

Vulcan® Tree Kits

PRODUCTS, APPLICATIONS
AND TECHNICAL INFORMATION



www.anchor systems.co.uk

ABOUT ANCHOR SYSTEMS (INTERNATIONAL) LTD

Anchor Systems (International) Ltd supplies ground anchors, helical anchors and concrete anchor bolts for a wide range of temporary and permanent works across the globe. We are the designer and exclusive supplier of the well proven and versatile range of Vulcan Earth Anchors® which have been installed worldwide for a multitude of structural and groundwork applications.

Formed over 20 years ago, Anchor Systems has considerable expertise in structural and geotechnical stabilisation and we have a strong reputation for quality and service as well as our ability to deliver solutions that yield sustained results. We offer a comprehensive advice, design, specification and site testing service.

At Anchor Systems we pride ourselves on providing full support and a first-class service, which we believe goes above and beyond that of our competitors. This starts from the enquiry where we work with our clients to gain a full understanding of what they are trying to achieve and how they like to work. We then offer full support and advice throughout the design and ordering process and even when our client has received their goods – we don't leave it there. We go on to offer support, training and on-site supervision and will always make sure our clients are completely happy throughout the whole process. We can also provide clients with bespoke designed products that can be unique to them and their project.

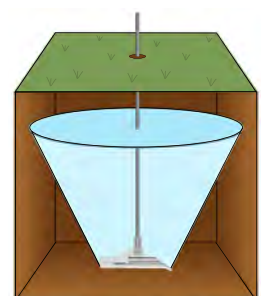
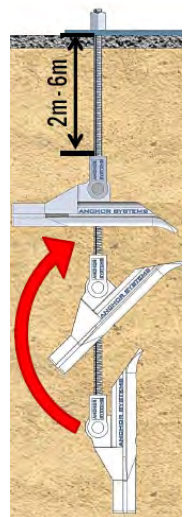
VULCAN EARTH ANCHORS®

The Vulcan Earth Anchor range was designed as a simple, reliable and cost-effective ground anchoring solution with the ability to provide immediate loading capacities from 1 - 450kN in most displaceable ground conditions with extensive applications.

The concept involves a specially designed anchor with a large surface area, linked to a high yield tie bar or tendon to suit a variety of conditions, being driven into the ground where it is locked in position by applying a tensile load and the top end terminated.

With their ease of use and speed of installation, Vulcan Earth Anchors provide a time and cost saving alternative to more traditional means of anchoring, particularly where tight programme schedules are involved. This, combined with the wide catalogue of sizes available, means that the Vulcan Anchor has gained recognition across a vast range of applications internationally.

- Large surface area means that Vulcan anchors can achieve greater capacity than others on the market
- Rapid installation time
- Largest range of anchors in the UK ranging from 1 - 450kN+
- Anchor Systems Ltd are the only company globally to make anchors in stainless steel
- Bespoke design available
- Competitive lead times and high quantities of stock available
- Made in Britain



INTRODUCTION TO VULCAN TREE KITS

Anchor Systems offer an extensive range of tree kits, providing a discreet anchoring system for securing newly planted trees of all sizes in most situations. Our widely used tree kits are strong, durable, practical and very cost effective.

Our Vulcan Tree Anchoring Systems are the preferred method of securing saplings, rootballs and supporting established trees. The speed of installation and simplicity of the systems makes Anchor Systems (International) Ltd the market leader for these range of products. A range of systems are available to suit a wide variety of applications and your specific requirements can be accommodated. Our systems are simple to install, easy to adjust and user friendly. Anchor Systems has been constantly developing, innovating and updating our extensive range of unique over ground and underground fixing solutions to suit all applications.

BENEFITS OF OUR NEW TREE KIT SYSTEMS

- Made in Britain – quality and reduced lead times.
- Produced from high grade steel – stronger and better longevity.
- The Vulcan Earth Anchor has a larger surface area than previous designs and alternatives on the market – achieves higher loads in poor ground conditions.
- Wide variety of systems and solutions
- Multiple anchor installation options – hand held or machine driven.
- Wider range of 5 different size anchors for small trees under 2m to large trees over 12m
- Increased durability – lifespan ranges from temporary works to 120 + years.
- Available with wire or high yield bar tendons.
- Innovative root ball protection for direct load transfer and easier installation.
- Universal tools and simple assembly.
- Cosmetically appealing above and below ground.

***Bespoke options available –
We create solutions tailored to you.***

PRE-WORKS TRAINING

We can provide training for all types of tree kit systems and show you how to install and load the anchors while complying with Health and Safety regulations.

SITE PREPARATION

Before any tree kit is installed it is always recommended to use a CAT scanner to the required depth to check for buried services.

PERSONAL PROTECTION EQUIPMENT

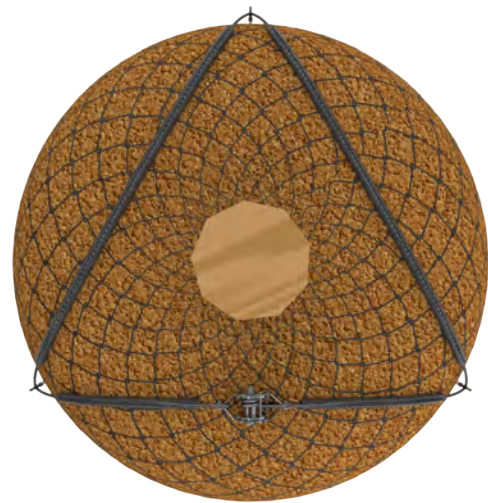
At Anchor Systems (International) Ltd we strongly recommend that before you install any of our systems you ensure that the proper safety equipment is worn. Please see below the recommended personal protection equipment –

- Hard Hat
- Safety Boots
- Goggles
- Overalls
- Ear Defenders
- Gloves

Rootball Fixing Kit - Wired

RBK-W

The Rootball Wired Fixing Kit is the ideal solution for underground securing of newly planted rootballed trees without the need for any over ground support. The kit has been assembled to provide the best possible start for the new planting, delivering security, safety and peace of mind for the installer as well as being aesthetically pleasing. The kits are available in five sizes to suit tree sizes from light standard to semi mature. They are simple to install offering precise positioning for the anchor points, with high strength tensile wires that incorporate rootball protectors spreading the load and preventing damage to the tree's root structure.



Tree Kit Code	Kit Description	Tree Height / Circumference	Installation Tool Required				
			Drive Rods	Installation	Rod Removers	Load Locking	Tensioners
RBK1W	3 x AS-01 Vulcan Anchors, 2m of Galv Wire, 1 x Ratchet Tensioner, 3 x Rootball Protector	Up to 2.5m / Up to 12cm	HDR01	Maul, PR2.5, PPD	N/A	AH1, AH2	RT0
RBK5W	3 x AS-05 Vulcan Anchors, 4m of Galv Wire, 1 x Ratchet Tensioner, 3 x Rootball Protector	2.5m - 4.5m / 12cm - 25cm	HDR05, PDR05	Maul, PR2.5, PPD	HRR40	AH1, AH2	RT1
RBK10W	3 x AS-10 Vulcan Anchors, 5m of Galv Wire, 1 x Ratchet Tensioner, 3 x Rootball Protector	4.5m - 7.5m / 25cm - 45cm	HDR10, PDR10	Maul, PR2.5, PPD, AIOR32	HRR40	AH1, AL J1, AL J2	RT1
RBK20W	3 x AS-20 Vulcan Anchors, 8m of Galv Wire, 1 x Ratchet Tensioner, 3 x Rootball Protector	7.5m - 12m / 45cm - 75cm	PDR20	PPD, AIOR32	HRR40	AL J1, AL J2	RT2
RBK90W	3 x AS-90 Vulcan Anchors, 12m of Galv Wire, 1 x Ratchet Tensioner, 3 x Rootball Protector	12m+ / 75cm +	R32P-R32SH	AI032, BR67M	HRR40	AL J2	RT2

KIT COMPONENTS

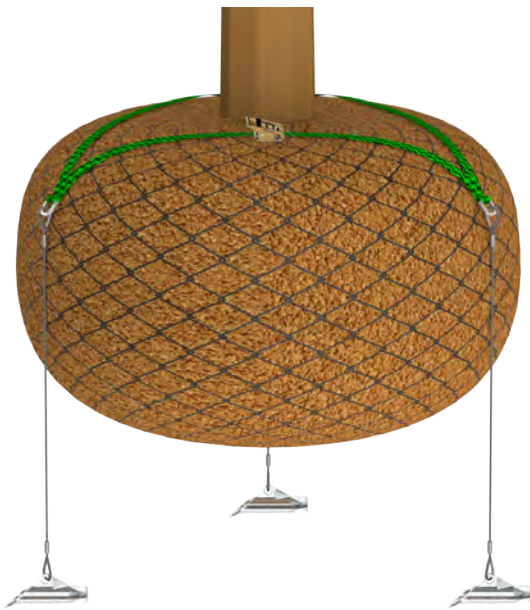
- High tensile wire
- Galvanised anchors
- Rubber rootball protectors
- Ratchet tensioner



Rootball Fixing Kit - Strap

RBK-S

The Rootball Strap Fixing Kit incorporates webbed strapping to provide the necessary positioning and anchoring for newly planted rootballed trees. A more superior alternative to traditional staking and belting, the strap kit will prevent leaning trees, offering peace of mind for the installer. Simple to install, the webbed strapping includes a ratchet tensioner that provides the ideal level of fastening whilst also preventing damage to the tree's root structure.



Tree Kit Code	Kit Description	Tree Height / Circumference	Installation Tool Required				
			Drive Rods	Installation	Rod Removers	Load Locking	Tensioners
RBK1S	3 x AS-01 Vulcan Anchors, 2m of 25mm Webbing, 1 x Ratchet Tensioner	Up to 2.5m / Up to 12cm	HDR01	Maul, PR2.5, PPD	N/A	AH1, AH2	RT0
RBK5S	3 x AS-05 Vulcan Anchors, 4m of 25mm Webbing, 1 x Ratchet Tensioner	2.5m - 4.5m / 12cm - 25cm	HDR05, PDR05	Maul, PR2.5, PPD	HRR40	AH1, AH2	RT1
RBK10S	3 x AS-10 Vulcan Anchors, 5m of 25mm Webbing, 1 x Ratchet Tensioner	4.5m - 7.5m / 25cm - 45cm	HDR10, PDR10	Maul, PR2.5, PPD, AIOR32	HRR40	AH1, AL J1, AL J2	RT1
RBK20S	3 x AS-20 Vulcan Anchors, 8m of 35mm Webbing, 1 x Ratchet Tensioner	7.5m - 12m / 45cm - 75cm	PDR20	PPD, AIOR32	HRR40	AL J1, AL J2	RT2
RBK90S	3 x AS-90 Vulcan Anchors, 12m of 35mm Webbing, 1 x Ratchet Tensioner	12m+ / 75cm +	R32P-R32SH	AI032, BR67M	HRR40	AL J2	RT2

KIT COMPONENTS

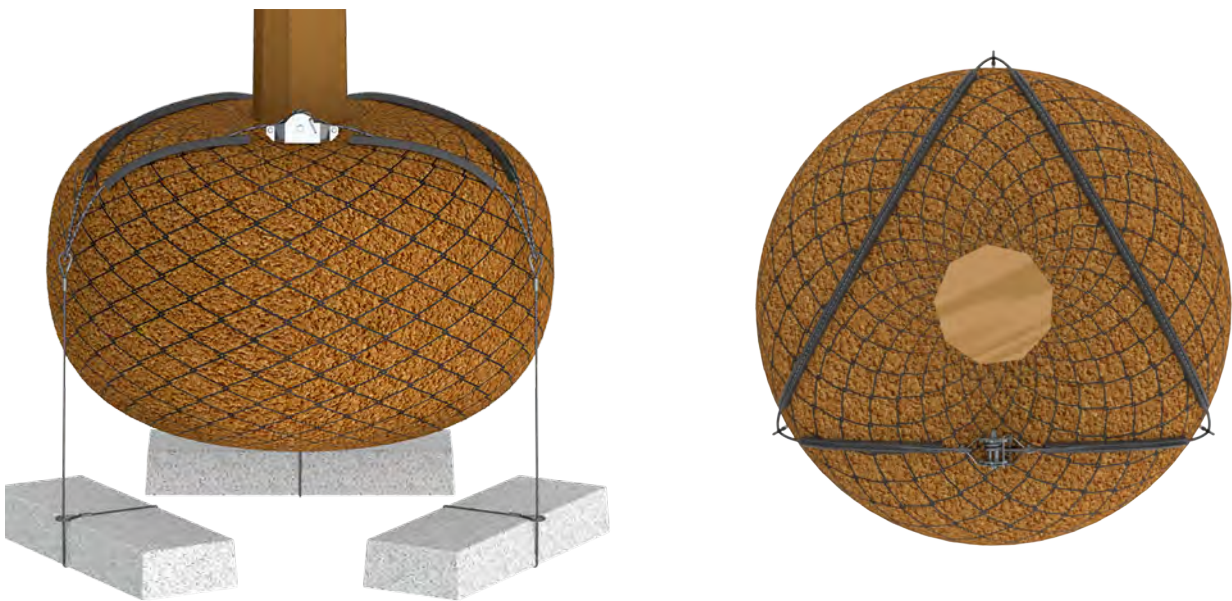


- Webbed strapping
- Galvanised anchors
- Ratchet tensioner

Dead Man Kit - Wired

DMK-W

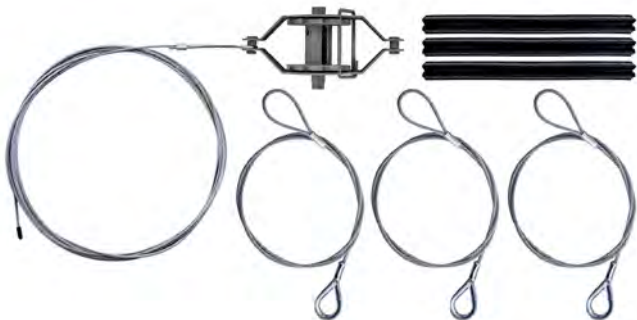
Where trees are being installed in urban environments, care must be taken to avoid utilities and services and it is therefore not always possible to drive anchors into the ground. The Wired Dead Man Kit uses high tensile wires over rubber rootball protectors to spread the load and prevent damage. These are then attached to heavy objects such as sleepers and kerbstones to weigh down the tree. Well compacted subsoil is then placed over the sleepers and kerbstones to provide added weight and security for the tree.



Tree Kit Code	Kit Description	Tree Height / Circumference	Installation Tool Required				
			Drive Rods	Installation	Rod Removers	Load Locking	Tensioners
DMK5W	3 x Wire Slings, 4m of Galv Wire, 1 x Ratchet Tensioner, 3 x Rootball Protector	2.5m - 4.5m / 12cm - 25cm	N/A	N/A	N/A	N/A	RT1
DMK10W	3 x Wire Slings, 5m of Galv Wire, 1 x Ratchet Tensioner, 3 x Rootball Protector	4.5m - 7.5m / 25cm - 45cm	N/A	N/A	N/A	N/A	RT1
DMK20W	3 x Wire Slings, 8m of Galv Wire, 1 x Ratchet Tensioner, 3 x Rootball Protector	7.5m - 12m / 45cm - 75cm	N/A	N/A	N/A	N/A	RT2

KIT COMPONENTS

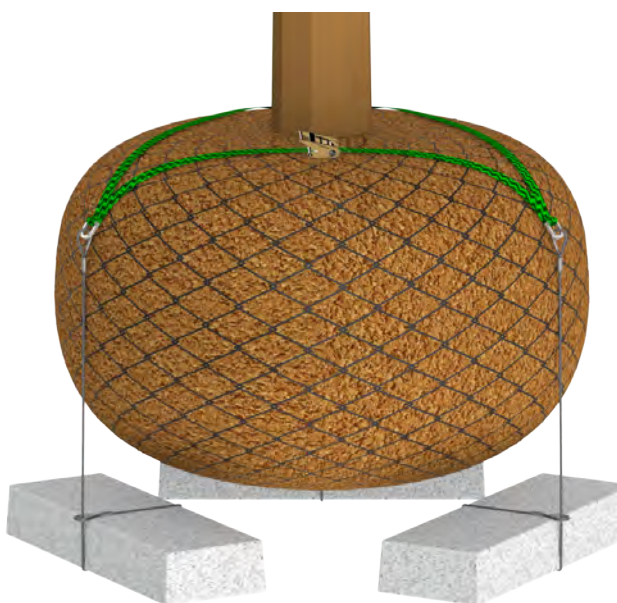
- High tensile wire
- Rubber rootball protectors
- Ratchet tensioner



Dead Man Kit - Strap

DMK-S

This tried and tested system has been incorporated into many rail, utilities and urban projects across the UK. By utilising sleepers or kerbstones this provides the perfect solution for situations where you cannot drive traditional anchors into the ground due to underground utilities or in non-displaceable ground. Like the Rootball Strap Kit, the Deadman Strap Kit will prevent leaning trees, offering peace of mind for the installer. Simple to install, the webbed strapping includes a ratchet tensioner that provides the ideal level of fastening whilst also preventing damage to the tree's root structure.



Tree Kit Code	Kit Description	Tree Height / Circumference	Installation Tool Required				
			Drive Rods	Installation	Rod Removers	Load Locking	Tensioners
DMK5S	3 x Wire Slings, 4m of 25mm Webbing, 1 x Ratchet Tensioner	2.5m - 4.5m / 12cm - 25cm	N/A	N/A	N/A	N/A	RT1
DMK10S	3 x Wire Slings, 5m of 25mm Webbing, 1 x Ratchet Tensioner	4.5m - 7.5m / 25cm - 45cm	N/A	N/A	N/A	N/A	RT1
DMK20S	3 x Wire Slings, 8m of 35mm Webbing, 1 x Ratchet Tensioner	7.5m - 12m / 45cm - 75cm	N/A	N/A	N/A	N/A	RT2

KIT COMPONENTS



- Webbed strapping
- High tensile wire
- Ratchet tensioner

Drop-Man® Kit - Wired

DMKDM-W

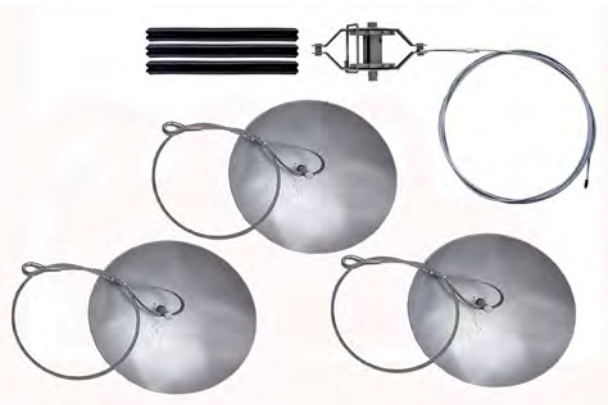
The Drop-Man® Kit is the newest system to join our tree kit range. As part of our ongoing commitment to innovation and providing solutions for our clients we designed a new tree kit system that works in a similar way to our Dead Man Kit. The Drop-Man plates are used to weigh down the tree when traditional anchors cannot be used and without the need of separate kerbstones or sleepers. Having all components in one kit makes it easier and more cost effective than having to source kerbstones or sleepers separately.



Tree Kit Code	Kit Description	Tree Height / Circumference	Installation Tool Required				
			Drive Rods	Installation	Rod Removers	Load Locking	Tensioners
DMKDM5W	3 x 252 OD Drop-Man Plates With Wire Slings, 4m of Galv Wire, 1 x Ratchet Tensioner, 3 x Rootball Protector	2.5m - 4.5m / 12cm - 25cm	N/A	N/A	N/A	N/A	RT1
DMKDM10W	3 x 352 OD Drop-Man Plates With Wire Slings, 5m of Galv Wire, 1 x Ratchet Tensioner, 3 x Rootball Protector	4.5m - 7.5m / 25cm - 45cm	N/A	N/A	N/A	N/A	RT1

KIT COMPONENTS

- 3 x Drop-Man plates
- High tensile wire slings
- Rubber rootball protectors
- Ratchet Tensioner



Drop-Man® Kit - Strap

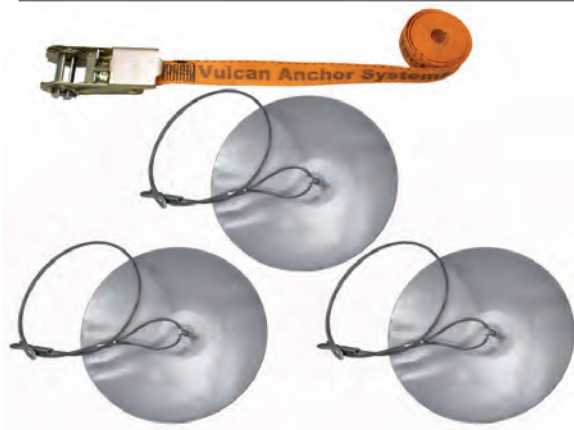
DMKDM-S

The Drop-Man plates are attached to high tensile wire which is then looped onto the tensioning strap which is placed over the rootball. The Drop-Man plates are lightweight but provide enough surface area in their concaved shape to hold down trees of up to 7.5m tall. The webbed strapping has a built-in ratchet and includes a ratchet tensioner to provide the ideal level of fastening in a fast and easy to use method.



Tree Kit Code	Kit Description	Tree Height / Circumference	Installation Tool Required				
			Drive Rods	Installation	Rod Removers	Load Locking	Tensioners
DMKDM5S	3 x 252 OD Drop-Man Plates With Wire Slings, 4m of 25mm Webbing, 1 x Ratchet Tensioner	2.5m - 4.5m / 12cm - 25cm	N/A	N/A	N/A	N/A	RT1
DMKDM10S	3 x 352 OD Drop-Man Plates With Wire Slings, 5m of 25mm Webbing, 1 x Ratchet Tensioner	4.5m - 7.5m / 25cm - 45cm	N/A	N/A	N/A	N/A	RT1

KIT COMPONENTS

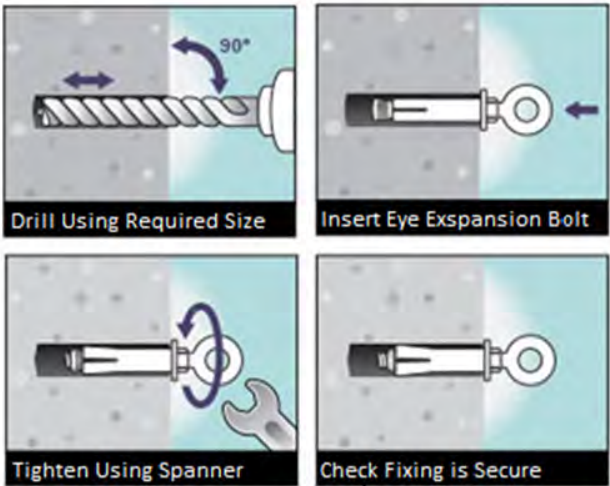
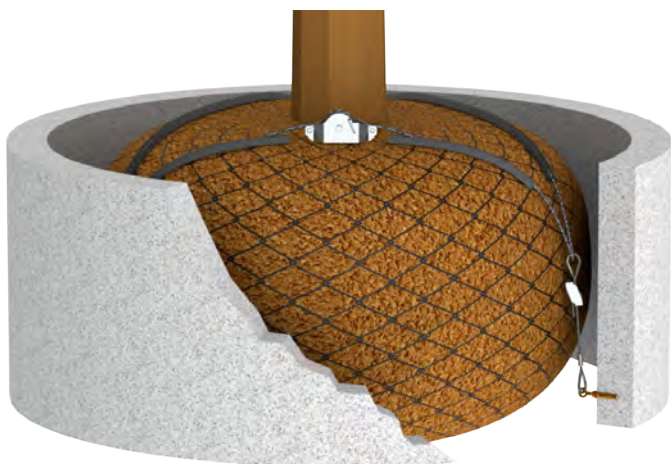


- 3 x Drop-Man plates
- Webbed strapping
- High tensile wire slings
- Ratchet Tensioner

Containerised Rootball Kit - Wired

CRBK-W

The Containerised Rootball Fixing Kit is the preferred method of securing saplings and rootball trees in planters and containers. Ideal for roof garden planting projects, the kit provides the flexibility and security of being able to plant trees above ground. The kit replaces traditional anchors with 3 eye-bolts that can be secured into the solid base of a container or planter, offering a discreet securing system that will not impact on the over- all design.



Tree Kit Code	Kit Description	Tree Height / Circumference	Installation Tool Required				
			Drive Rods	Installation	Rod Removers	Load Locking	Tensioners
CRBK5W	3 x Expanding Eye Bolts Connected to Wire Slings, 2m of Galv Wire, 1 x Ratchet Tensioner, 3 x Rootball Protector	2.5m - 4.5m / 12cm - 25cm	N/A	N/A	N/A	N/A	RT1
CRBK10W	3 x Expanding Eye Bolts Connected to Wire Slings, 5m of Galv Wire, 1 x Ratchet Tensioner, 3 x Rootball Protector	4.5m - 7.5m / 25cm - 45cm	N/A	N/A	N/A	N/A	RT1

KIT COMPONENTS

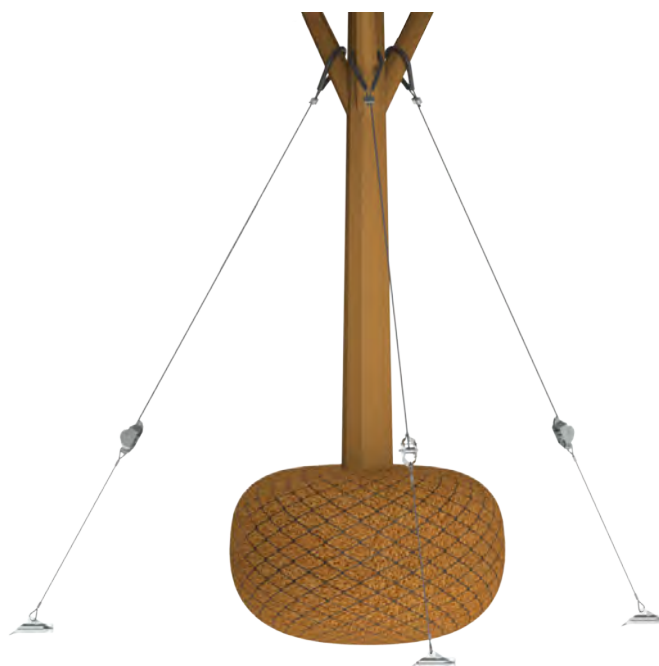
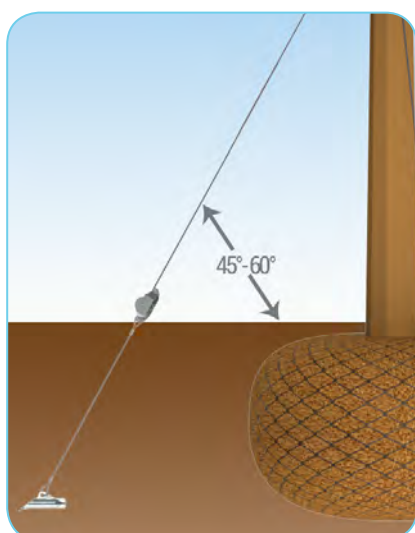
- High tensile wire
- Eyebolts
- Rubber rootball protectors
- Ratchet tensioner
- Fastlink wire joiners
- Steel thimbles



Overhead Guying Kit - Wired

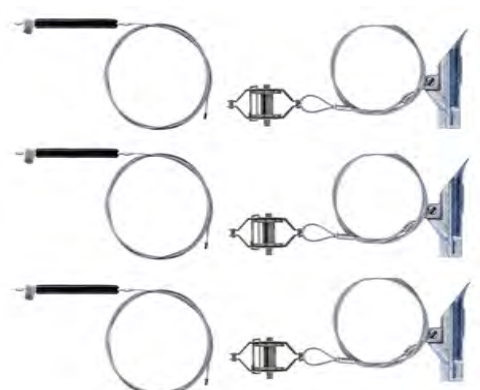
OHG-W

Developed for use with newly planted trees that are subject to wind in exposed areas. The guying kit acts as an anchor and support to prevent the tree from leaning or becoming displaced. The simplicity of the guying kits reduces overall installation time plus creates anchor points that enable better establishment. The guying kit can be used in a variety of ground conditions to suit your project requirements.



Tree Kit Code	Kit Description	Tree Height / Circumference	Installation Tool Required				
			Drive Rods	Installation	Rod Removers	Load Locking	Tensioners
OHG5	3 x AS-05 Vulcan Anchors Attached to Ratchet Tensioners, 3 x Wire Clips, Collars and Wire Assemblies (6m)	2.5m - 4.5m / 12cm - 25cm	HDR05, PDR05	Maul, PR2.5, PPD	HRR40	AH1, AH2	RT1
OHG10	3 x AS-10 Vulcan Anchors Attached to Ratchet Tensioners, 3 x Wire Clips, Collars and Wire Assemblies (8m)	4.5m - 7.5m / 25cm - 45cm	HDR10, PDR10	Maul, PR2.5, PPD, AIOR32	HRR40	AH1, AL J1, AL J2	RT1
OHG20	3 x AS-20 Vulcan Anchors Attached to Ratchet Tensioners, 3 x Wire Clips, Collars and Wire Assemblies (12m)	7.5m - 12m / 45cm - 75cm	PDR20	PPD, AIOR32	HRR40	AL J1, AL J2	RT2
OHG90	3 x AS-90 Vulcan Anchors Attached to Ratchet Tensioners, 3 x Wire Clips, Collars and Wire Assemblies (12m)	12m+ / 75cm +	R32P-R32SH	AI032, BR67M	HRR40	AL J2	RT2

KIT COMPONENTS



- High tensile wire
- Galvanised anchors
- Rubber bark protectors
- Ratchet tensioner
- Wire joining clips

Anchor Systems have created a specialist range of handheld installation and loading equipment that is fit for the purpose of efficiently installing and tensioning our tree kit systems. We have also tried to keep the individual plant unit weights as low as possible to ensure that our anchoring systems can be installed as easily as possible.

All of our equipment is available to either hire out for the length of time you require or to purchase. If you would like to know more about our equipment specifications then we will happily provide you with this, just get in touch.

Installation	Code	Description
	HDR1	Hand Drive Rod AS1
	HDR5	Hand Drive Rod AS5
	HDR10	Hand Drive Rod AS10
	PDR5	Power Drive Rod AS5
	PDR10	Power Drive Rod AS10
	PDR20	Power Drive Rod AS20
	R32P-R32SH	Power Drive Rod Set AS-90
	HRR40	Hand Rod Removers HDR
	Maul	Maul Hammer 12lb
	PR2.5	Post Rammer 2.5inch
	PPD	Petrol Post Driver
	AI032	All In One R32 Breaker



Installation

When driving the Vulcan Earth Anchors into the ground you can choose between using a Maul Hammer & Drive Rods or a Petrol Post Driver or an All In One Breaker with Power Drive Rods. Once you have driven the anchor in to the required depth you can then use the Hand Rod Removers to pull the Drive Rod out of the ground.

Loading	Code	Description
	AH1	Anchor Loading Hook 1
	AH2	Anchor Loading Hook 2
	AL J1	Anchor Loading Jack 1
	AL J2	Anchor Loading Jack 2



Loading

After driving the Vulcan Earth Anchors into the ground you will need to load them in order to make sure they have turned and are load ready in the ground and will hold the rootball or guy wires in place. When using the smaller anchors you can do this easily by using the simple Handheld Loading Hooks. For our larger anchors you will need to use an Anchor Loading Jack to ensure the correct load is applied.

Tensioning	Code	Description
	RT0	Ratchet Tensioner 0
	RT1	Ratchet Tensioner 1
	RT2	Ratchet Tensioner 2



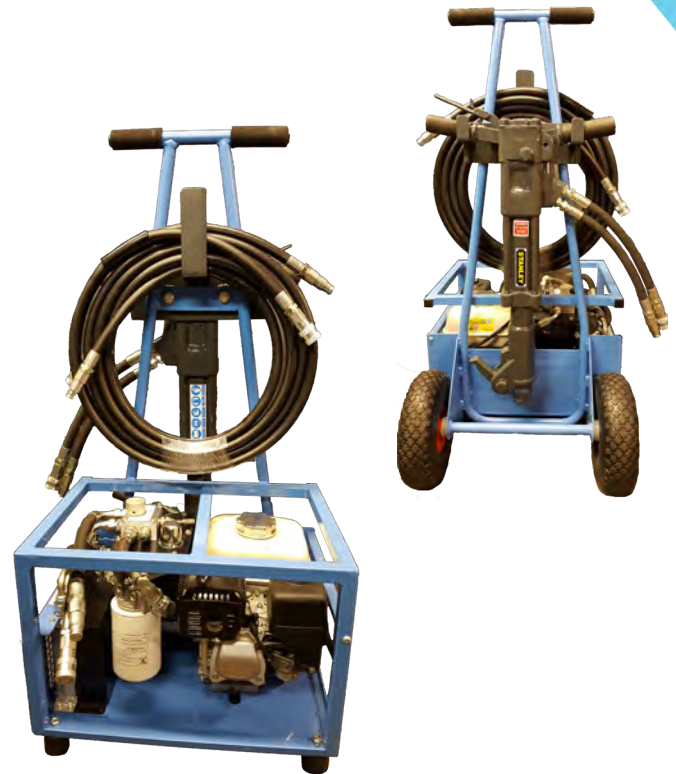
Tensioning

With all our systems, once you are satisfied that the tree is in the correct position and attached with the wire or strapping system around the tree, one of the final steps is to tighten the ratchet tensioner to keep the tree firmly in position. We offer three sizes of Ratchet Tensioning Tool to enable you to tighten the ratchets fully and with ease.

TRUNDLE PACK

Our focus is to ensure that the plant that we provide is both robust and easy to use. With this in mind, we have developed the Trundle Pack which contains the installation equipment you need all together on one easy to manoeuvre trolley. The Trundle Pack has been designed for rough terrain and long-distance sites with poor access meaning there is no need to make multiple trips back and forth to your vehicle when unloading.

- All in one installation pack
- Easy start power pack
- Easy lift points for in and out of vans
- Powerful and light weight
- Compact for tight and restricted areas
- Straight unleaded fuel, no need to mix 2 stroke fuel
- Suitable for installing AS-05 to AS-90 anchors
- Reliable and robust
- Anti-vibration breaker



TOOL KIT

Our all in one Tool Kit provides the perfect solution for when you have multiple trees to install, especially if they are of varying sizes. This tool kit comes in a handy box to carry and protect your equipment which helps prolong its lifespan and reduces the risk of losing items compared to carrying them around separately. This all in one kit provides you with all the tools you need to install our tree kits as well as all the installation methods for each system on one handy USB.



- Easy to carry metal tool box
- AH1 Multi Piece
- Ratchet Stay Pin
- RT1 & RT2 – Ratchet tensioning tools for various sized ratchets
- HRR set – Hand Rod Removers
- Knipex rootball protector cutters
- USB loaded with installation guides to all of our Tree Kit Systems
- Steel wire cutters

Have any questions?

01342 719 362

Horticulture & Agriculture

At Anchor Systems we provide anchoring systems for many horticulture and agricultural sectors, including landscaping, farming, animal housing, vineyards and high density orchards. Our extensive range of systems and solutions using our Vulcan Earth Anchors are used in many applications including the securing of structures such as animal pens and poly tunnels. We have also supplied vineyard and orchard trellis anchoring systems for a number of years and have an extensive knowledge and experience in this field. Our systems are simple and rapid to install making them cost effective and the first choice for anchoring in this industry.



VINEYARDS

Our anchors are widely used as a point of tethering for vineyard trellis and crop protection structures, essential to maximise crop potential by assisting canopy management and preventing poor grapevine performance and costly damage to the yield. Easily installed in the field with minimal equipment, our vineyard anchor systems provide a rapid and simple solution for securing trellising runs.

OTHER USES

Our ground anchoring technology is an ideal solution for the rapid installation of polytunnels and permanent or temporary structures for crop and machinery storage as well as animal housing systems. With no need for concrete or wet trades, our anchors are operational immediately at the time of installation with minimal plant required and therefore perfect for hard to access locations. With minimal ground disturbance and no need for hard standing or excavation, land can often be returned to its original state if required.



Geotextile & Erosion Control

Our geotechnical anchoring systems have been developed to integrate with the majority of geotextile solutions and geofabrics available from all the major manufactures. These systems can be installed to supplement, combine with or replace existing installations as well being used to stabilise virgin embankments as the only system used. Fast and simple to install, with the ability to provide maximum load capacity immediately whilst allowing the positioning of the geotechnical materials and anchor installation to be carried out simultaneously, achieving instant security, thus, saving time and money on project labour and delivery.

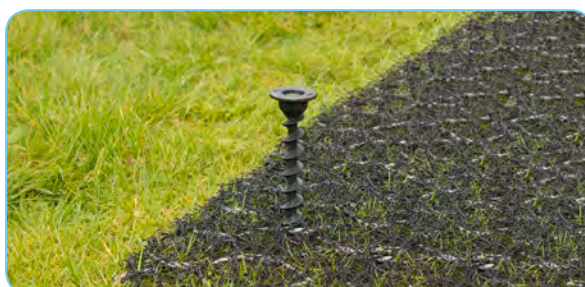


GEO-SCREW®

We have recently developed the Geo-Screw®, a high load ground anchoring screw designed to hold most types of geotechnical materials to most types of ground with a rapid installation time. This product is designed as a replacement to traditional U pins and pegs that can be awkward to install and often pull out of position. Unlike other systems that require the purchase of extra tools and accessories, the Geo-Screw can be easily installed with a universal battery powered drill alone.



- Easy installation with universal drill, no accessory chuck needed
- Achieves a higher load than competition
- Quicker to install compared to conventional pins
- Reduced screws required per square metre
- Suitable for poor ground conditions
- Easy to handle
- Available in recycled or biodegradable materials
- Close contact between the earth and matting
- No need for a separate washer
- Does not unpin
- Cost-effective
- Easily removable
- Discrete



**ANCHOR
SYSTEMS**
(INTERNATIONAL) LTD

FOR TECHNICAL ADVICE OR
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