

# Tree Anchoring & Irrigation Systems

Brochure

# INTRODUCTION TO PLATIPUS

# Tree Anchoring Systems, Irrigation & Landscape Applications

Since first pioneering the concept of underground tree anchoring in 1983, Platipus have designed, manufactured and supplied systems to secure, stabilise and irrigate trees on prestigious projects as well as thousands of smaller and private sites all over the world. Some examples of our prestigious projects include:

- One Tower Bridge, UK
- Franklin D Roosevelt Four Freedoms Park, New York, USA
- Expo Milan, Milan, Italy
- The Garden Show, Burg, Germany
- Sheraton Park, Doha
- Edward Street, Brisbane, Australia

By securing the rootball underground our systems allow for quick root development resulting in very low mortality rates for newly planted trees.



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. With continuous innovation we have developed high quality standard tree anchoring solutions for on-grade and on-structure, large palm trees or typhoon locations and permanent tree anchoring situations.



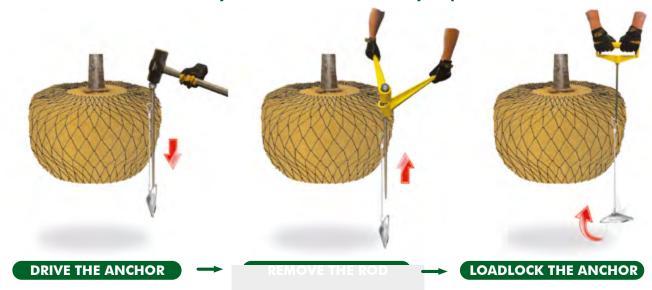






# THE PLATIPUS EARTH ANCHOR

# The installation of the anchor system consists of three easy steps:



Our Percussion Driven Earth Anchor (PDtA®) is a unique, modern and versatile device that can be rapidly installed in three steps using simple hand or powered tools. The cutting edge design ensures fast and easy installation and when fully loadlocked the anchor is immediately ready for use.

These systems are specifically designed to provide security and stability to the transplanted tree for three to five years whilst the roots establish themselves. Thereafter key elements of the system will degrade to allow unrestricted root growth and the remaining parts may be recycled.

The following anchors are used in our tree systems and are selected according to the size of the tree, the design and layout of the planting area and local soil and weather conditions. Where appropriate, we can test our anchors on site, prior to installation, to provide quantifiable load data. Bespoke solutions for projects requiring a longer design life can be supplied using stainless steel accessories.

PRODUCT CODE		DIMENSIONS L X B X H (mm)	MATERIALS	ANCHOR CABLE LENGTHS (m)
\$21		80 X 28 X 25	Aluminium Alloy	0.6
<b>S41</b>	Sylva Miles Balletina	121 X 41 X 34	Aluminium Alloy	0.75
<b>S61</b>	State parties	171 X 58 X 50	Aluminium Alloy	1.2
<b>S81</b>	a costana	263 X 90 X 76	Aluminium Alloy	1.5
B41	T Supred Budinas	310 X 110 X 93	Galvanised Spheroidal Graphite Iron	1.5

# TREE ANCHORING WITH ANCHORS Rootball Fixing System - Plati-Mat®

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

Over the past three 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, airpot 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, airpot and containerised stock
- 4 Leg options available for larger trees

TREE HEIGHT / CIRCUMFERENCE	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®	RFOP
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 \$81 anchors, 8 metres of galvanised wire, 1 x ratchet tensioner & 3 x Plati-Mats®	RF3P
12m+ / 75cm+	3 x B41 anchors, 10 metres of galvanised wire, 1 x ratchet tensioner & 3 x Plati-Mats®	RF4P

# TREE ANCHORING WITH ANCHORS

Palm Tree Systems - Plati-Mat®



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. Bespoke and stainless steel options are also available to suit individual requirements.

# **3 LEG SYSTEM**







#### **4 LEG SYSTEM**



Note: Palm tree rootballs must be a minimum of 2 metres in 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	DESCRIPTION	PRODUCT CODE
up to 6m	3 x S81 anchors, 8 metres of galvanized wire, 1 x ratchet tensioner & 3 x Plati-Mats®	RF3P
6 - 12m	3 x B41 anchors, 10 metres of galvanized wire, 1 x ratchet tensioner & 3 x Plati-Mats®	RF4P

# **4 LEG SYSTEM**

<b>)</b>

TREE HEIGHT	DESCRIPTION	PRODUCT CODE
up to 6m	4 x S81 anchors, 2 x 8 metres of galvanized wire, 2 x ratchet tensioners & 4 x Plati-Mats®	RF3P4LEG
6 - 12m	4 x B41 anchors, 2 x 10 metres of galvanized wire, 2 x ratchet tensioners & 4 x Plati-Mats®	RF4P4LEG

Please contact the technical team for information and specification guidance.

# TREE ANCHORING WITH ANCHORS

**Guy Fixing System** 

Guy fixing kits are available in a range of sizes to suit most high quality tree transplants up to 20m high. These kits are fast and easy to install, offer effective support for trees in highly exposed areas and for trees which require correction against leaning.

A simple drive rod and tension lever is required for installation although powered machinery is recommended for multiple installations and for G3 / G4 kits. We are happy to recommend kits for particular applications and soil conditions.

### **TYPHOON ANCHORING**

The annual threat of hurricanes & typhoons has meant that around the world, there is a requirement to provide additional above ground support to trees in exposed locations such as pool decks, raised planters and roof gardens. We work closely with the Client and Landscape Architect to ensure the correct solution is specified. This could involve field trials on-site to test anchor suitability and may result in a variety of systems being specified (i.e. extra depth, 4 leg variants, permanent stainless components). Our typhoon systems have been tested during field trials and installations with no adverse effect on the symmetry or stability of the trees and palms.













TREE HEIGHT / CIRCUMFERENCE	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.	<b>G</b> 1
4.5 - 7.5m / 25 - 45cm	$3 \times 861$ anchors attached to ratchet tensioners, $3 \times 861$ collar, clip & wire assemblies (length 8m), $3 \times 861$ tensioner shrouds.	<b>G2</b>
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.	<b>G</b> 3
12m+ / 75cm+	3 x B41 anchors attached to ratchet tensioners, 3 x collar, rope grips (9) & wire assemblies (length 12m), 3 x tensioner shrouds.	<b>G4</b>

# TREE ANCHORING WITHOUT ANCHORS

D-MAN® Anchor System - Plati-Mat®

# **Underground Tree Anchoring Solutions.**





With the ever increasing desire to create beautiful landscapes in challenging urban environments and roof gardens there are many occasions where a standard tree anchoring system cannot be used due to the location of buried services or shallow planting areas. The award-winning D-MAN® is a strong, compact and lightweight system primarily designed to replace the traditional kerbstone or sleeper deadman.

D-MAN® can be used individually or in multiples and cells simply lock / unlock together. It has a distinctive letterbox style wire tendon anchor point and a unique cup for valuable water storage. D-MAN® is made from recycled plastic and when combined Plati-Mat® and our own engineered ratchet tensioner provides excellent stability to the tree.





The D-MAN® cells / Deadmen should be installed at least 30cm below the base of the rootball with the soil compacted above the cells to 60%, right up to the nursery line.

TREE HEIGHT / CIRCUMFERENCE	DESCRIPTION	PRODUCT CODE
2.5 - 4.5m / 12 - 25cm	3 x Galvanised wire disc anchor points, 4 metres of galvanised wire, 1 x ratchet tensioner, 3 x Plati-Mat & 3 x D-MAN® Cells	RF1PDMAN
4.5 - 7.5m / 25 - 45cm	3 x Galvanised wire double disc anchor points, 5 metres of galvanised wire, 1 x ratchet tensioner, 3 x Plati-Mat & 6 x D-MAN® Cells (3 x 2 cells connected)	RF2PDMAN

# **D-MAN® STRUCTURAL SYSTEMS**

D-MAN® cells can be easily connected together and stacked to create a structural system to suit any planting area or podium. This allows for trees with rootballs of varying heights to be planted level and also provides options to influence the architecture of the soil.

The D-MAN® Structural System alleviates many problems caused by planting in restricted urban areas.

- Cover and protect large planting areas & roof gardens
- Stack cells, by rotating them 180°, to allow planting areas to be built up.
- Secure trees & large shrubs with our D-MAN® Anchor System in any location
- Allows catchment water to drain underneath leaving the balance in cells





# TREE ANCHORING WITHOUT ANCHORS

Deadman System - Plati-Mat®

Designed to satisfy the requirements of a specialist market, traditional deadmen systems have enabled Platipus to offer effective solutions for planting in difficult urban environments, where buried 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 / CIRCUMFERENCE	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-Mat®	RF1RDMP
4.5 - 7.5m 25 - 45cm	3 x wire chokes, 5 metres of galvanised wire, 1 x ratchet tensioner & 3 x Plati-Mat®	RF2RDMP
7.5 - 12m 45 - 75cm	3 x wire chokes, 8 metres of galvanised wire, 1 x ratchet tensioner & 3 x Plati-Mat®	RF3RDMP





# TREE ANCHORING WITHOUT ANCHORS Eyebolt System - Plati-Mat®

In addition to our standard systems, we 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 / CIRCUMFERENCE	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-Mat® & 9 x 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-Mat® & 9 x rope grips	RF2RP

For large tree sizes, please contact the technical team for information and specification guidance.

# PERMANENT ANCHORING SOLUTIONS

In addition to our standard solutions we can also provide permanent tree anchoring systems, using stainless steel accessories, available in a wide range of options to suit individual applications

such as:

- Podiums
- Roof Gardens
- Bridges
- Concrete Planters
- Jetties

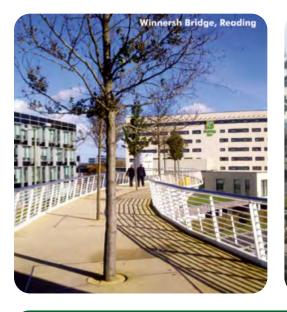




# **IDEAL APPLICATIONS**

- Coastal environments with high levels of salinity
- Sites which are constantly exposed to high winds and heavy rainfall
- On-structure applications where root development is restricted by shallow and narrow planting pits





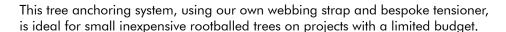


Please contact the technical team for information and specification guidance.

# TREE ANCHORING WITH STRAP

# **ROOTBALL FIXING SYSTEM - STRAP**





Although designed as a low cost tree anchoring system, careful consideration and many years of development have enabled us to manufacture a strap tensioner capable of producing the high loads needed to correctly anchor and secure these trees. Both 25mm and 35mm standard strap tensioners have been specifically engineered to meet our usual high standards.



# THE BENEFITS INCLUDE:

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

TREE HEIGHT / CIRCUMFERENCE	DESCRIPTION	PRODUCT CODE
2.5 - 4.5m / 12 - 25cm	3 x S41 anchors with delta links, 4 metres x 25mm strap & 1 strap tensioner	RF1S
4.5 - 7.5m / 25 - 45cm	3 x \$61 anchors with delta links, 5 metres x 35mm strap & 1 strap tensioner	RF2S

#### **DEADMAN SYSTEM - STRAP**

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 7.5 metres high.





TREE HEIGHT / CIRCUMFERENCE	DESCRIPTION	PRODUCT CODE
2.5 - 4.5m / 12 - 25cm	3 x wire chokes with delta links, 4 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 strap tensioner	RF2RDMS

#### **EYEBOLT SYSTEM - STRAP**





TREE HEIGHT / CIRCUMFERENCE	DESCRIPTION	PRODUCT CODE
2.5 - 4.5m / 12 - 25cm	3 x expanding eyebolts with cable attached, 1 x strap tensioner, 4 metres x 25mm strap, 3 x delta links & 9 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 rope grips	RF2RS

**Concrete Ring** 

**Concrete Base** 

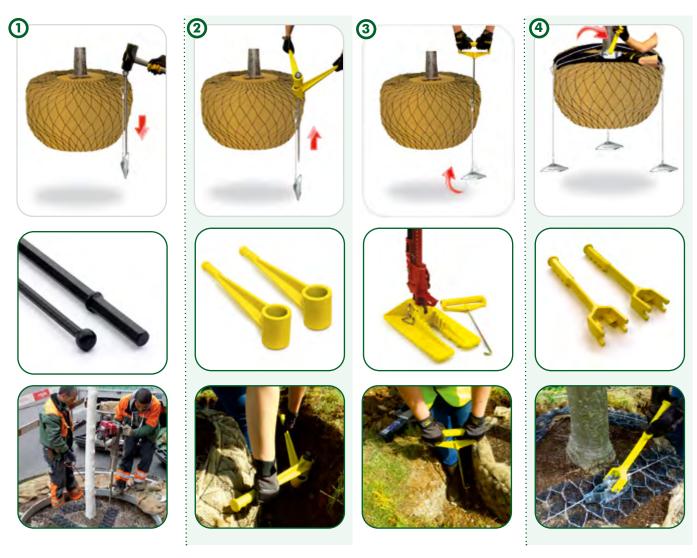


It is not advisable to use any strap systems for container grown stock (see Plati-Mat® systems).

# **INSTALLATION TOOLS**

Tree Systems

Basic tools are essential in the installation process. Other equipment makes 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.



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
S2ZIP	HDRS2	X	PHOZ	X
GEOCLIP	Please contact us for recommended Geoclip installation tools			

# OTHER LANDSCAPE PRODUCTS

Piddler® Tree Irrigation & Aeration System

Drought stress is one of the biggest contributors to high mortality rates of transplanted trees in the first few years after planting. Water is vital for tree growth and sustainability and without regular watering the tree will suffer irreparable damage.

During the summer a 6cm girth tree typically requires at least 30 litres of water per month and a semi-mature tree, with a girth of 20cm or more, needs 300 litres of water per month. The use of a targeted irrigation system that delivers water directly to the root zone provides huge benefits to the tree's development.



# THE BENEFITS INCLUDE:

- Efficient & even delivery of water & air directly to the tree roots
- Minimal waste no run off, evaporation or water escaping to the bottom of the tree pit
- Easy watering using a hose pipe through the debris cap or the adapter
- Quick to assemble, tailor to fit on all rootball sizes
- The membrane design prevents blockages & directs roots down to their ideal growing zone
- Lightweight & compact, compared to traditional pipe systems, offering significant freight cost savings











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

# OTHER LANDSCAPE PRODUCTS

S2 Zip Anchor

# The S2 Zip Anchor - the latest innovation in securing Landscape Fabrics

To complement our comprehensive range of tree anchoring systems, Platipus has developed the simple, cost-effective and reliable S2 Zip Anchor to secure a wide variety of landscaping fabrics.

# THE BENEFITS INCLUDE:

- Ideal for weed control, ground covers and grass reinforcement
- Reliable alternative to traditional pins or pegs meaning less anchors may be required to cover the same area
- Reduces time and labour costs associated with reinstalling loose pins
- Easy to assemble and quick to install using simple hand tools
- Self-locking load plate holds material securely to the ground
- UV stabilised and highly corrosion resistant
- Excellent surface erosion solution when used with suitable geotextiles

















Drive Anchor Remove Rod Loadlock Set Plate

The S2 Zip anchor can be easily and efficiently installed using lightweight equipment:



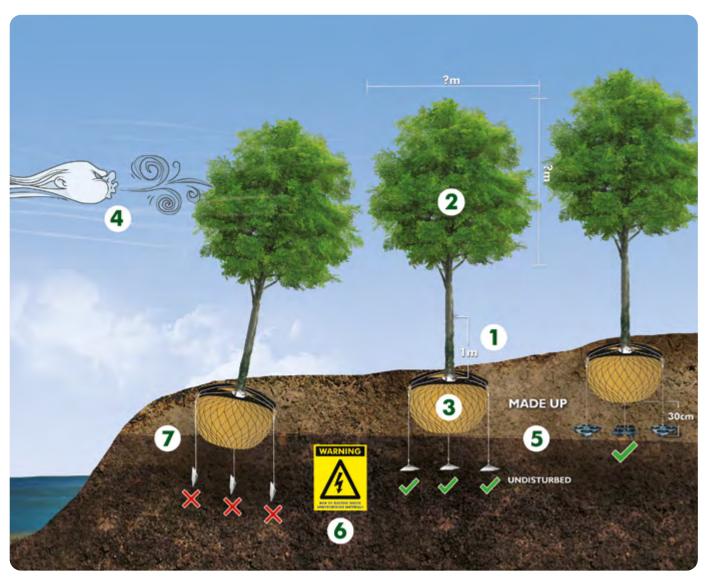
# **GEOCLIP**

The Geoclip System is used to secure Geoweb, particularly when installed in difficult locations. This system can be tailored depending on the project and it is possible to use different anchor sizes or adapt it for use on structure.

The system includes stainless steel wire tendon, Geoclip and Wedge Grip for a reliable and long lasting support.



# TECHNICAL SUPPORT Designer & Contractor Guidelines



# 1 Tree Sizes

Is there accurate information regarding the overall height and circumference of the trees at 1m from the rootball?

# (2) Sail Area

What size sail area do the trees have?

# (3) Root Structure

The trees should be properly rootwrapped, airpot or container grown and of sufficient strength and proportion to support an underground fixing method. When pushed, does the stem move while the rootball, airpot or container does not? If the system does move, then an above ground guying system should be used. (See page 6).

# (4) Site Location

Where are the trees to be planted and what is the sites exposure to winds and heavy rainfall? Has an anchor test been carried out?

# (5) Soil Conditions

Is the soil on the site compact/undisturbed, 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? If so, you may need to use Extra Depth (ED) kits, or D-MAN® / Deadman Systems. (See pages 7 & 8)

# (6) Buried Services

Has the planting area been checked for all underground services such as drains, water, gas, electricity or fibre optic/ telecom cables? If services are known to be present, we recommend an alternative system such as our D-MAN® or Deadman System (See pages 7 & 8).

# (7) Loadlocking Correctly

You must loadlock the anchors properly into their working position, by applying an upwards force / load on the wire tendon. If the anchors are not loadlocked properly, the tree will become loose when the first winds arrive.

Due to settlement of the tree and after watering, re-tensioning is highly recommended.

# **TECHNICAL SUPPORT**

AutoCAD Drawings / Presentations / Demonstrations / Platipus News

#### **AUTOCAD DRAWINGS**

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

AutoCad drawings can be easily requested directly from the tree anchoring systems section of our website: https://platipus-anchors.com/industry-sectors/landscape-tree-anchoring-irrigation/autocad-drawings/



# PRESENTATIONS, DEMONSTRATIONS & TRAINING





We understand the importance of Continued Professional Development. Our philosophy is to offer busy professionals the opportunity to discover the advantages of the Platipus Tree Anchoring System through a comprehensive technical presentation or demonstration, at a time and location convenient to you.

Please contact the technical team if you would like to organise a 1 to 1, group or webinar presentation, demonstration or on-site training.

# **PLATIPUS NEWS**

You can also stay up to date with the latest Platipus News including case studies, videos and much more by following us on Social Media and Youtube. Find us here:



www.youtube.com/user/platipusearthanchors



www.linkedin.com/company/platipus-anchors-ltd.



www.facebook.com/platipusanchors



www.twitter.com/PlatipusAnchors

# **INSTALLATION GUIDE**

Rootball Fixing System - Plati-Mat®











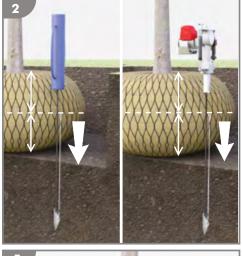


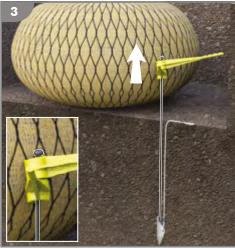


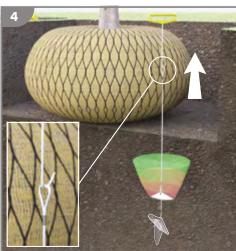


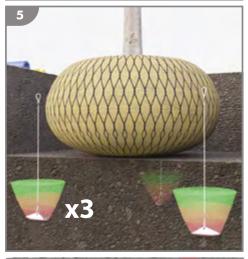


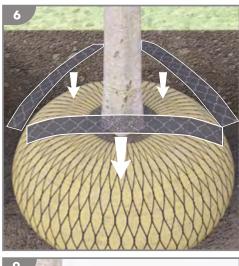


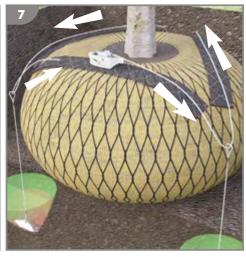


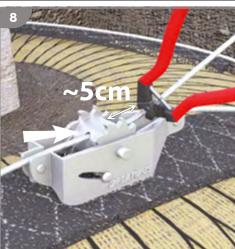


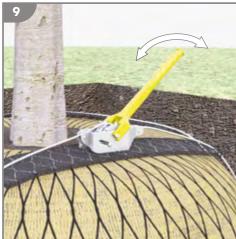


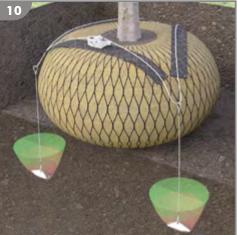












For more installation guides visit our YouTube channel

# **INSTALLATION GUIDE**

D-MAN® Anchor System - Plati-Mat®













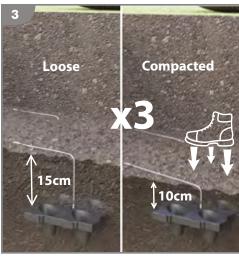
# **RF1PDMAN**

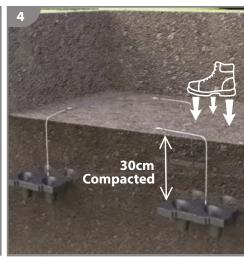


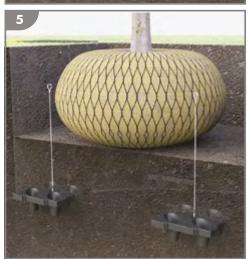


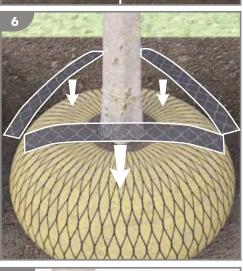




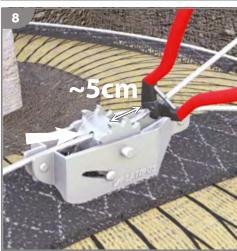




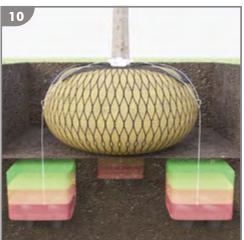












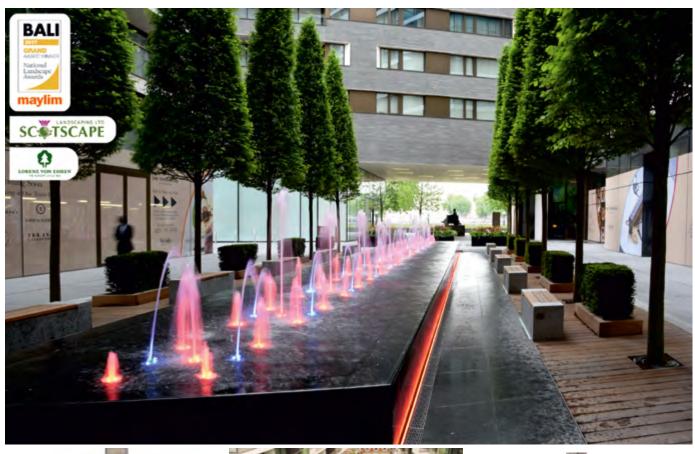
For more installation guides visit our YouTube channel



# **Project Overview**

One Tower Bridge is a prestigious flagship project by Berkeley Homes, offering a stunning mixed-use development directly adjacent to Tower Bridge, one of London's most iconic landmarks. The project was multi-phased and logistically challenging as cranes were required to lift and plant mature trees at both ground and podium level.

All landscaping and external works were delivered by Maylim who were awarded the coveted 'Grand Award' at the 2017 BALI National Landscape Awards. The company's attention to detail was highlighted throughout this high pressure project and their ability to overcome huge challenges was key to their award success. Scotscape carried out the soft landscaping over a 27 month period. The projects urban environment together with the presence of buried services meant that a combination of Platipus D-MAN® and Deadman Fixing Systems with Plati-Mat® were chosen for their high quality and reliability, providing unrivalled stability to all of the trees. The completed gardens now offer beautiful and relaxing surroundings and Platipus are proud to have been the preferred supplier for all tree anchoring systems on the project.









Tree Anchoring Systems: RF1PDMAN & RF3RDMP

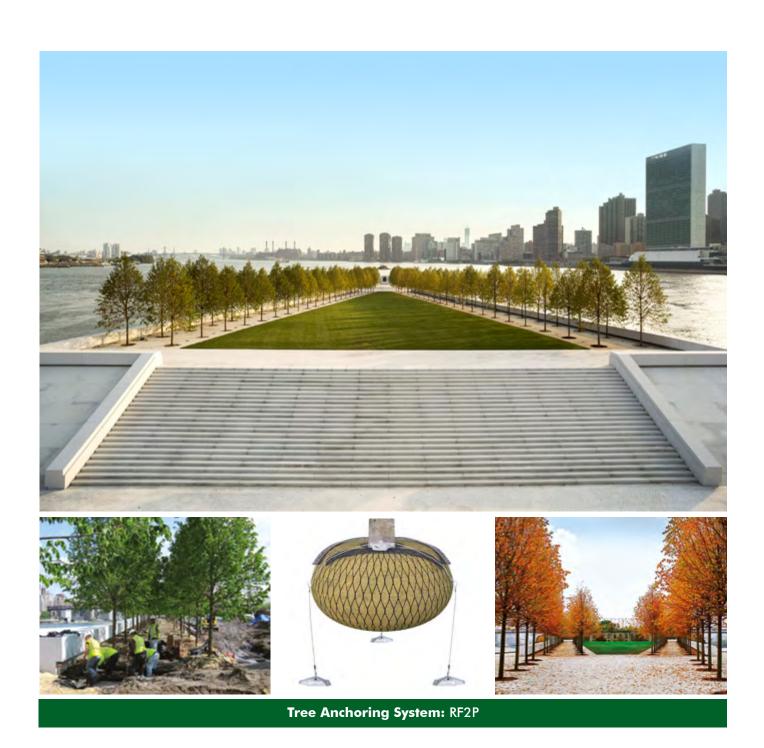
# **CASE STUDY**

The Franklin D. Roosevelt Four Freedoms Park, New York



# **Project Overview**

The Franklin D. Roosevelt Four Freedoms Park, located in the East River of New York City between Manhattan and Queens, was built as a tribute to the historic wartime speech given by FDR in 1941. Designed by architect Louis Kahn in 1973, the island public park is triangular in shape and is lined with Littleleaf Linden trees around a white granite landscape. To maintain the geometrical design of the park, the Platipus Rootball Fixing System was used in lieu of stakes and guy wires. The system also served to secure the trees against the wind loads off the surrounding water. In October 2012, just days after the official dedication, Hurricane Sandy threatened the park by producing wind gusts of over 70 mph. This major storm event did not impact the position or symmetry of the trees due to the strong stability of the anchored rootball.



# CASE STUDY Expo Milano 2015, Milan - Italy



# **Project Overview**

Expo Milano 2015 was the Universal Exhibition which Milan hosted in 2015. For over 6 months, Milan became a global showcase where over 140 countries participated and welcomed over 20 million visitors to its 1.1 million square meter of exhibition area. This significant project put Milan in the light of the international scene.

A variety of Platipus underground Rootball Fixing Systems were chosen to secure the numerous green spaces between the pavilions inside the Expo. Platipus systems were able to provide a clean finish to this prestigious project and also ensured the trees were safely anchored in this large public space. Platipus worked closely with the Landscape Contractor in providing unlimited technical support and free on-site training to its landscape teams.



Tree Anchoring Systems: Deadman Systems - Plati-Mat® & Strap

# **CASE STUDY**

The Garden Show 2018, Burg - Germany



From April 2018 this public park will form the entrance to the Landesgartenschau castle. The park, built in 1913 as a railway station, lies in the west of the city which acts as a green axis between the station and the city center. The 9.5-hectare park is permanently upgraded in terms of function and design in order to fulfill its role as a central inner city park and recreation center. The fire brigade monument and the honorary cemeteries are a contrast between the places of silent remembrance. In addition, historical tombstones and 24 pattern tombs are presented in the park.

Before the opening of the Garden Show, more than 135 trees will be anchored in the park with underfloor anchoring systems by Platipus. As an alternative to wooden poles, this anchoring method ensures an undisturbed landscape aswell as a providing a healthy, unobstructed way to grow.









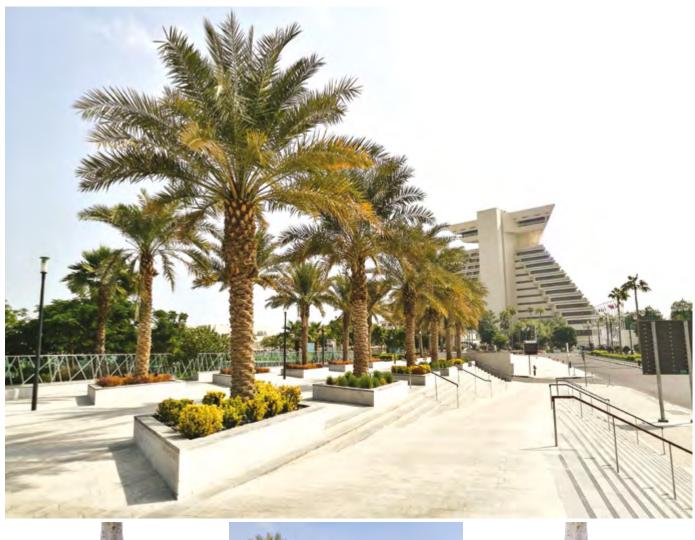
Tree Anchoring System: RF1S



# **Project Overview**

This development creates a renewed public green space covering the area from the Doha Bay to the Sheraton Hotel. The project included the design and creation of a public park and a two-storey underground car park accommodating around 2,000 vehicles.

Platipus underground Rootball Fixing Deadman Systems were specified in order to provide not only a clean and safe finish to the public space but also to secure these transplanted, mature palms in their concrete planting pits without jeopardising the water proofing that protects the underground car park beneath. Platipus provided on-site training and installation advice.









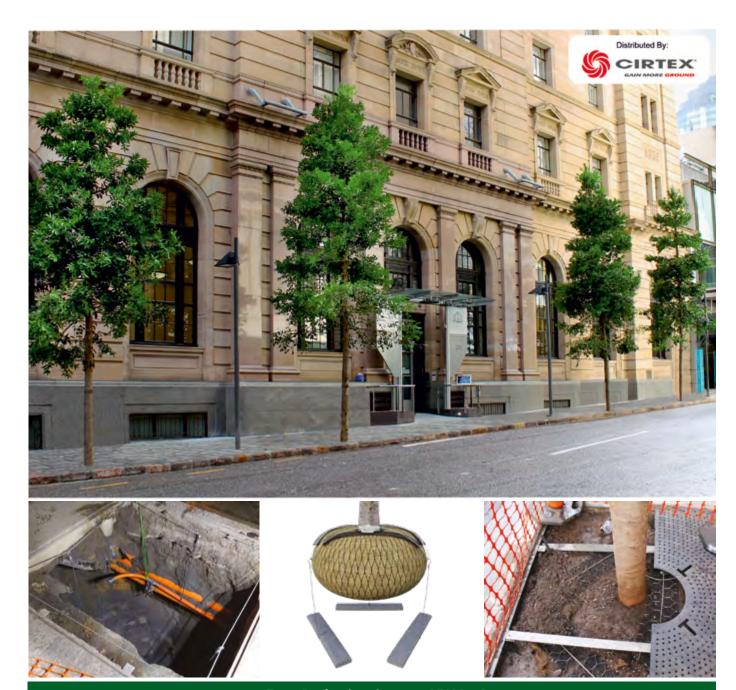
Tree Anchoring Systems: Deadman System - Plati-Mat & Strap (RF2RDMP & RF2RDMS)



# **Project Overview**

An upgrade project started in September 2016 to transform this area of the Central Business District into a world-class retail environment with open footpaths and a tree-lined boulevard. 25no. Kauri Pines were planted in areas with buried services and the City Project Office did not want to restrict pedestrian access by using wooden stakes or above ground guy wires to support the transplanted trees.

The Platipus Deadman Fixing System with Plati-Mat was specified to anchor the trees and to provide a clear aesthetic finish to the landscape. This system allowed tall 7 – 9m high trees to be planted in restricted planting areas without damaging the buried services and still provided excellent stability and support to keep the trees secure. To minimize the impact on local traders, the installation was conducted at night and Cirtex Australia Ltd provided on-site advice to ensure this was done efficiently.















PDEA®, ARGS® and ARVS® are Registered Trademarks of Platipus Anchors. Platipus Anchors technology is protected by International Patents, Trademarks and Registered Copyright.











# **LOCATIONS & CONTACT INFO**

#### **ASP ENTERPRISES**

aspent.com

salesasp@aspent.com

St. Louis, MO Omaha, NE 636.343.4357 402.861.8579

Kansas Citv. MO 816.554.1191

Wichita, KS 316.393.1554

# **BOWMAN CONSTRUCTION SUPPLY**

bowmanconstructionsupply.com

salesbcs@bowmanconstructionsupply.com salesquick@quicksupplyco.com

Denver, CO Colorado Springs, CO 303.696.8960

Loveland, CO 970.535.0863

# **OUICK SUPPLY CO.**

quicksupplyco.com

Des Moines, IA 515.289.1271

#### **CASCADE GEOSYNTHETICS**

cascadegeos.com

salescascade@cascadegeos.com

Portland, OR 971.339.1020

# **SOLUTIONS WE SUPPLY**

#### **GEOSYNTHETICS**

Filter Fabrics

Stabilization Fabrics

# Geogrids

- Road Grids
- Wall Grids
- Slope Stabilization

#### **Specialty Fabrics**

#### **Composite Geomembranes**

• GCLs, PVC, HDPE, LLDPE, EPDM, Granular Bentonite

#### **SEDIMENT CONTROL**

#### **Inlet Protection**

· Grated Inlet, Curb Inlet, Area Inlet Protection

#### **Ditch Checks**

- · Triangle Silt Dike
- GeoRidge

#### **Perimeter Protection**

- · High and Low-Porosity Silt Fence, Straw Wattles, Silt Socks
- Safety Fence

#### Flocculants & Water Treatment

Polymer-Based & Natural Flocculants

#### Sediment Basin Skimmers

**Dewatering Bags** 

#### **Trackout Control**

- FODS
- Rumble Grates

# **Turbidity Curtains**

#### **EROSION CONTROL**

719.257.7840

#### **Basic Hydraulically Applied Mulches**

- Wood
- Paper
- Blends
- Straw

#### **High-Performance Hydraulically Applied Products**

- FGM
- Additives & Tackifiers

#### **Temporary Erosion Control Blankets**

- Coir & Jute Mat/Nettings
- Short-Term ECBs
- Extended-Term ECBs

#### **Permanent Erosion Control Blankets**

- Turf Reinforcement Mats
- HP-TRMs
- Anchor Reinforced Vegetation System

# Structural BMPs

- Transition Mats
- Geoweb Cellular Confinement
- Composite Vegetated Armor System
- Flex MSE Vegetated Wall System
- Articulated Concrete Block
- Gabions
- · Grout-Filled Geotextile Mats

#### Vegetation Establishment

- · Native Seed & Turf Seed
- Fertilizers
- · Organic Soil Additives
- Stratavault Soil Cells

### STORMWATER MANAGEMENT

#### Water Quality

- Inlet Filter Boxes
- Pre-Treatment Chamber
- Nutrient Separating Baffle Boxes
- · High-Flow Biofiltration Media
- · Hydrodynamic Separators
- Stratavault

#### Water Ouantity

- · Modular Underground Storage Systems
- Chamber Detention Systems

#### Drainage

- HDPE Swale Liner
- Pipe & Fittings
- · Drainage Composites
- Strip Drain

#### **Inlet Structures**

- PVC
- · Drain Basins, In-Line Drains
- Landscape

# Permeable Pavers

- Permeable Articulating Concrete Block
- Grass Pavers
- Gravel Pavers
- Concrete Pavers

#### **SPECIALTY**

Natural & Synthetic Coir Fiber Logs **Vegetated Reinforced Soil Slopes** Soil Anchors **Root Barrier System** AquaBlok Muscle Wall

We are full line distributors of construction materials for all project types. Contact us for assistance with a project. From specification and development to installation and completion, we're here to help with all of your site solution needs.