

# Plantra® Grow Tube Guidelines: SunFlex™ Grow Tubes for Trees

## Step 1 – Plant seedling

## Step 2 – Prepare the seedling for “tubing”

If your seedlings have side (lateral) branches please remove them carefully using sharp pruning shears before installing the grow tube (see figure 1).

**NOTE:** Do NOT bend side branches to squeeze or otherwise force them into the grow tube. Doing so will encourage weak branching and other problems as the tree matures.

## Step 3 – Install Grow Tube and Support Stake

### Preferred Method: Using SunFlex Stake

Your grow tube installation is only as good as the support stake you choose for the job. That’s why SunFlex Grow Tubes are designed to fully integrate the SunFlex Stake inside the grow tube to achieve the strongest, long-lasting and secure stake/tube attachment available anywhere (see figure 2).

- Position stake 1.5 – 2 inches from the seedling with ground-line marker towards the ground. Use Plantra SunFlex Stake Driver and drive stake until ground-line marker reaches the soil surface.
- Pop grow tube open by flattening tube its entire length in opposite direction as packed. Next, slide the grow tube over the top of the stake and down to the ground carefully guiding the seedling inside the grow tube along the way.

**NOTE:** This method of installing support stake inside the grow tube is recommended for SunFlex stakes only. The SunFlex Stake has a rounded top to avoid stem abrasion and a small diameter to avoid crowding the seedling inside the grow tube. Other stake materials should never be installed inside grow tubes as their sharp edges could damage stems that come in contact with the stake top and have large diameters which will occupy important growing volume inside the tube the tree should have.

- Position the grow tube so the stake is tight against the of the tube and lined-up between the paired tie holes.
- Press tube base firmly into soil. When completed, the tip of the SunFlex stake should be at least 1-2 inches above the top tie hole and below the top of the grow tube.

**IMPORTANT:** Firmly tap the top of the tube to seat the tube base into the soil. Mound additional soil around tube base as needed to reduce entry by rodents.

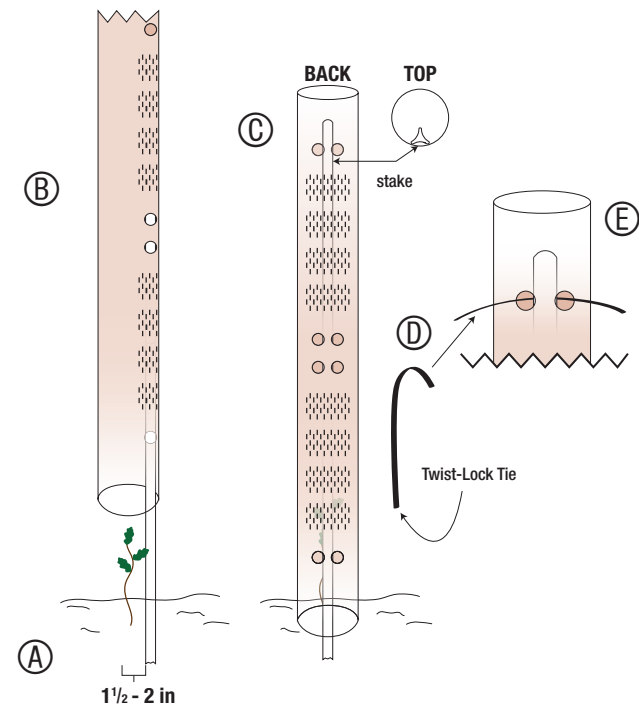
- Attach the grow tube to the stake by inserting a Plantra Twist-Lock tie through top tie hole from the outside, guiding it around the stake and back out the paired tie hole. Twist both tie ends firmly so that the tube and stake are tight together to prevent the grow tube from sliding up from contact by animals. Repeat steps for middle and bottom tie holes.

**TIP:** Bend the Twist-Lock tie about 2 inches from one end to make a “curl.” Use this end to thread the tie into one tie hole, around the stake and out the other tie hole.

FIGURE 1



FIGURE 2



## Alternate Method: Using “other” support stake on outside of grow tube

This method is not as strong as using SunFlex Stakes but will accommodate other stake materials. When choosing a stake, always avoid natural materials prone to rot such as bamboo and most wooden stake materials including white or red oak. These stake types will not last the estimated 5-7 (or more) years most grow tubes, tree tubes and tree shelters need to remain standing. Avoid using rigid, non flexible stakes made from wood, bamboo or metal as these materials interfere with normal stem development and will lead to weaker trunks. Lastly, choose a stake length that allows sufficient anchoring depth and when driven into the soil is above the top tie holes but below the top of the tube.

Drive stake as shown in [figure 2](#). Position the grow tube over the seedling to the ground with the stake outside the tube and between the tie-holes. Next, seat the tube bottom firmly into the soil and mound additional soil as needed around tube base to help prevent entry by rodents. Thread Plantra Twist-Lock double wire twist ties through paired tie holes, wrap the ends around the stake and twist to secure ([see figure 3](#)).

## Step 4 – Install bird exclusion mesh top

All SunFlex Grow Tubes 4ft tall and taller come with exclusion mesh netting that is intended to discourage birds from entering the tubes.

Simply stretch the netting over the tube top like pulling on a sock. Pull the netting down to the top tie and gently insert one or both ends of the twist ties through the mesh to keep it from blowing off in the wind ([see figure 4](#)).

## Additional Considerations

### A Word About Weed Control

Weeds and grasses steal light, water, and nutrients from your seedlings and provide cover for stem-girdling rodents. Every square

foot of soil is capable of producing a limited amount of biomass growth. By controlling weeds, growth potential is maximized. Using Plantra SunFlex Grow Tubes will make your seedlings easier to find for weed control and provide protection against weed sprays. Plantra® SunFlex™ Mulch Mats are a great way to control weeds and offer a safe alternative to chemicals.

### Grow Tube After-Care

SunFlex Grow Tubes are designed to last for years – until your trees are big enough to make it on their own. In the first season or two, new leaves will form on the stem inside the tube as the seedling grows. Please do not remove these green leaves - they are important to fuel the tree's early growth.

During the first season(s) be sure that the bird exclusion mesh tops remain in place on all tubes 4ft and taller. If any mesh tops are missing before seedlings grow within 6 inches of the tube tops please call our Grower Success Team at Plantra and we'll send you replacements free of charge. Once seedlings get to the top of the tube the mesh tops are no longer needed and should be removed.

To keep your trees fully protected beyond the first growing seasons, do not remove SunFlex Grow Tubes until the tree trunk has grown to the size of the tube diameter. SunFlex Grow Tubes are perforated along two sides their entire length, allowing the tube to split open once the trunk diameter grows bigger than the diameter of the tube.

Waiting until the stem grows to the size of the tree tube diameter ensures that your tree is “wind-firm” and ready to support itself entirely. Doing so also allows the tube to help protect the main trunk against damage by antler rub, gnawing rodents or mechanical injury. Once your trees outgrow the tube diameter the tubes and support stakes should be removed from the field. SunFlex grow tubes can be recycled and SunFlex stakes can be reused again.

FIGURE 3

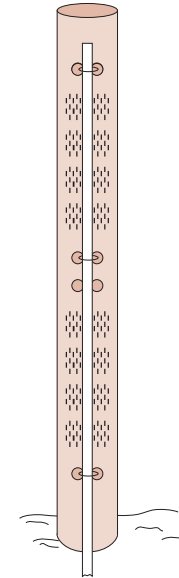


FIGURE 4

