



Tree Tub Technology

Years of research and experience with countless urban projects have resulted in the Treetec® system which is applied in Streetlife's tree tubs. The Treetec® tree care system allows trees to develop optimally in planters. In this way, you can apply sustainable greenery and urban trees in any urban location, building, parking decks, viaduct or roof terrace.

Treetec® Basic and Treetec® Bottom Up solutions are comprehensive tree care systems that form an integral part of Streetlife's professional tree planter product range. Treetec® systems ensure adequate insulation, oxygen circulation, root ball fixing, irrigation and excess water drainage. Capillary tubes in the Treetec® kit provide improved water circulation that significantly reduces the frequency with which watering and maintenance are required in the growing season.

The Treetec® wall construction ensures sufficient thermal insulation and prevents damaging variations in temperature. As well as water, trees also require a sufficient supply of oxygen to their roots. The Treetec® wall construction ensures oxygen circulation around the root ball from the inside of the tub.

Each Streetlife Tree Tub has facilities to fix small and large root balls in the tree tub. This invisible anchoring of the tree's root ball prevents crooked growth in the planter due to wind.

Each Streetlife tree planter has been designed so that it is possible to move 'planter with tree'. Depending on the size of the tree planter, this can be done with a forklift truck or, if necessary, with a crane (with standard lifting beam or cable harness).

Trees in tubs require a measured composition of the substrate. We have had success using a compound of potting compost and sand supplemented with additives. We recommend using ground covering, e.g. ivy matting or tree grids. Green ground covering creates an aesthetically appealing effect, insulates the soil's top surface, and prevents it from drying out and dirt from accumulating.

Dense urban landscapes have an increasing need for sustainable shrubbery and landscaping in more obscure places such as on deck patios and roofs. However, these structures are often limited to a maximum uniformly distributed load of 500 kg/m². Using lightweight decking and planters filled with a low-density substrate provides an affordable and sustainable way to plant trees on roofs. High-rise buildings are subject to high wind loads. After selection of the desired tree type and tree planter, Streetlife can advise you on wind calculations.

Several factors determine whether trees grow successfully in a planter, e.g. tree type, substrate, maintenance, pruning and watering. We've made a Tree Table to help you get started.

You can find the Tree Table, Treetec® diagrams and specifications on the following pages.

Streetlife's Treetec® systems and tree planters are subject to intellectual property rights and are protected by patents and design filings.



Giant Flowerpots in natural fibre bio-composite in front of the Alphen aan den Rijn city hall designed by Erik van Eegeraat Architects.

These three Giant Flowerpots helped transform a bare town hall square into an attractive green space simply and flexibly.

The Suitable Tree

An appropriate choice from the available assortment is an essential part of a project. Trees are often available in an unexpected form, such as multi-stemmed, low-branched or in pollarded form. Tree specialists provide advice in this context. In conjunction with the client and landscaping specialists, future success is guaranteed.

TREE SPECIES

Abutilon pictum 'Thompsonii'	M K L B
Acer campestre 'Elrijk'	G M L/V
Acer platanoides 'Deborah'	G M H
Acer saccharinum	G L H
Aesculus carnea 'Briotii'	G B
Aesculus parviflora	M K L B
Albizia jubilibrissin 'Rosea'	M K L B
Amelanchier lamarckii	M K B Vd H S
Aucuba japonica 'Variegata'	K B Vd W S
Betula typen	G
Broussonetia papyrifera	K L B Vd
Buddleja davidii 'White Profusion'	K L B S
Camellia japonica	M K L B S
Carpinus betulus	G M K L/V
Cassia marylandica	K L B K I S
Cercidiphyllum japonicum	M K H
Cercis siliquastrum	M K B H
Chamaerops humilis	G M K L W
Cornus alba 'Sibirica'	K B Vd H
Cornus kousa	K B Vd H
Corylus colurna	G Vd
Corinus coggeria 'Royal purple'	M K S
Davídia involucrata	G B
Decaisnea fargesii	M W S
Eucalyptus gunnii	M L
Euonymus alatus	M K H W S
Fagus sylvatica 'Dawyck'	G M H
Fatshedera lizei	K L B W S
Fatsia japonica	K L B W S
Ficus carica	K L B
Fraxinus angustifolia 'Raywood'	G L
Fraxinus ornus	G M L
Gleditsia triancanthos 'Skyline'	G M L
Gleditsia triancanthos 'Sunburst'	G M L
Hydrangea arborescens 'Annabelle'	K L B S
Ilex meservae 'Blue Princess'	M K B Vd W S
Koelreuteria paniculata	M K B Vd
Kolkwitzia amabilis	K B S
Liquidambar styraciflua	M L H W
Magnolia kobus	M K B

CODES

Magnolia stellata	M K B
Malus 'Evereste'	M K B Vd
Morus alba 'Macrophylla'	G M L
Nothofagus Antarctica	G M K H W
Parrotia persica	M K
Photinia fraseri 'Red Robin'	M K B H W
Phyllostachys aureosulcata 'Aureocaulis'	G M W
Pinus sylvestris	G M W
Plantanus x acerifolia 'Tremonia'	G M L
Plantus orientalis 'Digitata'	G M
Populus tremula 'Erecta'	M K
Prunus cerasifera 'Nigra'	M K B
Prunus laurocerasus var.	M K W
Prunus sargentii	M
Prunus subhirtella 'Autumnalis'	M K B W
Pyrus typen	M K B
Quercus robur	G M Vd
Quercus rubra	G Vd
Syringa typen	G M B S
Sophora japonica	G M B
Taxus baccata	G M K L/V W
Tilia europaea 'Pallida'	G M K L/V
Vitis typen	K B Vd K I S
Wisteria typen	K B K I S

LEGEND CODES

G	Large tub, size: 200 x 200 x 90 cm (l x b x h)
M	Medium tub, size: 170 x 170 x 90 cm (l x b x h)
K	Small tub, size: 140 x 140 x 90 cm (l x b x h)
L	Lee, for a spot sheltered from the wind
B	Flowering
Vd	Fruit-bearing
Kl	Climber, trellis needed
L/V	Suitable for training (trellis) or shaped tree
H	Autumn colour
W	Ornamental value in the winter
S	Shrub



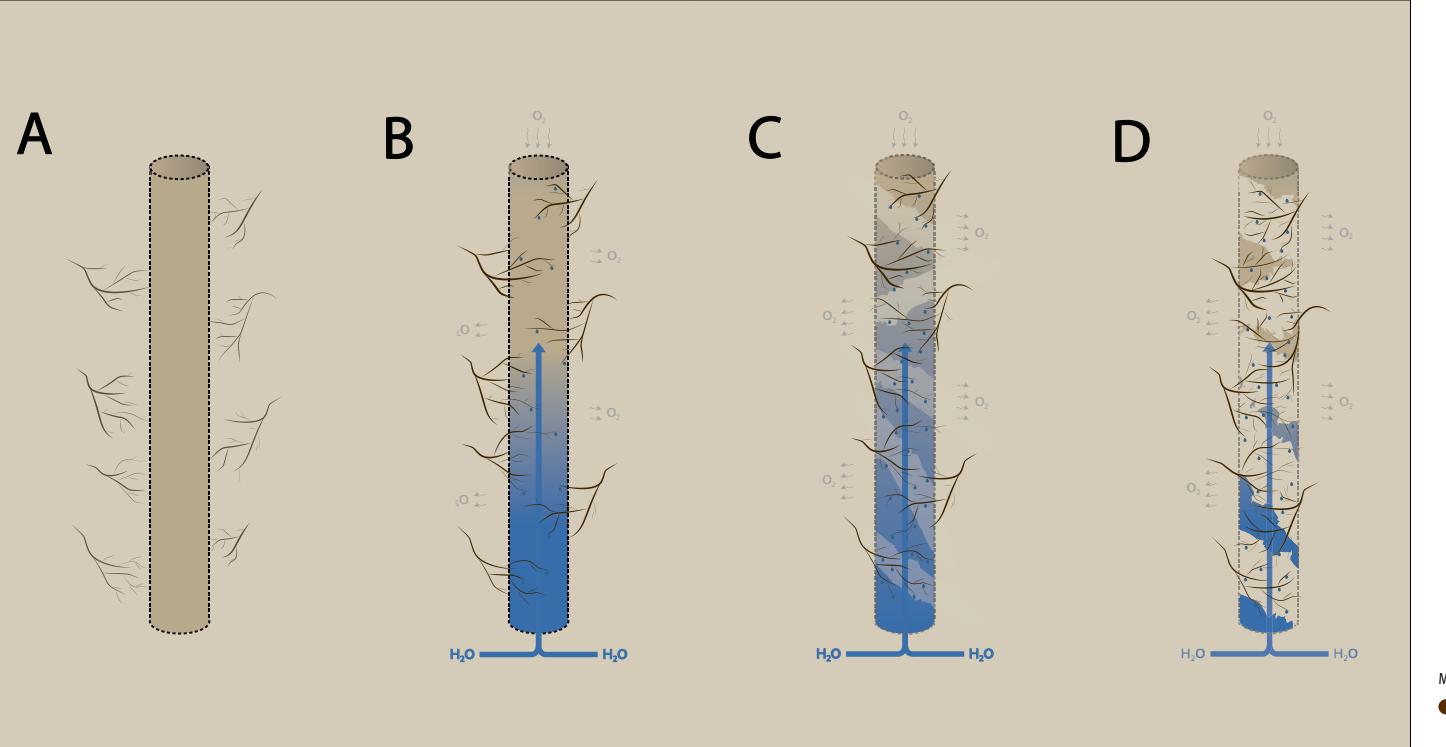


Treetec® Biodegradable

Treetec® Bottom Up (TTBU) has been specially developed to give trees in tree planters a head start: water replenishment via the capillary action of the Bottom Up column ensures that water and oxygen are well distributed in the root ball. Once the tree has made it through the first few years in a healthy condition, the root ball no longer needs this help. Over time, the new **Treetec® Bottom Up Biodegradable Column** will decompose and be absorbed into the substrate.

The four stadiums of the **Biodegradable Capillary Columns** are depicted below:

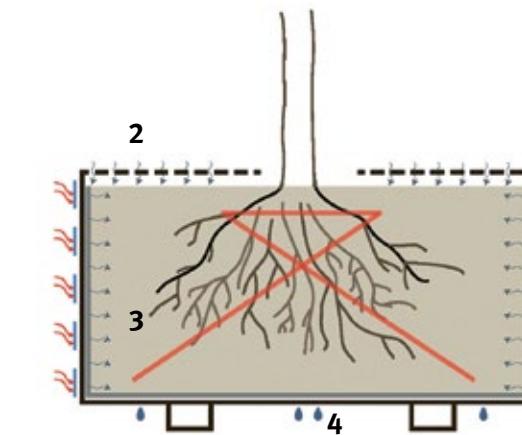
- A The installation of the columns against the root cloth.
- B The first root growth in the column structure. First decrease of moisture-retaining fibers in the column.
- C Further root growth in the columns. Partial degradation of the cylindrical column.
- D A fully grown columnstructure has replaced the original capillary column. An optimal retention of water and oxygen by the roots now exists.



Treetec® systems

Treetec® Basic

Treetec® Basic is a basic care kit for ensuring healthy growth in tree planters. The kit consists of an oxygen circulation system, thermal insulation and sub-soil root ball fixing system. This gives a newly planted tree the care it requires, thereby increasing its chance of its development. Oxygen is better circulated around the root ball.



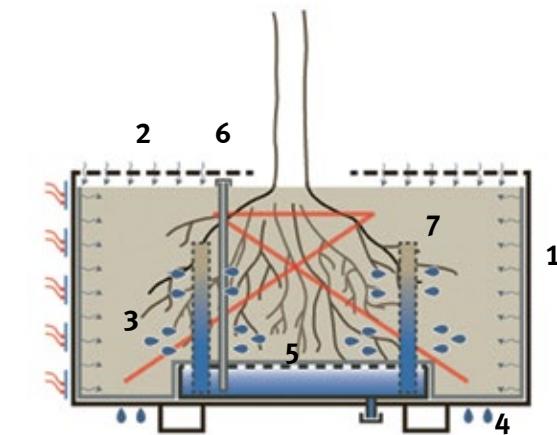
Treetec® Basic:

1. Wall construction: thermal insulation and oxygen circulation around the root ball.
2. Optional covering using tree grids or green ground matting reduces the rate of evaporation thereby preventing soil from drying out.
3. Tree-root anchoring that prevents lopsided growth.
4. Excess water due to heavy rainfall does not accumulate but is drained off via the bottom.

Treetec® Bottom Up

With Treetec® Bottom Up, the water reservoir is situated at the bottom of the tree tub or tree isle. Vertical capillary tubes circulate water to the roots. The reservoir's capillary tubes provide improved water circulation that significantly reduces the frequency with which watering and maintenance are required in the growing season.

After a few years, the capillary columns are no longer needed, although they should not be removed so as to avoid damage to the root ball. To this end, in addition to the regular column, Streetlife has developed a Biodegradable Column. See page on the left.



Treetec® Bottom Up, like Treetec® Basic (1 t/m 4):

5. Integrated water reservoir at the bottom.
6. During the growing season, the water reservoir is topped up by means of a water feeding pipe. In winter, the water reservoir can be emptied by opening the lower valve.
7. Capillary columns distribute the water around the roots. In the course of time, the roots will accommodate the capillary columns and will absorb the water as needed.