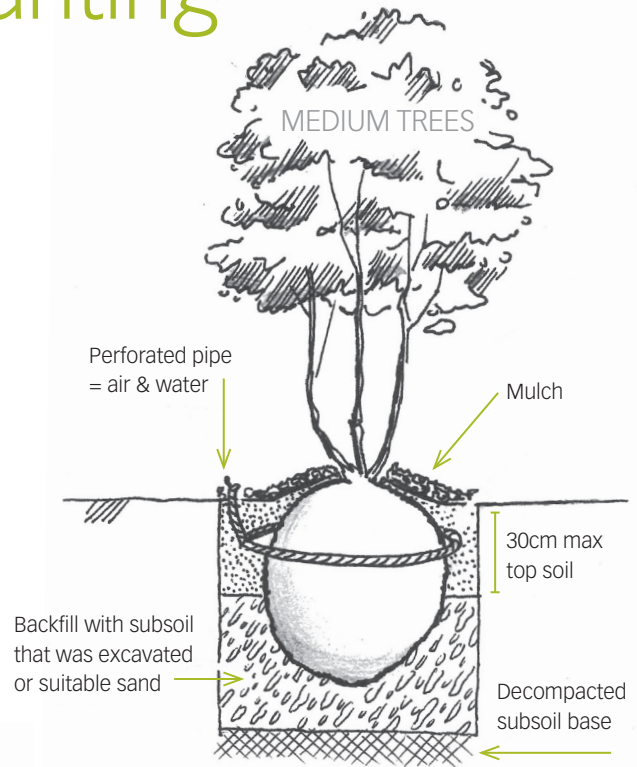


## Perfect Tree Planting

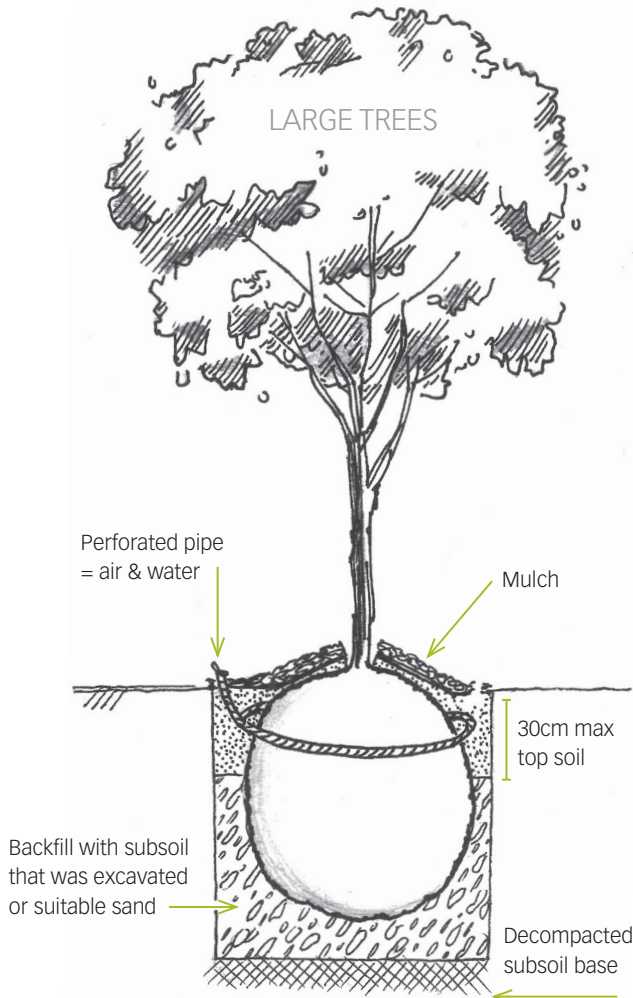
SMALL TREES & LARGE SHRUBS



MEDIUM TREES



LARGE TREES



- 1 Add top soil or any organic and nutrient rich compost to a maximum depth of 30cm.
- 2 Install a perforated pipe around the rootball to provide extra air to the roots and allow water to percolate properly when watering.
- 3 Install an appropriate device to stabilise the tree according to its needs (tree stakes or tree anchor).
- 4 Plant the root ball slightly higher than the soil surface level if on undisturbed native/unworked subsoil base. If planted on worked/new base, plant the root ball higher, enough to compensate for the depth that the heavy tree will sink after the soil settles (approx 20-40cm).
- 5 Bank a thin layer of top soil over the top of the root ball but smooth to an angle so water will run off the tree trunk.



## Mycorrhizal Fungi

Mycorrhizal fungi or the 'friendly fungi' as it has also become known, has grown in popularity over the last few years with many landscapers and designers singing its praises.



**Mycorrhizal fungi is essential for plant establishment. When planting trees of any size and at any time of year, using Mycorrhizal fungi will be beneficial to the long-term life of the tree.**

### How does Mycorrhizal fungi work?

The fungi colonise the plant roots and extend the root area increasing the surface area of the roots that absorb water. The fungi feed off the sugars in the plant roots and in exchange help to transport water and nutrients back to the plant roots. The fungi reach far into the surrounding soil (further than the plant roots can reach) increasing the surface area in contact with the soil for nutrient and water absorption. There is also evidence that suggests the mycorrhizal fungi helps the plant to resist certain soil-borne diseases.

### How to use Mycorrhizal fungi

Mycorrhizal fungi can take many years to naturally colonise plants (up to 5 years), therefore by adding at the time of planting you are speeding up a natural process that has many benefits to the plant in the long term (the effect can be seen in 4-6 weeks).

Rootgrow needs to come into direct contact with the roots. Rub directly onto the roots or dip bareroot trees into a prepared mix.

### Benefits

The increased root structure allows the plant to increase its uptake of more water and essential nutrients resulting in a plant that is more tolerant of drought situations with stronger growth. The resulting healthy, stronger root systems result in a better survival rate (especially for bareroot trees) and a plant that is more capable of competing against weeds than if no organic matter or fungi were added.

Mycorrhizal fungi can also help in the rehabilitation of degraded soil. This is of particular importance for areas where land has been cleared or is low in organic matter content. It is believed to be the only product to overcome rose replant problems.

The application of Mycorrhizal fungi when planting results in faster establishment and lower failure rates of newly planted trees.

As a totally naturally occurring organic additive, one application is all you will ever need. The fungi will naturally start to populate the surrounding area and result in an altogether healthier soil in which to plant. Less fertiliser is needed as a result of the larger root system and it can also increase fruit tree yields by up to 20%. Trees that have been planted with Mycorrhizal fungi also have an increased tolerance to drought.

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## Tree Staking

All newly planted trees should be staked no matter where the situation and site.

Staking is required to prevent root rock\* in newly planted trees giving time for the roots to start forming thus slowing down establishment. All newly planted trees should be staked for at least three years. After three years your tree should have an established root system that can sustain the growth of the tree into the future.

There are many different opinions about how to stake a tree and much discussion on which is the correct method.

### General Guidelines

- Tree stakes should have at least a third of their length below ground level in order to provide a solid hold and to be effective
- Stakes should be inserted on the side of the prevailing wind. This ensures the tree is blown away from the stake and prevents any damage from rubbing
- Insert a tree buckle/spacer between the tree and stake to prevent rubbing of bark which can cause disease to enter via the wound
- After 3 years the tree should be self-sufficient and above ground stakes can be removed
- The larger the tree, the more staking will be needed
- Some situations will call for an anchoring system that is used under the soil surface with no fixtures showing above ground. These are known as Tree Anchors

### What tree, what stake?

Different trees will require different staking systems:

- Bare root tree - Single Stake
- Root ball tree - Single Stake/Double Stake/Tree Anchor (dependent on tree size/girth size)
- Container grown tree - Single Stake/Double Stake/Tree Anchor (dependent on tree size/girth size)

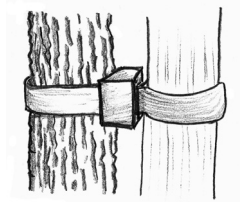
### Methods

**Single Stake:** Insert stake to a third of its length below ground level. Secure to the trunk by tree strapping/tree tie. Normally for smaller trees. Good for standards and multi-stem trees.

**Double Stake:** 2 or 3 stakes on either side or equally spaced around the tree. Secure to the trunk by tree strapping/tree tie. Good for windy sites.

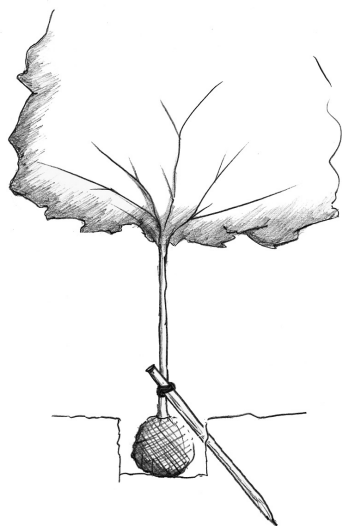
**Angled Stake:** Insert stake at 45° angle. Angle towards the prevailing wind. Secure with tree strapping/tree tie. Good for use on sloping sites.

**Tree Anchors:** See Platipus Plati-Mat Tree Anchor System Factsheet for installation. Used with very large trees. Used where stakes could be considered unsightly.

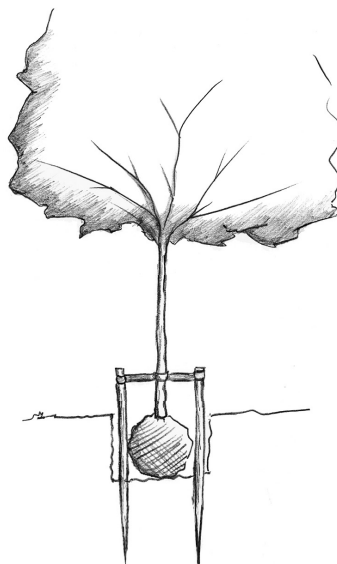


TREE TIE

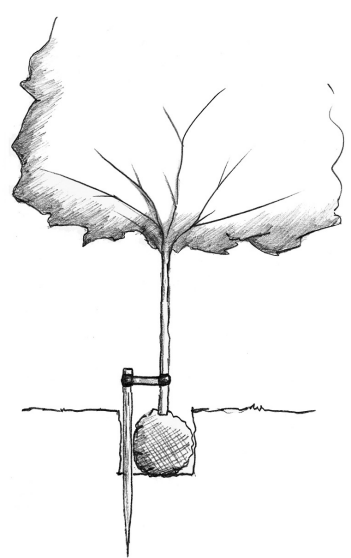
\* Root rock is when a tree moves in the wind causing damage to newly formed roots.



ANGLED STAKE



DOUBLE STAKE



SINGLE STAKE



## Platipus Plati-Mat Tree Anchor Benefits & Installation

Easy to install and no unsightly wires make the Platipus root ball fixing system the preferred method of securing root balled and containerised trees. The system comes with Plati-Mat which allows the secure positioning of newly transplanted trees.



Platipus Fixing Kit



Platipus PH1 - Plati-Hook



Platipus Hand Drive Rod



Platipus Tension Levers

### Benefits

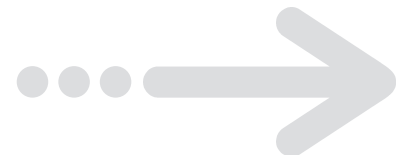
- More secure fixing enabling better establishment of the tree
- Quick to install
- Greater contact surface area at the top of the root ball or container level
- No unsightly wires or timber above ground
- Suitable for all root ball or containerised trees

### What size should I use?

- RF1P - Trees 2.5-4.5m in height or 12-25cm girth, comes with 3 anchors, 4 meters of galvanised wire, 1 x ratchet tensioner and 3 Plati-Mats
- RF2P - Trees 4.5-7.5m in height or 25-45cm girth, comes with 3 anchors, 5 metres of galvanised wire, 1 x ratchet tensioner and 3 Plati-Mats
- Larger sizes are available to order

### Will I need any other tools for installation?

- Platipus Drive Rods (available separately) are essential for installation
- Platipus Tension Lever (available separately) are essential for installation
- Post rammers
- Wire cutters
- Rod removers
- Plati-hook





## Platipus Plati-Mat Tree Anchor Installation Guide



Stage 1



Stage 2



Stage 3



Stage 4



Stage 5



Stage 6



## Methods of Tree Irrigation

Drought stress is one of the biggest factors of high failure rates in newly planted trees.

**The key to tree survival is water, water and water and irrigation systems will deliver for you. Irrigation systems are best placed in situ when actually planting the tree. However, soaker hoses or drip irrigation can be installed after planting.**

### Irrigation Systems



#### Root Rain Metro

A perforated pipe 35mm in dia that can deliver up to 60L of water per minute. Eliminates water waste as water is delivered directly to the root ball. Install at the time of planting by wrapping around the root ball. Quick and easy to install.

- Each Root Rain Metro comes with a fixing bracket and attached top cap to prevent soil entering the pipe
- 2 lengths available - 1.75m and 2.5m
- 1.75m for trees up to 8-10cm girth
- 2m for trees above 10-12cm girth

#### Soaker Hose

An easy and simple to use 'on the soil surface' solution. Made from high quality UV resistant material. A soaker hose is porous along its entire length allowing water to release slowly and provide a deep soaking to the root zone, reducing evaporation and keeping water waste to a minimum. Can also be connected to a timer for more efficient use.



#### Platipus Piddler Tree Irrigation

Piddler is a targeted irrigation system that delivers water directly to the root zone improving the development of newly planted trees.

A highly efficient use of water and air to the tree roots helps development with effective supply of water evenly in both directions all the way around the root ball and drenching the soil laterally. Eliminates water waste as water is delivered directly to the root ball. Install at the time of planting by wrapping around the root ball. Quick and easy to install.

- Debris cap and unique membrane construction prevents blockages
- 2m and 3m lengths held in stock. Longer lengths are available to order



SEE ASSOCIATED FACTSHEET  
[Platipus Piddler Tree Irrigation Installation Guide](#)



# Platipus Piddler Tree Irrigation Installation Guide

Piddler is a targeted irrigation system delivering water directly to the root zone thus improving the development of newly planted trees.



## Benefits of using the Piddler system

- Highly efficient use of water evenly in both directions all the way around the root ball, drenching the soil laterally
- Minimal waste - no run off or evaporation
- Easy watering through the debris cap using a hose pipe
- Debris cap and unique membrane construction prevents blockages
- Ideal for use in straight runs (hedges)
- Ideal for use on rooftop plantings
- 2m and 3m lengths held in stock. Longer lengths available on order



## Installation Guide

- Place the soil back in the planting pit leaving a 10cm depth free
- Thread the membrane into the side slit on the Piddler tube and wrap around the root ball then cut the membrane to desired length
- Thread the membrane into the opposite side slit on the Piddler tube ensuring the membrane overlaps
- Place the tube 5cm is above ground level and infill the rest of the soil
- Water into the protruding Piddler pipe



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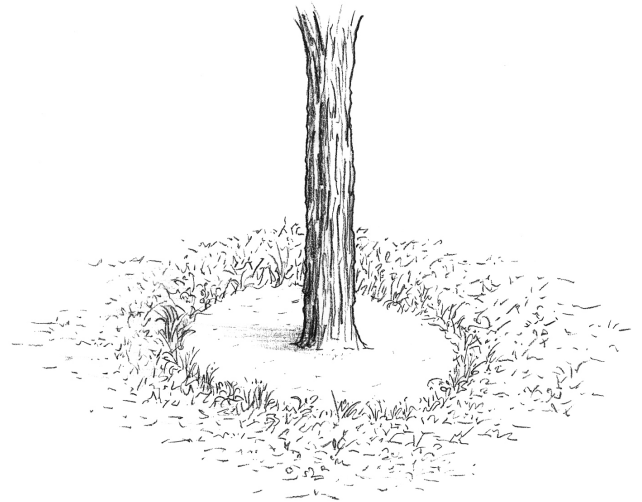


## Tree Aftercare

A newly planted tree is dependent on you and good aftercare for the first 3 years after planting.

**During its life on the nursery, trees will have been watered, fed and weeded on a regular basis. It is a good idea to continue these practices until the tree is self-sustaining. Trees can fail if the correct aftercare is not followed.**

- All newly planted trees will require watering during the growing season for the first 3 years
- Water on a regular basis
- How often you will need to water will depend on a number of factors: soil type, drainage, exposure of site and tree species. These points should have been covered at the point of selecting the tree - Right Plant, Right Place
- Keep an area of at least 1m weed free for the first 3 years if possible
- Mulch each autumn to conserve moisture around the roots and suppress weed growth. Mulch around the entire area of the tree canopy
- Mulch to a depth of 7cm. Ensure mulch is kept away from the main stem
- Mulch eventually rots down and will also enrich the earth surrounding the root system
- Check on tree ties and stakes at the start and end of each growing season. Adjust ties and loosen if necessary
- Check stakes on a regular basis, especially on windy sites
- Stakes and ties can be removed after 2 to 3 years once the tree has established a strong root system
- Remove tree spirals once your tree has outgrown the spiral. Continue to protect if in areas of high rabbit or deer population
- Water your tree during spells of dry weather or wind
- Prune out the three D's on a regular basis: Dead, Diseased, Dying



### Typical signs of stress

#### Underwatering

- Curled or wilted leaves
- Brown edges to leaves
- Sparse growth
- Yellow leaves and leaf drop

#### Overwatering

- Waterlogged soil
- Yellow leaves
- Small leaves
- Dead ends to the branches

#### Wind Stress

- Broken branches
- Brown edges to leaves
- Leaning away from general wind direction

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## Newly Planted Plants and Drought Stress



Newly planted trees and shrubs can take some time to establish a strong enough root system to support themselves so will need to rely on you to provide water and nutrition in order for them to thrive and survive.

Drought stress can be caused by many factors, if combined your plant will need lots of TLC and water to help establish properly. Drought stress is normally due to hot weather, windy conditions, poor planting practices and dry soil. Some issues may be due to where the plant has been placed; too near to paving, in a rain shadow, competition from surrounding plants or weeds or simply the wrong plant in the wrong place.

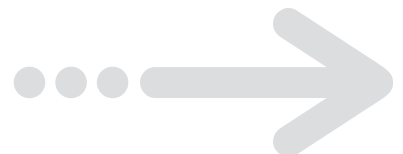
Newly planted trees and shrubs will not yet have established a root system and will need to rely on you to provide watering needs in order to thrive and survive.

Given overleaf are guidelines only. Conditions in your particular area or soil type and recent weather conditions will mean that you may need to adapt some of them to suit. These guidelines are applicable to trees, specimen shrubs and climbers.

### Signs of stress are relatively easy to spot

- Wilting foliage
- Leaves curling or brown at the edges
- Older foliage looking yellow and weak
- Premature leaf drop
- Branch die back
- Splits in the bark
- Dry soil around the plant

**Some signs of stress may only show in extreme conditions but treatment is best applied at the onset of any of these signs of stress.**



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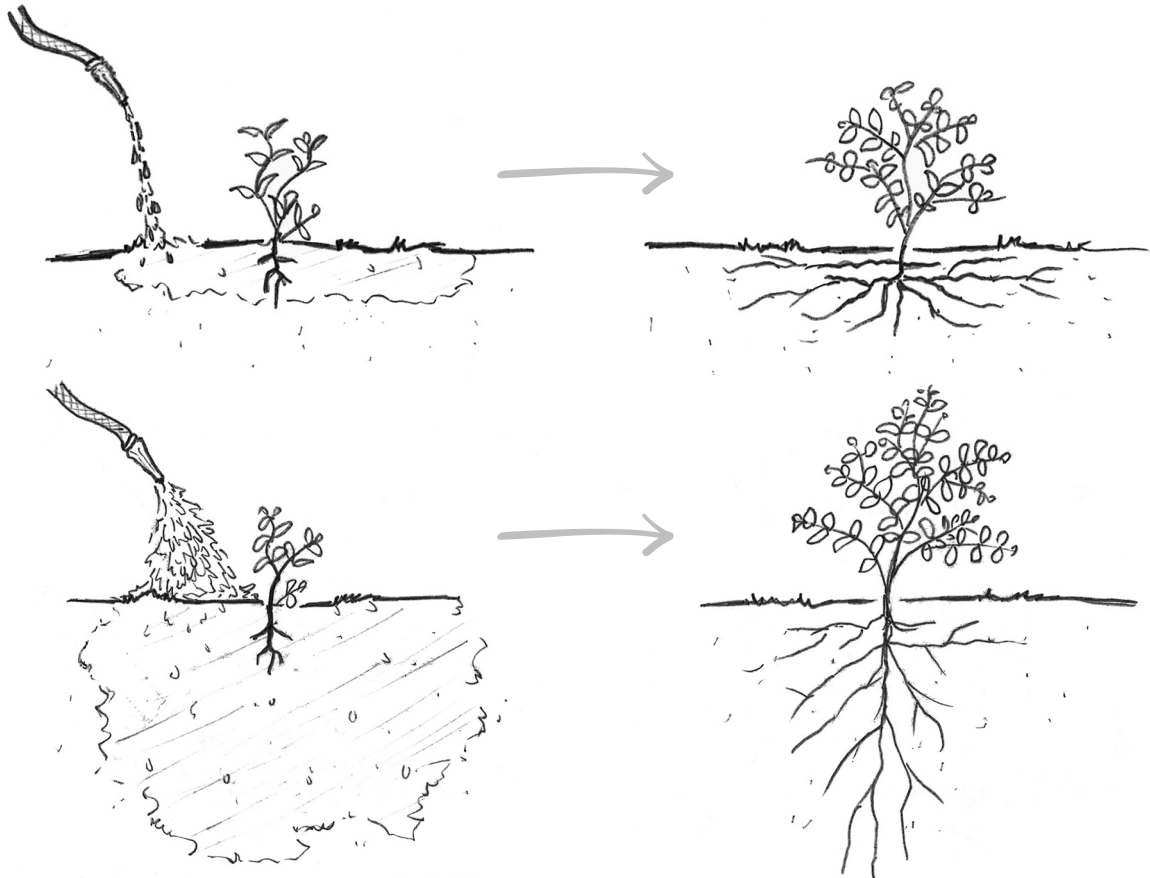


## Newly planted plants and drought stress

# What to do

**There is no golden rule of one size fits all. Following these guidelines at the first signs of stress will help to ensure your tree is less stressed and able to put out roots.**

- Water on a regular basis throughout the growing season (March to Sept) even when the weather is overcast and windy
- Water for 3 years after planting. After this your tree should be self sufficient with a root system that can find water and sustain growth
- Water in the early morning or evening if possible
- Take your time when watering. Watering slowly ensures the soil gets a thorough soaking and gets down to the roots where it is needed. Watering so only the soil surface gets water will result in a shallow root system that will still have issues in periods of drought or windy condition



- Water around the tree not just around the tree trunk. This is where most of the roots will need and want to grow to. Water all around underneath the canopy
- Mulch around your tree to a depth of 7cm to retain moisture in the soil and keep the roots cool. Make sure the mulch does not touch the tree stem
- Leaky pipe or a timed watering system can really help in times of stress; hot weather and/or windy conditions. If possible use a timer to water in the early morning or evening