

Tubex Nature Tree Shelter Introduction



Tubex Nature™ is a tree shelter that enjoys all the benefits of the original Tubex tree shelter design, whilst being made of biodegradable material – perfect for those schemes where collection of tubes may be problematic.

Tubex Nature™ is made from bio-based materials derived from sugarcane, corn & starch. It is externally tested against ISO 17556 to show soil biodegradability, and independently tested to show biodegradation on soil at ambient temperatures.

Tubex Nature products can be left to biodegrade in situ and will, over time, start to degrade and breakdown into water and CO2 through a microbiological process.

Quick and easy to install, they have been designed to have a service life of 3-5 years*, boosting the survival rates in the early stages of a plant's life and are suitable for both bare root and cell grown plants.

*Product longevity is dependent on site and weather conditions and cannot be guaranteed.



Benefits

- **Leave in situ to biodegrade**
- **Protects** from browsing animals and herbicide spray
- Creates microclimate to **promote healthy growth**
- **Easy installation** – comes with pre-fitted releasable tie(s)

Installation

- Plant bare root or cell grown plant.
- Insert stake next to plant, then install shelter over plant, gently pushing into ground. Firmly tighten pre-fitted cable tie(s) around stake.
- Leave in situ to biodegrade or remove for industrial composting once plant is established.
- See installation diagrams (pg 4) for more information.

Note – there is an extra set of holes 195mm from the ground on the 0.6m Nature Tree Shelter (with no cable tie), for use on exceptionally windy sites, where Tubex recommend inserting a 2nd cable tie.

TUBEX NATURE™ products are designed to naturally biodegrade over time. Due to this property, Tubex advise Nature products are not used near roads, pathways, or locations where disintegration fragments could pose safety risks. For such applications, we recommend the Tubex Recyclable Range. TUBEX® accepts no liability for use or installation of the products in unsuitable environments.

Specifications:

Dimensions	Tubex Nature Range				Material	For All Sizes
Height m ^(B)	0.6	0.75	1.2	1.5	Tube	Bio based (plant based) blend
Diameter description	Standard	Standard	Standard	Standard Plus	Cable tie	Nylon (not bio-degradable). Biodegradable available - please discuss prior to ordering.
Diameter mm	73-105	73-105	73-105	80-120	Tube colour	Natural / biscuit colour
Number of cable ties	1 ^(A)	2	2	2	Service life (tube)	Estimated 3 years
Type of cable ties	Releasable	Releasable	Releasable	Releasable	Biodegradable	Yes
Length of cable tie mm (inch)	250 (10)	250 (10)	250 (10)	250 (10)	End of life	Remove and industrially compost, or mulch into soil - non toxic, or allow to biodegrade in situ.
Height of top cable tie from ground mm ^(C)	450	500	825	1125	Recyclable	Yes.
Height of bottom cable tie from ground mm ^(C)	195	195	250	250	Recycling options	Use a local Recycling Centre and the bin for 'Plastic' (Code 5 PP). Or contact Tubex for details of their Collection & Recycling scheme. Or use a similar agricultural recycling service.
Average weight/tube g	72	125	146.5	281	Recommended support	Stake
<small>(A) 1 cable tie. Extra set of holes for insertion of 2nd cable tie on windy sites (sold separately). (B) Manufacturing tolerance of tube height +/- 25mm. (C) Manufacturing tolerance of cable tie height +/- 5mm.</small>						
Packaging	Tubex Nature Range					
Nest	5	5	5	5		
Bundle	60	60	60	60		
Bag or strap banded	Bag	Bag	Strap banded	Strap banded		

* All components of TUBEX Nature have been externally tested against ISO17556 to show soil degradability.

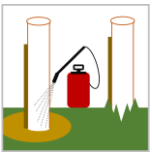
** Tested against OECD 207 for Earth-worm ecotoxicity and OECD 208 for Plant ecotoxicity - no acute toxicity detected.

Tubex Nature Tree Shelter Features & Benefits

Plant Welfare



Animal protection
Protects young plants from bark-stripping and browsing animals.



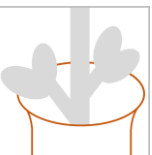
Herbicide protection
The tube protects from herbicide spray.



Light transmission
Creates a mini greenhouse effect, encouraging growth.



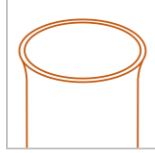
Wind protection
Delivers wind break effect, protecting plants on exposed sites.



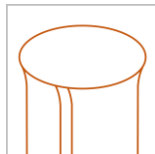
Flared rim
To minimise stem abrasion.



Lifespan



Twin walled
Delivers best strength to weight ratio.

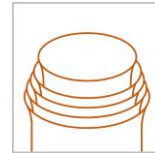


Strengthening rods
to prevent tearing at stake area.



Service life
Designed to offer 3 years of service life depending on conditions*.

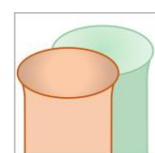
Installation



Nested
For ease of movement around site.



Pre-fitted cable tie(s)
Thumb-releasable for easy installation & maintenance.



Natural colour
Blends into background.

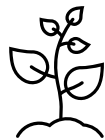


Biodegradable

Biodegradable
Leave in situ to biodegrade over time into water and CO₂.



Where is Tubex Nature made?
Made in the UK.



What is it made of?
Tubex Nature™ is made from bio-based materials derived from sugarcane, corn & starch.



How has it been tested?
It has been externally tested against ISO17556 to show soil degradability.
It has also been tested against OECD 207 & 208 to show it is non-toxic.

*Product longevity is dependent on site and weather conditions and cannot be guaranteed.

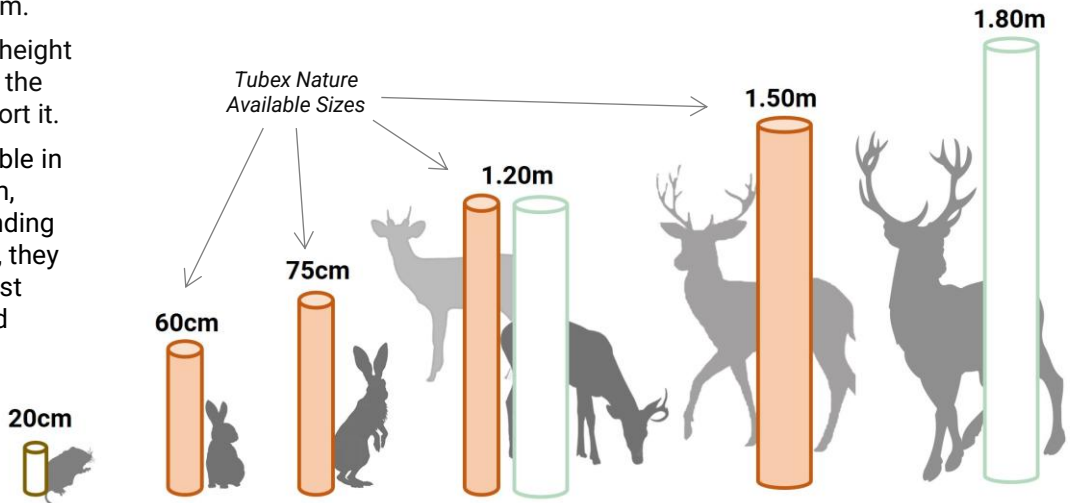
Tubex Nature Tree Shelter Range Choices

Height

Identify which damaging agent (animal) you wish to protect your plants from.

This will influence the height of your protection and the wooden stake to support it.

Tubex Nature is available in heights of 0.6m, 0.75m, 1.2m and 1.5m. Depending on the height selected, they can help protect against voles, rabbits, hare and some deer.



Protecting against	Vole	Rabbit	Hare	Muntjac / Roe Deer	Fallow Deer	Red Deer
Minimum height of tube for protection	20cm	60cm	75cm	1.20m	1.50m	1.80m
Height of supporting stake*	Not required	75cm	90cm	1.20m or 1.35m	1.50m	1.80m
Diameter Type	NA	Standard	Standard	Standard or Standard plus	Standard Plus	Standard Plus

* It is advisable to use a longer stake for sandier, lighter soils.

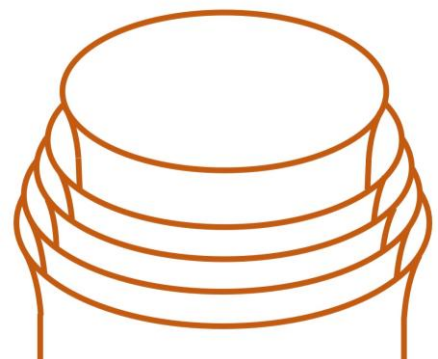
Nature Sizes 

Diameter

Tubes are nested (one inside the other), to save space and time when moving plant protection around a site.

Diameters describe the range of diameters you will find in a nest of tubes, from the smallest to the largest.

Tubex Nature comes in nests of 5 tubes, with a 'standard' diameter range of 73mm to 105mm for heights 0.6m, 0.75m and 1.2m, and 'standard plus' diameter of 80-120mm.



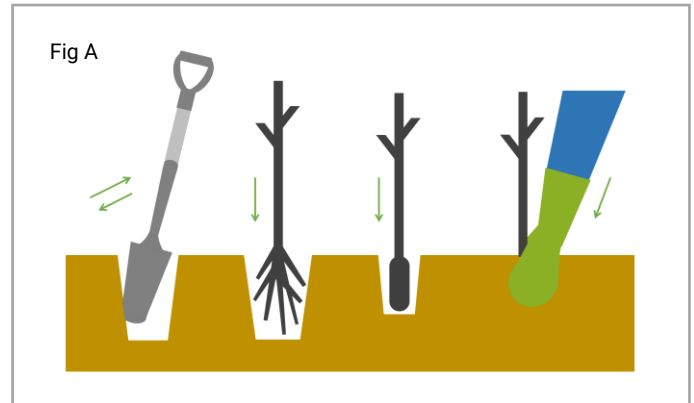
Tubex Nature Tree Shelter Installation

PLANT

Planting bare root or cell grown plants is a straightforward task, however, do not attempt to plant if the ground is frozen or waterlogged. Find a suitable position for your plants, bearing in mind future growth and potential height and spread at maturity.

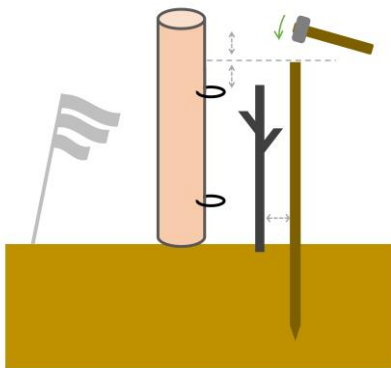
Bare rooted or cell grown plants can be 'notch' planted in 3 steps (Fig A):

1. Begin by inserting the blade of a spade into the ground. Push the spade handle away from you and then bring it back towards you. Once you remove the spade, you will see that you have created a cavity or 'notch' in the ground.
2. **For bare root** - place the plant roots within the cavity and shake to ensure that all of the roots are in the cavity and pointing downwards. **For cell grown** - place the cell gently into the ground. Ensure the top of the plug (the soil surrounding the roots) is positioned at 2 to 4cm below the surface to avoid drying out.
3. Fill the cavity with soil. Use your heel to firm the soil around the plant to remove any air pockets. Once planted, give them a good water if practical to do so.



You are now ready to install your support and protection.

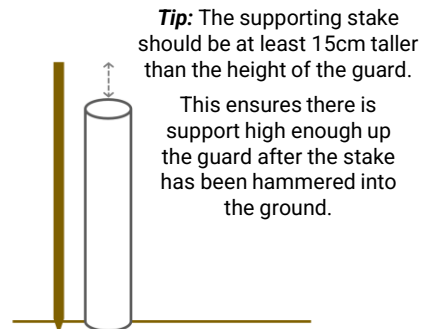
Fig B



Tip: Stand the shelter next to the plant whilst you are knocking in the stake to see how far to insert it.

SUPPORT

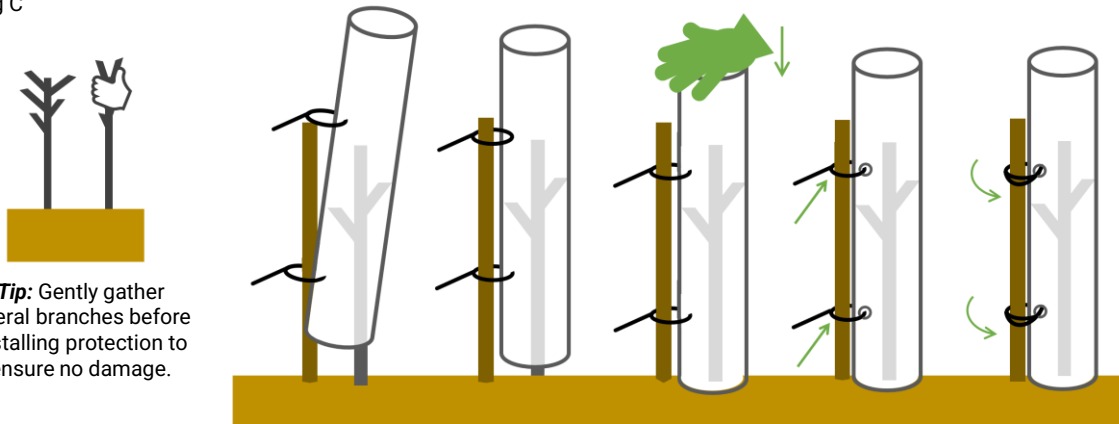
1. After planting, position the tube on the windward side if there are strong prevailing winds, and the stake between 2cm to 5cm from the base of the plant (Fig B).
2. Hammer the stake into the ground with a stake driver or mallet (ideally knocking 1/3 of its height into the ground). Ensure it is vertical (particularly important on sloping ground). The top of the stake should be below the top rim of the shelter and above the top tie wrap.



PROTECT

1. Position the shelter over the tree (Fig C), making sure not to damage any lateral branches, sliding the releasable tie wraps over the stake at the same time.
2. Push the shelter into the ground 1-2cm. This forms a safe barrier to deter vermin from burrowing under the shelter.
3. Tighten the thumb releasable ratchet ties, ensuring the shelter is firmly positioned.
4. Tuck the tie ends into the holes in the shelter for neatness and to deter rubbing by deer or sheep.

Fig C



Tip: Gently gather lateral branches before installing protection to ensure no damage.



End of life

Leave in situ to biodegrade OR remove and mulch into soil OR remove for industrial composting.