# FRÄNKISCHE

## Tree ventilation and irrigation set



Last modified: February 2013

#### **DRAINAGE SYSTEMS**

ELECTRICAL SYSTEMS
BUILDING TECHNOLOGY
INDUSTRIAL PRODUCTS



### Trees improve the quality of life

#### A contribution to the quality of life

Trees in private and public spaces characterise urban landscapes. We are all familiar with their benefits as noise reducers, climate regulators, oxygen producers and dust filters, and appreciate their beauty.

However, trees can only fulfil these functions if they get the amount of water and nutrients they need and if the soil-air balance and climate requirements are fulfilled permanently.

Impermeable surfaces and heavily compacted neighbouring undeveloped land frequently lead to trees not being sufficiently supplied when they take root.

They do not get the required amount of air, water and nutrients.



#### Trees need habitats, too...



The original habitat of the city trees is outside of urban areas in the woods or open landscapes.

Unfortunately, most local conditions for trees in urban areas do not comply with natural conditions.

#### Negative influences damage trees:

- dry, warm urban climate
- insufficient root zone
- pollutants in the air and in the soil
- large paved areas
- heavily compacted soils
- lack of water and nutrients
- acid rain
- emissions and many more ...

We need to counter these negative influences to preserve old tree populations and support the growth of new plantings from the beginning.

#### This can be achieved with:

- providing a sufficient amount of water and fresh air
- decarburising the root zone
- providing a specific amount of nutrients and fertilisers

The FRÄNKISCHE tree preservation set is the ideal solution to these problems.



### Ventilation is essential

### Advantages of the tree preservation set

- tree preservation pipe with increased air/water perforation area of ≥ 80 cm²/m
- ideal exchange of air thanks to increased perforation ratio
- high flexibility allows to make all bend radii
- universal cover element (Walu end cap) for installation in different surfaces
- retractable and lockable cover for easy watering and nutrient supply
- theft and vandalism protection for durable stability

Research shows that not only irrigation is decisive for the development of trees but rather ventilation of the root zone. Substrates with grain structure allow the root ball to breathe sufficiently through the ventilation pipe and the outside Walu end cap.

### Installation made easy...

### ... three steps for ideal ventilation



The totally perforated tree preservation pipe is installed as a loop in the root zone under the throughfall and connects to a tee.

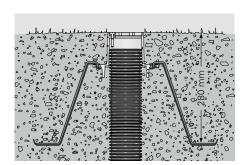


An additional pipe section provides the connection between the loop and the surface.



The Walu end cap serves as upper end.

### Walu end cap - the ideal accessory



The Walu end cap serves as universal cover element for all surfaces. The retractable and lockable cover allows

easy ventilation, irrigation and nutrient supply.

The perforations in the cover ensure the permanent supply of the root zone with air.

The Walu end cap is made of cast aluminium and is corrosion and pressure resistant.

Walu anchors – ideally 4 pieces – supply both stability during installation and reliable theft and vandalism protection when installed.

Walu anchors are particularly necessary if the Walu end cap is installed in loose bedding material, such as soil, gravel, sand or macadam.



### Tree preservation



### Tree ventilation and irrigation set

- 5 m corrugated PVC-U ventilation and drainage pipe, colour: green, with increased air/water perforation area ≥ 80 cm²/m
- 1 tee
- 1 Walu end cap
- 2 Walu anchors

#### Application:

Permanent ventilation and irrigation (with or without fertiliser) of the root zone.

Product	Technical data	Cat. no.
Tree preservation set	DN 80	592.00.080



### Tree ventilation and irrigation pipe

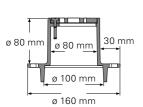
Corrugated PVC-U pipe; colour: green; with increased air/water perforation area ≥ 80 cm²/m.

#### Application:

Permanent ventilation and irrigation (with or without fertiliser) of the root zone.

Product	Technical data	Cat. no.
Tree preservation pipe	DN 80	593.03.080





### Walu end cap

Product	Technical data	Cat. no.
Walu end cap	Cover element made of cast aluminium	597.10.000

If a complete box is ordered, 24 Walu anchors are contained.



## Tree preservation



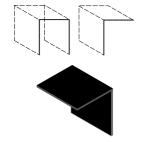
### Walu anchor

Product	Technical data	Cat. no.
Walu anchor	provides stability during installation, and theft and vandalism protection	597.12.000



### Concrete cover for Walu end cap

Product	Technical data	Cat. no.
Concrete cover for Walu end cap	Dimensions: 25 x 25 x 8 cm	597.00.000



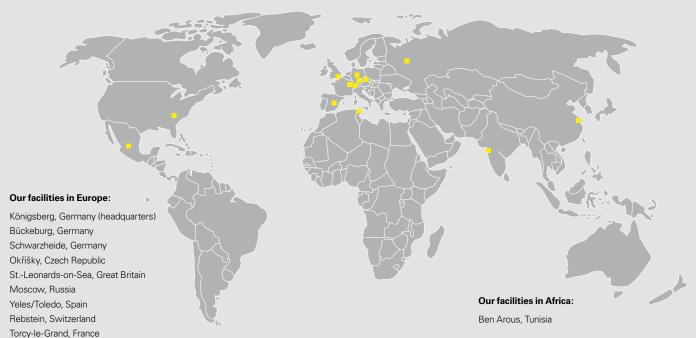
### Root barrier

Product	Technical data	Cat. no.
Root barrier*	L-shape, made from 4 mm PE boards	517.93.010
	U-shape, made from 4 mm PE boards	517.93.011

<sup>\*</sup> to prevent root growth

### Rooted in Königsberg -

### globally successful!



FRÄNKISCHE is an innovative, growthoriented, medium-sized family-owned enterprise and industry leader in the design, manufacturing and marketing of pipes, shafts and system components made of plastic and metal, and supplies solutions for construction, civil engineering, the automotive industry and industrial applications.

Ebersbach/Fils, Germany Hermsdorf, Germany

Mönchaltorf, Switzerland

We currently employ about 2,300 people

#### Our facilities in Asia:

Anting/Shanghai, China Pune, India

worldwide. Both our many years of experience and expertise in plastics processing, our consulting services and the large array of products are highly valued by our customers.

FRÄNKISCHE is a third generation familyowned business that was established in 1906 and is now run by Otto Kirchner. Today, we are globally represented with production facilities and sales offices. Our facilities in North America and Mexico:

Anderson, USA Guanajuato, Mexico

The proximity to our customers enables us to develop products and solutions that are perfectly tailored to our customers' needs. Our action and business philosophy focus on our customers and their needs and requirements for our products.

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