

NEW
D-MAN
DEADMAN SYSTEM



D-MAN
DEADMAN SYSTEM

PIDDLER TREE IRRIGATION SYSTEM

PLATIPUS
TREE ANCHORING SYSTEMS

WHAT'S MISSING?



Great Ormond Street Hospital



London Olympics 2012



Armed Forces War Memorial



Chiswick Park, London

- The underground tree anchoring system was first developed by Platipus® in 1983
- A comprehensive range of kits and installation tools are available to provide above and below ground anchoring for standard and semi-mature tree transplants up to 20m high
- Continuous innovation and development of high quality specialist tree anchoring solutions including deadman, roof gardens and palm tree applications
- Landscape Architects and Designers specify Platipus® because we offer:
 - A proven track record over 25 years
 - Security & stability for the trees
 - Technical support & specification guidance
 - CPD style presentations & demonstrations
- Landscape Contractors use Platipus because we offer:
 - Affordable solutions
 - Fast & easy installation
 - On-site training & support
 - High quality engineered products & installation tools

ROOTBALL FIXING SYSTEM - PLATI-MAT



The Platipus® rootball fixing system, including Plati-Mat, remains the preferred method of securing rootballed and containerised semi-mature trees. The ease of installation and lack of unsightly guy wires makes it the first choice of customers.

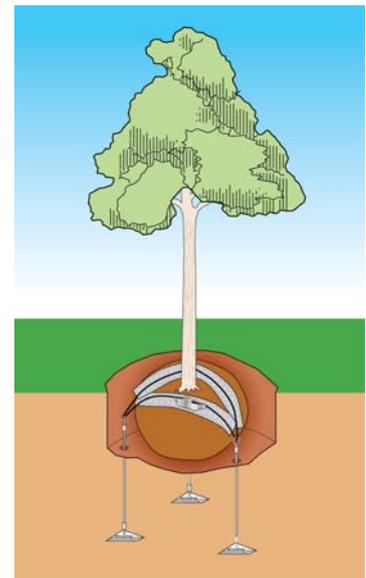
Over the past two decades, we have developed an extensive range of unique underground fixing solutions to suit most applications.

The Plati-Mat allows secure positioning of newly transplanted trees, whilst offering major benefits over traditional root support systems.

Available in five standard sizes, the Plati-Mat can be tailored to suit most rootball dimensions. This significant development allows faster installation and provides a greater contact surface area at the top of the rootballed or container grown tree.

The benefits include:

- Planting at the nursery line
- Reduced overall installation time
- More secure fixing creating better establishment
- No unsightly stakes or timber above ground
- Suitable for most rootballed and containerised stock



We are happy to discuss and recommend rootball fixing kits for particular applications and soil conditions. The following chart applies to most tree transplants.



	TREE HEIGHT (H) / CIRCUMFERENCE (C)	DESCRIPTION	PRODUCT CODE
	up to 2.5m up to 12cm	3 x S21 anchors, 2 metres of galvanised wire, 1 x ratchet tensioner & 3 x Plati-Mats.	RF0P
	2.5 - 4.5m 12 - 25cm	3 x S41 anchors, 4 metres of galvanised wire, 1 x ratchet tensioner & 3 x Plati-Mats.	RF1P
	4.5 - 7.5m 25 - 45cm	3 x S61 anchors, 5 metres of galvanised wire, 1 x ratchet tensioner & 3 x Plati-Mats.	RF2P
	7.5 - 12m 45 - 75cm	3 x S81 anchors, 8 metres of galvanised wire, 1 x ratchet tensioner & 3 x Plati-Mats.	RF3P
	12m+ 75cm+	3 x B61 anchors, 10 metres of galvanised wire, 1 x ratchet tensioner & 3 x Plati-Mats.	RF4P

D-MAN SYSTEM

NEW

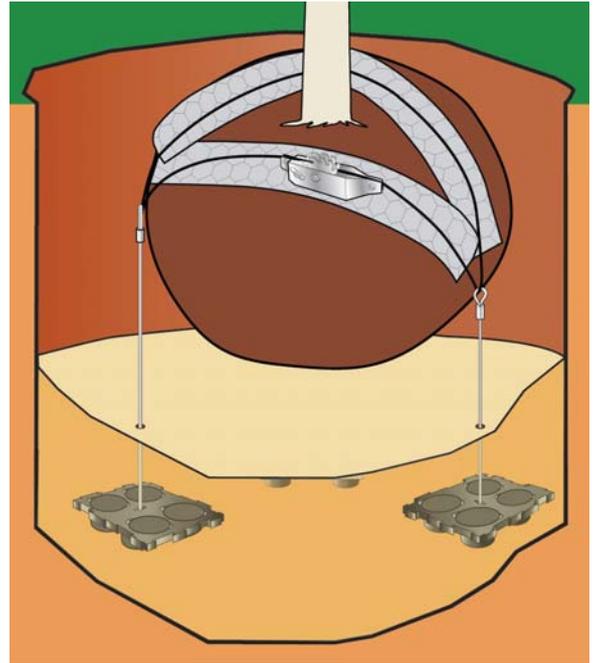


Introducing a **NEW** development in underground Tree Anchoring Solutions.

Designed primarily to replace the traditional Deadman such as Kerbstones or Sleepers in areas where normal underground anchors are impossible to use due to Services /Shallow Soil / Roof Gardens or Gas Tight Membranes on Brownfield sites.

Key Benefits of D-MAN

- Extremely easy to use either individually or in multiples
- Simple to lock / unlock cells together
- Cells are omni directional for connecting together
- Unique letterbox style wire tendon anchor point system
- The cells are nestable and packed with our kits in standard boxes, therefore one source supply reducing packaging and transport costs. All can be delivered on one pallet including our Piddler Tree Irrigation System.
- Unique cup shape for water storage
- Tested & approved by industry experts



Deadman and DMAN kits must have the deadmen positioned at least 30cm below the base of the rootball. Only tree soil should be used above the deadmen and must be finally compacted to 60%, up to the nursery line.



Unique Locking System



Quick & Easy Assembly



Connect To Create Any Size



Simple Centre Slot Anchor Point



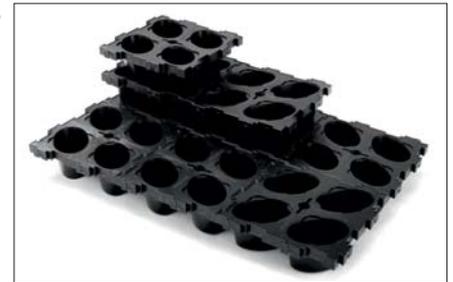
Nestable For Compact Transportation

D-MAN SYSTEM

In addition to the prime function there are additional recommended uses



- Build up large planting areas with connected cells, secure your trees or large shrubs with our D-MAN System in any position you require; with the flexibility to reposition if needed.
- Protects the roof planting area from damage, allows catchment water to drain underneath, leaving the balance in cells.
- Stackable by rotating 180 degrees to allow planting areas to be built up and providing additional structural support to surrounding areas
- Made from recycled plastic!



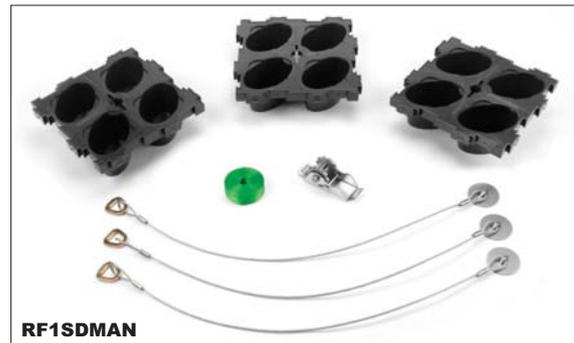
And last but not least the Tree Kits...

D-MAN System - Plati-Mat



RF1PDMAN

D-MAN System - Strap



RF1SDMAN



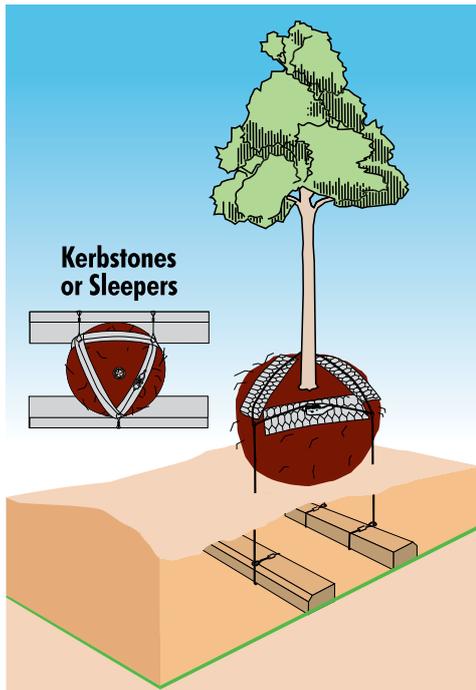
RF2PDMAN



RF2SDMAN

TREE HEIGHT (H) / CIRCUMFERENCE (C)	DESCRIPTION	PRODUCT CODE
2.5 - 4.5m 12 - 25cm	3 x wire chokes, 4 metres of galvanised wire, 1 x ratchet tensioner, 3 x Plati-Mats & 3 x D-MAN Cells.	RF1PDMAN
4.5 - 7.5m 25 - 45cm	3 x wire chokes, 5 metres of galvanised wire, 1 x ratchet tensioner, 3 x Plati-Mats & 6 x D-MAN Cells (3 x 2 Cells connected).	RF2PDMAN
2.5 - 4.5m 12 - 25cm	3 x wire chokes with delta links, 3 metres x 25mm strap, 1 x strap tensioner & 3 x D-MAN Cells.	RF1SDMAN
4.5 - 7.5m 25 - 45cm	3 x wire chokes with delta links, 5 metres x 35mm strap, 1 x strap tensioner & 6 x D-MAN Cells (3 x 2 Cells connected).	RF2SDMAN

DEADMAN SYSTEM - PLATI-MAT



Designed to satisfy the requirements of a specialist market, deadman systems have enabled Platipus® to offer effective solutions for planting in difficult urban environments, where services may be a problem.

The systems use kerbstones or sleepers as anchor points and providing that the soil placed on top of the kerbstones or sleepers has been well compacted before placing the tree in the pit, the systems offer a fast and efficient method of securing rootball trees up to 12 metres high.

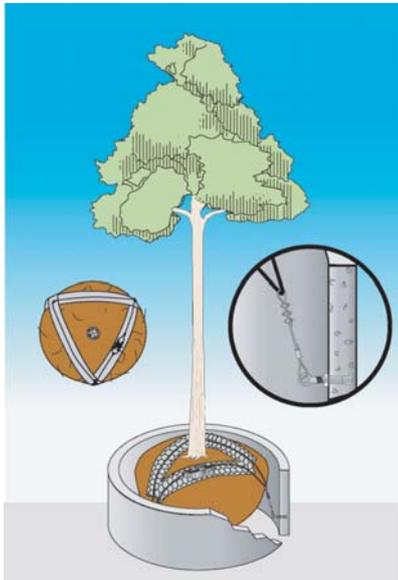
TREE HEIGHT (H) / CIRCUMFERENCE (C)	DESCRIPTION	PRODUCT CODE
2.5 - 4.5m 12 - 25cm	3 x wire chokes, 4 metres of galvanised wire, 1 x ratchet tensioner & 3 x Plati-Mats.	RF1RDMP
4.5 - 7.5m 25 - 45cm	3 x wire chokes, 5 metres of galvanised wire, 1 x ratchet tensioner & 3 x Plati-Mats.	RF2RDMP
7.5 - 12m 45 - 75cm	3 x wire chokes, 8 metres of galvanised wire, 1 x ratchet tensioner & 3 x Plati-Mats.	RF3RDMP



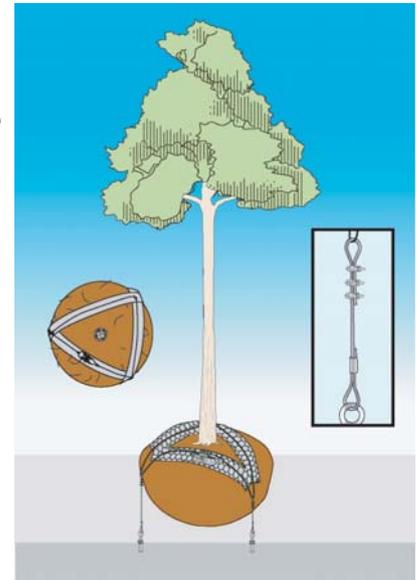
SPECIALIST APPLICATIONS

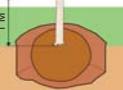
In addition to our standard systems, we can also provide individual bespoke tree anchoring systems to resolve challenging planting situations such as roof gardens, containers, solid bases and unusual urban sites.

Concrete Ring

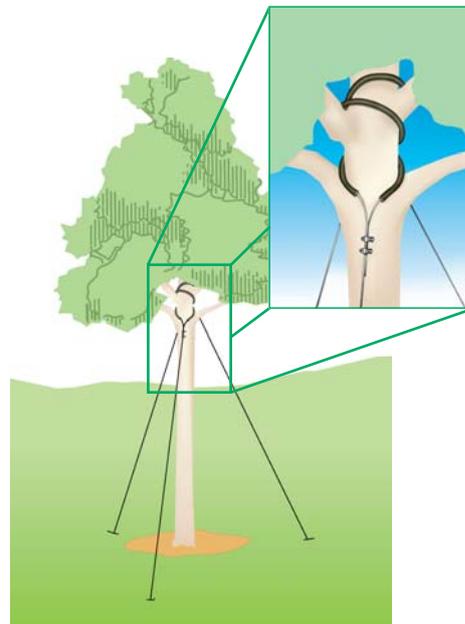


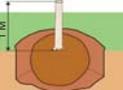
Concrete Base



	TREE HEIGHT (H) / CIRCUMFERENCE (C)	DESCRIPTION	PRODUCT CODE
	2.5 - 4.5m 12 - 25cm	3 x expanding eyebolts with wire attached, 1 x ratchet tensioner with 4 metres of wire, 3 x Plati-Mats & 9 rope grips.	RF1RP
	4.5 - 7.5m 25 - 45cm	3 x expanding eyebolts with wire attached, 1 x ratchet tensioner with 5 metres of wire, 3 x Plati-Mats & 9 rope grips.	RF2RP

Contractors Guy Fixing



	TREE HEIGHT (H) / CIRCUMFERENCE (C)	DESCRIPTION	PRODUCT CODE
	2 - 4.5m 7 - 25cm	3 x S4 anchors with wire assemblies (length 5m), 3 x collar, 6 x rope grips (2 per wire).	CG1
	4.5 - 7.5m 25 - 45cm	3 x S6 anchors with wire assemblies (length 6m), 3 x collar, 6 x rope grips (2 per wire).	CG2

PIDDLER - TREE IRRIGATION SYSTEM



Drought stress remains one of the biggest contributors to high mortality rates of transplanted trees in their first few years of establishment.

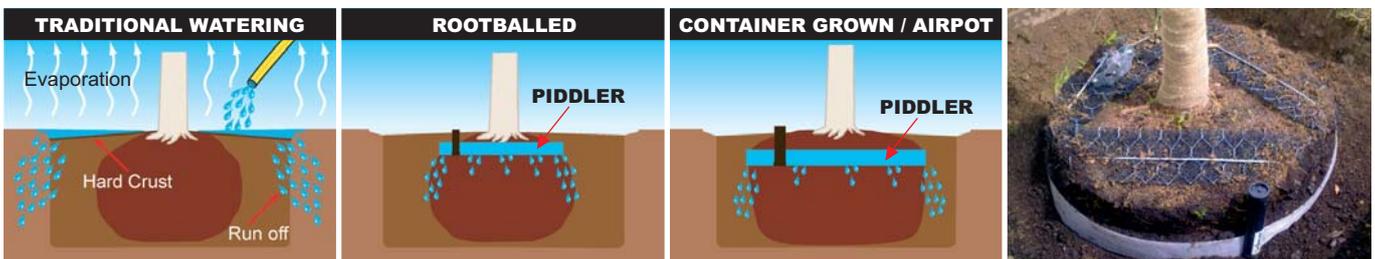
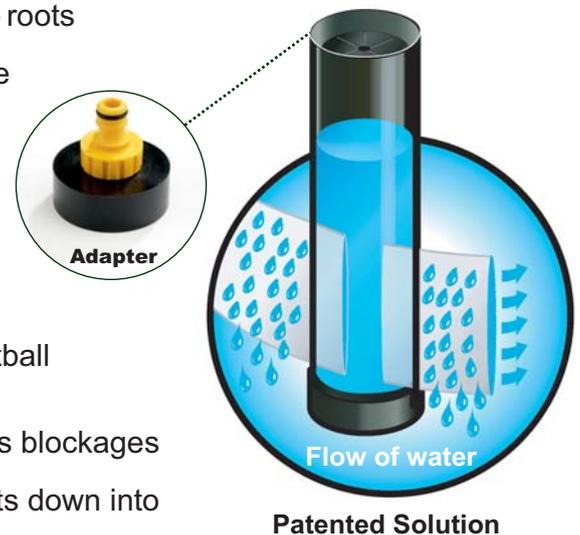
Water is vital for tree growth and sustainability. Lack of regular watering in the early years will without a doubt cause irreparable damage to the tree.

During the summer period a 6cm girth tree will typically require at least 30 litres of water per month and a semi-mature tree, with a girth of 20cm or more, will need 300 litres of water per month.

The use of a 'targeted' irrigation system that delivers water directly to the root zone provides a huge benefit to the development of the tree.

The Piddler irrigation system offers the following improvements over traditional watering systems:

- Highly efficient delivery of water and air directly to the tree roots
- Effective supply of water evenly in both directions all the way around the rootball, drenching the soil laterally
- Minimal waste - no run off, evaporation or water escaping directly into the bottom of the tree pit
- Easy watering with a hose pipe through the debris cap or using the pressurised adapter for increased flow
- Quick to assemble, tailor to size and suitable for all rootball diameters
- Debris cap and unique membrane construction prevents blockages
- Membrane acts as a strategic root barrier, directing roots down into their ideal growing zone
- Compact system offers significant freight cost savings over traditional pipe solutions
- Piddler can be used in straight runs (i.e. hedges) and is also ideal for roof garden planting



FOR ROOTBALLS up to Ø (cm)	HEADER HEIGHT(cm)/Qty	MEMBRANE LENGTH/M	PRODUCT CODE
55	25/1	2	PID0
90	30/1	3	PID1
155	30/1	5	PID2
240	30/2	8	PID3
310	30/3	10	PID4

PALM TREE SYSTEMS



There is a general trend across the world to plant much taller trees of all species, including palm trees. Traditionally these have been planted without support or are supported using unsightly wooden props; sometimes with disastrous results.

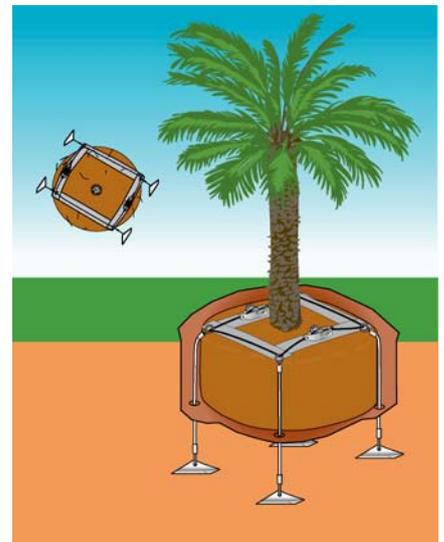
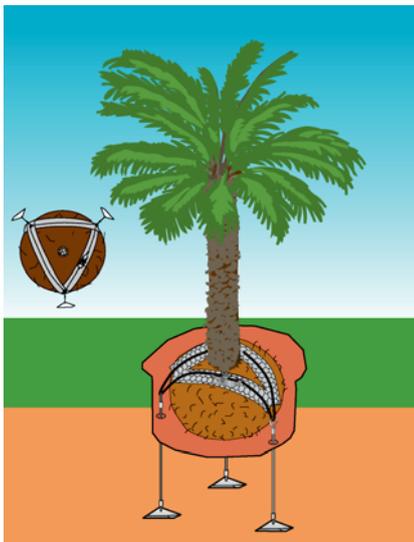
Platipus®, in conjunction with Landscape Architects and Palm Tree Nurseries, have refined our underground tree anchoring system to meet the demand of anchoring these large rootballed or container grown palm trees.

Available as a 3 leg or 4 leg system these solutions offer an instantly attractive finish to any landscape.

3 Leg System



4 Leg System



Note: Palm tree rootballs must be a minimum of 2 metres diameter properly rootwrapped and of sufficient strength and proportion to support a rootball fixing method. The correct palm tree kit required must be specified by the Landscape Architect once the rootball dimensions, tree height and sail area of the tree have been established.

3 LEG SYSTEM

	TREE HEIGHT (H)	DESCRIPTION	PRODUCT CODE
	Up to 6m	3 x S81 anchors, 8 metres of galvanised wire, 1 x ratchet tensioner & 3 x Plati-Mats.	RF3P
6 - 12m	3 x B61 anchors, 10 metres of galvanised wire, 1 x ratchet tensioner & 3 x Plati-Mats.	RF4P	

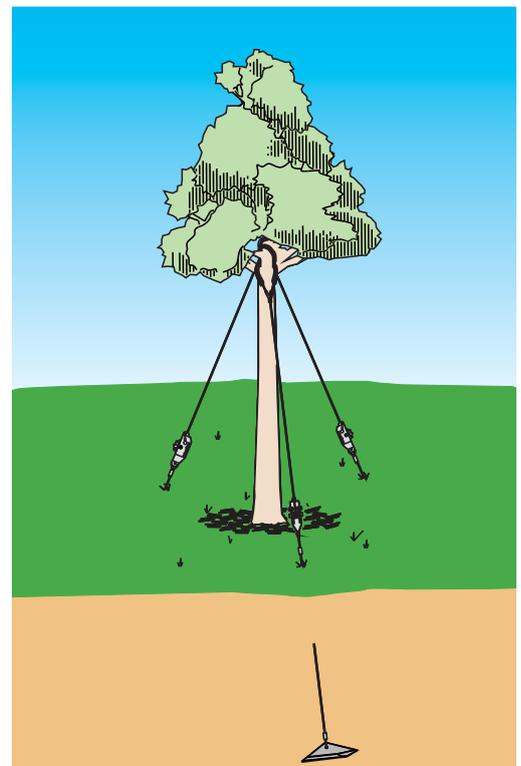
4 LEG SYSTEM

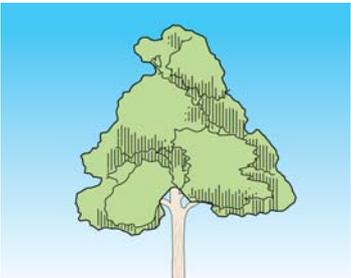
	TREE HEIGHT (H)	DESCRIPTION	PRODUCT CODE
	Up to 6m	4 x S81 anchors, 8 metres of galvanised wire, 2 x ratchet tensioners & 4 x Plati-Mats.	RF3P4LEG
6 - 12m	4 x B61 anchors, 10 metres of galvanised wire, 2 x ratchet tensioners & 4 x Plati-Mats.	RF4P4LEG	

GUY FIXING SYSTEM



- Guy fixing kits are available in a range of sizes to suit most transplants up to 20 metres high
- Kits are designed with simplicity and ease of use in mind
- They offer effective support for trees in highly exposed areas, and for trees which require correction against leaning
- Installation of the anchors is fast and simple
- Basic installation tools required are a drive rod and tension lever
- Powered machinery is recommended for multiple installations and for the larger anchors used on the G3 and G4 kits
- We are happy to discuss and recommend kits for particular applications and soil conditions. The following chart applies to most tree transplants



	TREE HEIGHT (H) / CIRCUMFERENCE (C)	DESCRIPTION	PRODUCT CODE
	2.5 - 4.5m 12 - 25cm	3 x S41 anchors attached to ratchet tensioners, 3 x collar, clip & wire assemblies (length 6m), 3 x tensioner shrouds.	G1
	4.5 - 7.5m 25 - 45cm	3 x S61 anchors attached to ratchet tensioners, 3 x collar, clip & wire assemblies (length 8m), 3 x tensioner shrouds.	G2
	7.5 - 12m 45 - 75cm	3 x S81 anchors attached to ratchet tensioners, 3 x collar, clip & wire assemblies (length 12m), 3 x tensioner shrouds.	G3
	12m+ 75cm+	3 x B61 anchors attached to ratchet tensioners, 3 x collar, clip & wire assemblies (length 12m), 3 x tensioner shrouds.	G4

ROOTBALL FIXING SYSTEM - STRAP



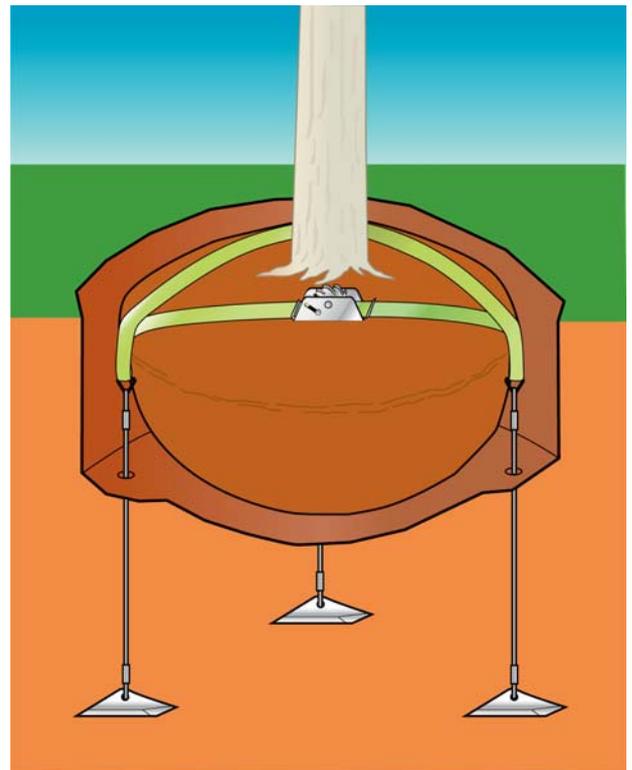
This new tree anchoring system, using our own webbing strap and bespoke tensioner, is ideal for small inexpensive rootballed trees on projects with a limited budget.

Although designed as a low cost tree anchoring system, careful consideration and many years of development has enabled us to manufacture a strap tensioner capable of producing the high loads needed to correctly anchor and secure these trees.

Each of the two new 25mm and 35mm standard strap tensioners has been specifically engineered to meet our usual high standards.

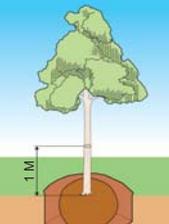
The benefits include:

- No more leaning trees due to insufficient strap tension from other inferior ratchet systems
- No unsightly stakes or timber above ground
- Planting at nursery line
- System uses proven anchor technology
- Specially engineered tensioners
- Strap trims easily with scissors



Note: Before specifying or choosing the new Rootball Fixing Strap System, you must ensure the rootballs are of sufficient strength and proportion to support this type of underground fixing method. If they are not please specify or use the Rootball Fixing System - Plati-Mat.

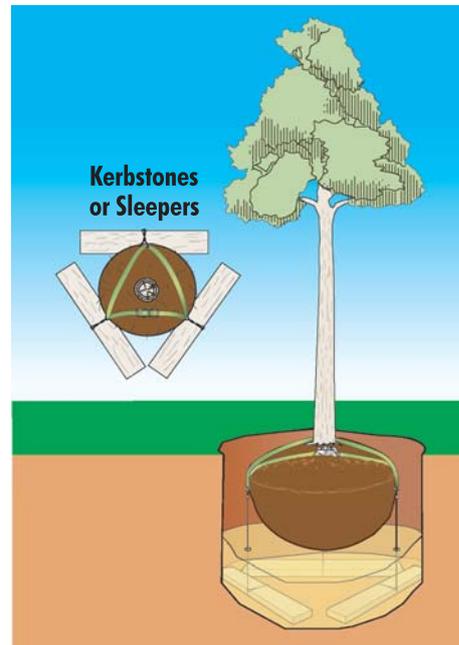


	TREE HEIGHT (H) / CIRCUMFERENCE (C)	DESCRIPTION	PRODUCT CODE
	2.5 - 4.5m 12 - 25cm	3 x S41 anchors with delta links, 3 metres x 25mm strap & 1 x strap tensioner.	RF1S
	4.5 - 7.5m 25 - 45cm	3 x S61 anchors with delta links, 5 metres x 35mm strap & 1 x strap tensioner.	RF2S

SPECIALIST APPLICATIONS - STRAP

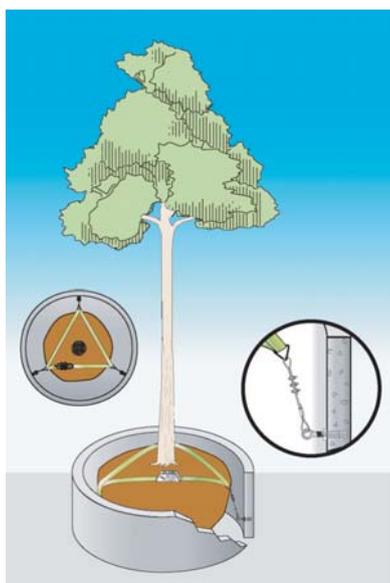
In addition to our standard strap systems, we can also provide individual bespoke tree anchoring systems to resolve challenging planting situations such as roof gardens, containers, solid bases and unusual urban sites where services may be a problem.

Deadman System

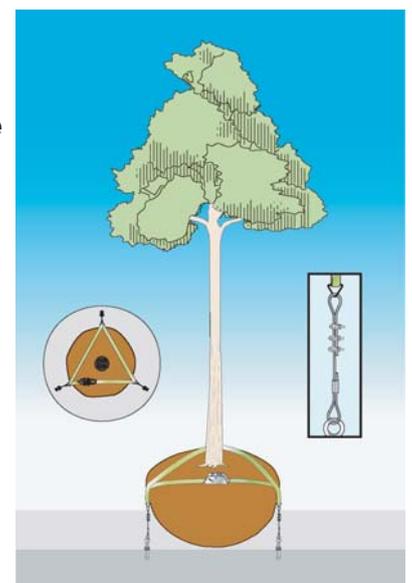


	TREE HEIGHT (H) / CIRCUMFERENCE (C)	DESCRIPTION	PRODUCT CODE
	2.5 - 4.5m 12 - 25cm	3 x wire chokes with delta links, 3 metres x 25mm strap & 1 x strap tensioner.	RF1RDMS
	4.5 - 7.5m 25 - 45cm	3 x wire chokes with delta links, 5 metres x 35mm strap & 1 x strap tensioner.	RF2RDMS

Concrete Ring



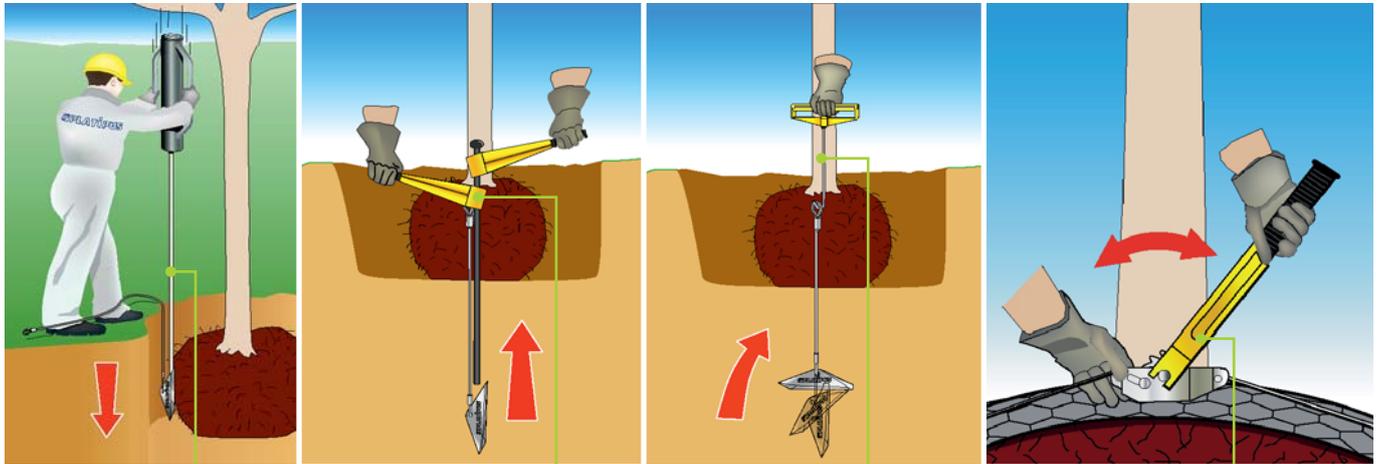
Concrete Base



	TREE HEIGHT (H) / CIRCUMFERENCE (C)	DESCRIPTION	PRODUCT CODE
	2.5 - 4.5m 12 - 25cm	3 x expanding eyebolts with cable attached, 1 x strap tensioner, 3 metres x 25mm strap, 3 x delta links & 9 x rope grips.	RF1RS
	4.5 - 7.5m 25 - 45cm	3 x expanding eyebolts with cable attached, 1 x strap tensioner, 5 metres x 35mm strap, 3 x delta links & 9 x rope grips.	RF2RS

INSTALLATION TOOLS

Basic tools are essential in the installation process. Other pieces of equipment make the general process easier and quicker. Where multiple installations of trees are concerned we recommend you consider using powered equipment to install the anchors. Additionally you will find it easier to install the larger “RF” and “G” kits using either petrol or compressed air breakers.



DRIVE RODS



ROD REMOVERS



LOADLOCKING



TENSION LEVERS



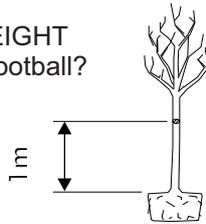
All our tools have been tried and tested over many years. A full twelve month replacement warranty is offered (subject to inspection) should any tools fail during the normal installation process.

PRODUCT CODE	DRIVE RODS	ROD REMOVERS	LOADLOCKING	TENSIONER
RF1P/G1	HDRS4/PDRS4	RR1	PH1	TL1
RF2P/G2	HDRS6/PDRS6	RR1	PH1	TL1
RF3P/G3	HDRS8/PDRS8	RR1	SJ1	TL2
RF4P/G4	HDRS8/PDRS8	RR1	SJ1	TL2
RF1S	HDRS4/PDRS4	RR1	PH1	TL1S
RF2S	HDRS6/PDRS6	RR1	PH1	TL2S

DESIGNER GUIDELINES & CONSIDERATIONS

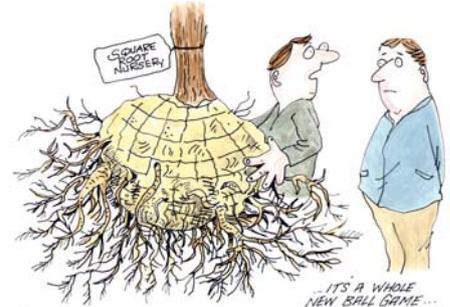
TREE SIZES

- Is there accurate information regarding the overall HEIGHT and CIRCUMFERENCE of the trees at 1m from the rootball?
- What size sail area do the trees have?
- Are they coniferous or deciduous?



ROOT STRUCTURE

- The trees should be properly rootwrapped or container grown and of sufficient strength and proportion to support an underground fixing method. *If not, then an above ground guying system such as the 'G' or 'CG' systems should be specified.*
- When pushed does the stem move while the rootball or container does not? *If so, you cannot use an underground fixing method. An above ground guying system should be specified.*



SITE LOCATION

- Where are the trees to be planted?
- What is the site's exposure to winds and heavy rainfall?
- Is there good accessibility to the planting area?
- Has an anchor test been carried out?



SOIL CONDITIONS

- Is the site unconsolidated, normal, disturbed or made up ground?
- Have large amounts of top soil been brought in to create planting areas and changes in the profile of the landscape?
- Is the site on an old previous structure where the ground contains rubble and broken concrete?
- Has any landfill been done on any areas of the site?



BURIED SERVICES

- Has the planting area been checked for all underground services, such as drains, water, gas, electricity or fibre optic/telecom cables?
- Buried Services are normally identified within 600mm of the surface. Generally, the rootball depths will exceed this. *If services are known to be present, recommend an alternative system such as our deadman fixing system.*
- If in doubt suggest a CAT scan of the tree planting pit and the surrounding area.



CONTRACTORS GUIDELINES & CONSIDERATIONS

THINGS TO REMEMBER

Question: How long does it take to install a Rootball Fixing System?

Answer: Once the hole is dug and the tree is ready to place into its pit, it should take approximately 15 - 30 minutes depending upon kit size and soil conditions.

Question: How will the soil area affect my choice of kit?

Answer: Consideration must be given when the tree is in leaf as extra wind loading may require larger anchorage.

Question: What tools do we need?

Answer:

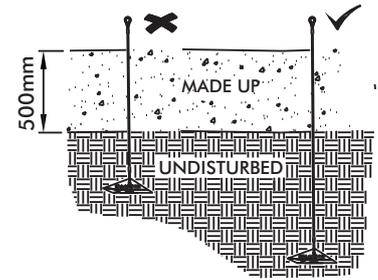
1. A drive rod (HDR or PDR of suitable size)
2. A tension lever
3. A Plati-Hook (or stressing jack for RF3P/RF4P)
4. Postrammer, sledgehammer or mechanical Breaker for powered installation

Question: What tools are not available from Platipus?

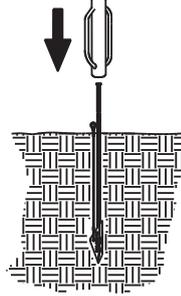
Answer:

1. Wire cutters/scissors
2. Sledgehammer

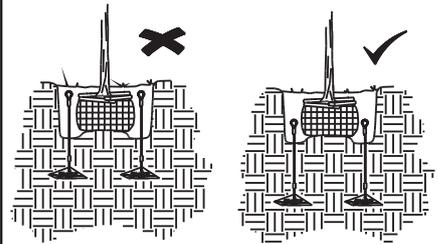
Remember to consider soil conditions when planting trees in made up ground and the need to place the anchors in an undisturbed material. If so, you can order 'ED' Kits (extra depth). To allow for this you may also need a longer drive rod.



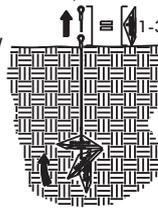
The anchor should be driven to the full working depth using a suitable drive rod.



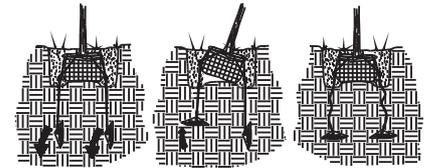
Always install the anchors to the full driven depth.



You must loadlock the anchors properly into their working position, by applying an upwards force / load on the on the wire tendon.



If the anchors are not loadlocked properly, the tree will become loose when the first winds arrive.

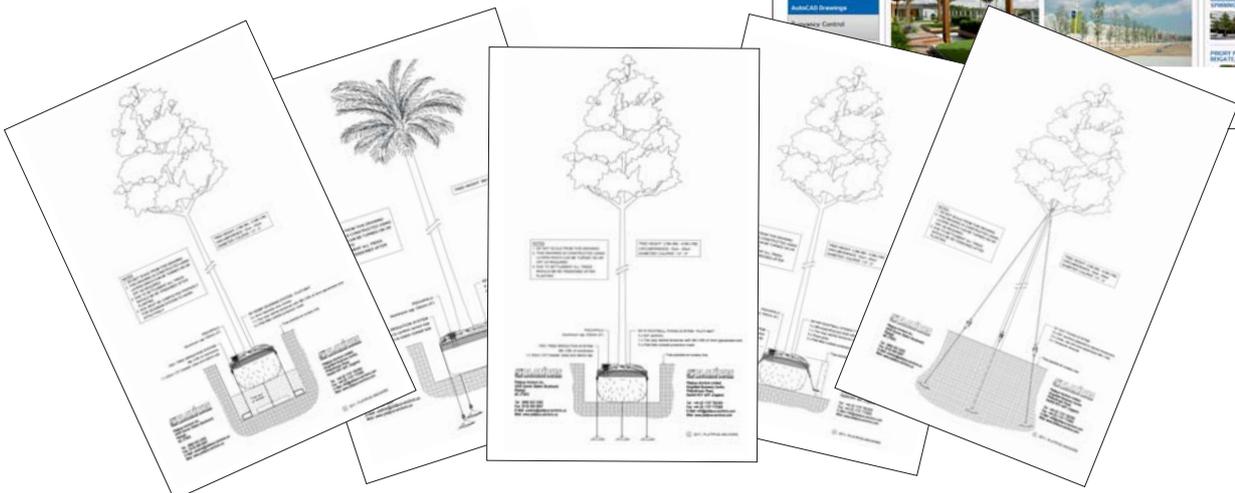


Note: Due to settlement of the tree re-tensioning is highly recommended after planting.

AUTOCAD DRAWINGS

We are committed to providing our customers with effective products and solutions, together with unrivalled service and support. As part of this commitment, we can now offer AutoCad drawings of our tree anchoring systems. This will enable you to choose the correct Platipus products and incorporate them directly into your own designs and specifications.

These can be easily requested by registering online at www.platipus-anchors.com



ROOTBALL FIXING SYSTEM - PLATI-MAT



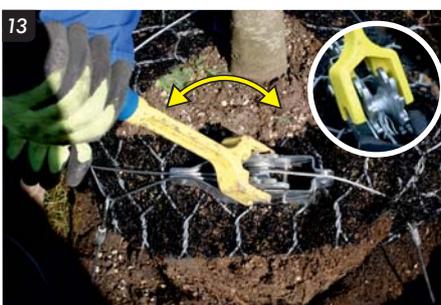
	RF1P	H = 2.5-4.5m C = 12-25cm
	RF2P	H = 4.5-7.5m C = 25-45cm
	RF3P	H = 7.5-12m C = 45-75cm
	RF4P	H = 12m+ C = 75cm+



D-MAN SYSTEM - PLATI-MAT



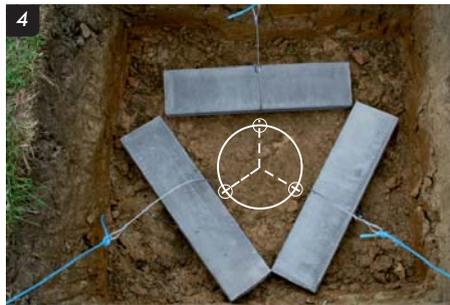
	RF1PDMAN	H = 2.5-4.5m C = 12-25cm
	RF2PDMAN	H = 4.5-7.5m C = 25-45cm



DEADMAN SYSTEM - PLATI-MAT



	RF1RDMP	H = 2.5-4.5m C = 12-25cm
	RF2RDMP	H = 4.5-7.5m C = 25-45cm
	RF3RDMP	H = 7.5-12m C = 45-75cm



PIDDLER - TREE IRRIGATION SYSTEM



FOR ROOTBALLS up to Ø (cm)	HEADER HEIGHT (cm)/Qty	MEMBRANE LENGTH/M	PRODUCT CODE
55	25/1	2	PID0
90	30/1	3	PID1
155	30/1	5	PID2
240	30/2	8	PID3
310	30/3	10	PID4



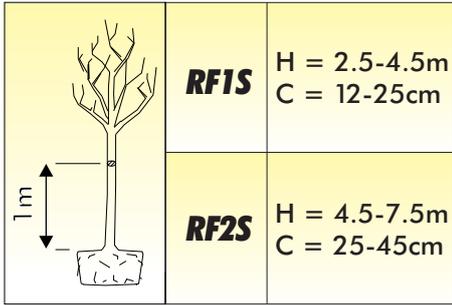
GUY FIXING SYSTEM



	G1	H = 2.5-4.5m C = 12-25cm
	G2	H = 4.5-7.5m C = 25-45cm
	G3	H = 7.5-12m C = 45-75cm
	G4	H = 12m+ C = 75cm+



ROOTBALL FIXING SYSTEM - STRAP



DEADMAN SYSTEM - STRAP

