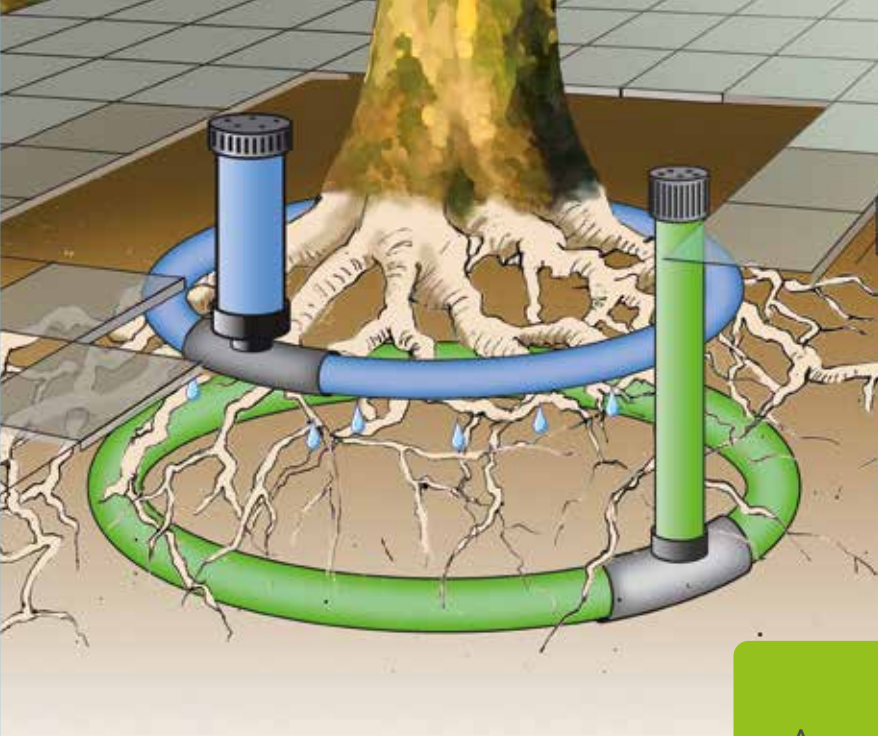




# Aeration & Irrigation

## Application

- Effective irrigation for trees in the urban environment
- Injecting oxygen into the planting hole



### Material

- Tubes: Polyethylene (PE)
- Components: Polypropylene (PP)
- 100% recyclable
- Polyethylene hose with filtering cloth to protect against clogging up
- Extra perforation for better aeration (AirMax) and for better distribution of water (AquaMax)



## Aeration & Irrigation

# Aeration & Irrigation

Many (young) trees, shrubs and hedges in urban environments suffer from drought or lack of oxygen to the roots. This is usually caused by a compacted soil structure and/or the fact that rainwater hardly penetrates the soil. The AirMax aeration system and the AquaMax irrigation system is a highly effective and easy to install system for the convenient irrigation of trees.

All AirMax and AquaMax hoses and tubes are as standard provided with a polyester filtering cloth that allows an even infiltration of water (when used as irrigation) and a minimum of 45% diffusion (when used as aeration).

### Example of installation AirMax Aeration

| Tree Diameter | Tree height | Tube length horizontal | Tube length vertical |
|---------------|-------------|------------------------|----------------------|
| 8 - 16 cm     | < 3 m       | 2 m <sup>1</sup>       | 1 m <sup>1</sup>     |
| 16 - 25 cm    | 3 - 5 m     | 2,5 m <sup>1</sup>     | 1 m <sup>1</sup>     |
| 25 - 45 cm    | 5 - 7 m     | 4,5 m <sup>1</sup>     | 1 m <sup>1</sup>     |
| > 45 cm       | > 7 m       | 7,5 m <sup>1</sup>     | 1 m <sup>1</sup>     |

Ø Tube horizontal: 80 mm  
Ø Tube vertical: 80 mm

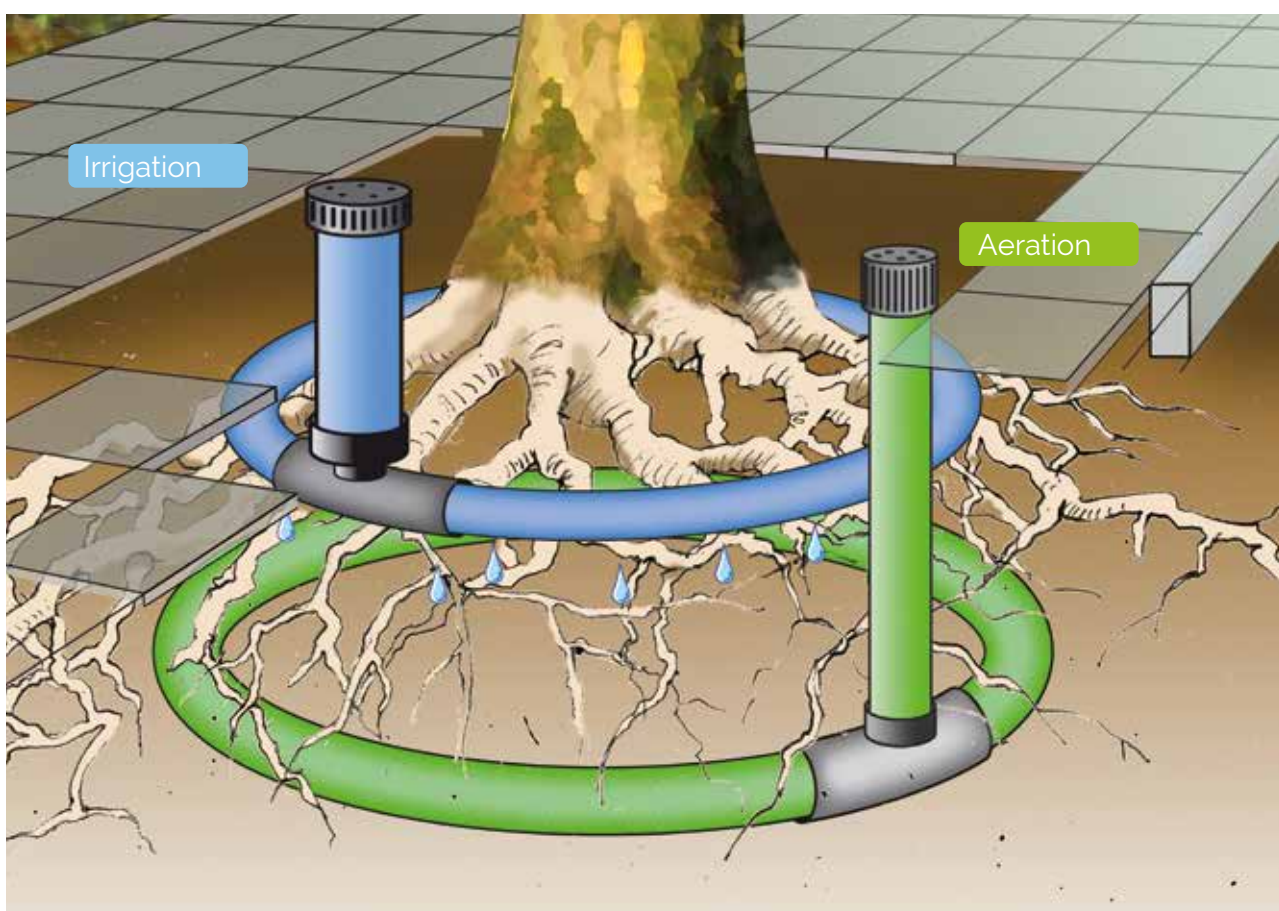
### Example of installation AquaMax Irrigation

| Tree Diameter | Tree height | Tube length horizontal | Tube length vertical |
|---------------|-------------|------------------------|----------------------|
| 8 - 16 cm     | < 3 m       | 2 m <sup>1</sup>       | 0,5 m <sup>1</sup>   |
| 16 - 25 cm    | 3 - 5 m     | 2,5 m <sup>1</sup>     | 0,5 m <sup>1</sup>   |
| 25 - 45 cm    | 5 - 7 m     | 4,5 m <sup>1</sup>     | 0,5 m <sup>1</sup>   |
| > 45 cm       | > 7 m       | 7,5 m <sup>1</sup>     | 0,5 m <sup>1</sup>   |

Ø Tube horizontal: 80 mm  
Ø Tube vertical: 80 mm

## Components










|   |  |
|---|--|
|    | <p>Flexible Irrigation/Aeration hose<br/> PE Ø 80 mm Type: AMS80<br/> PE Ø 100 mm Type: AMS100<br/> PE Ø 160 mm Type: AMS160<br/> 50 m1 per roll</p>   |
|    | <p>Flexible Irrigation/Aeration hose including woven filtering cloth<br/> PE Ø 80 mm Type: AMS80K<br/> 50 m1 per roll<br/> PE Ø 100 mm Type: AMS100K<br/> 50 m1 per roll<br/> PE Ø 160 mm Type: AMS160K 25 m1 per roll</p>                               |
|  | <p>Flexible Irrigation/Aeration hose including coconut filtering cloth<br/> PE Ø 80 mm Type: AMS80C<br/> PE Ø 100 mm Type: AMS100C<br/> 50 m1 per roll</p>   |
|  | <p>Flexible Irrigation/Aeration hose encased in polypropylene 450<br/> PE Ø 80 mm Type: AMS80PP<br/> PE Ø 100 mm Type: AMS100PP<br/> 50 m1 per roll</p>  |
|  | <p>AirMax 45 Aeration hose 45% perforated including woven filtering cloth<br/> PE Ø 80mm Type: AMB80K<br/> PE Ø 100 mm Type: AMB100K<br/> Standard dimensions 1.05 m and 2.10 m<br/><br/> Other dimensions available on request Read more on page 48</p> |



### Components

|   |   |  |  |
|---|---|--|--|
|  | <p>Bend pipe 90 degrees<br/>PP Ø 80 mm<br/>Type: AM80 Bend pipe<br/>PP Ø 100 mm<br/>Type: AM100 Bend pipe</p>                                     |  | <p>T-piece<br/>PP Ø 80 x 160 x 80 mm<br/>Type: AMT80 x 160 x 80<br/>PP Ø 100 x 160 x 100 mm<br/>Type: AMT100 x 160 x 100</p> |
|  | <p>T-piece<br/>PP Ø 80 x 80 x 80 mm<br/>Type: AMT80<br/>PP Ø 100 x 100 x 100 mm<br/>Type: AMT100<br/>PP Ø 160 x 160 x 160 mm<br/>Type: AMT160</p> |  | <p>Connector<br/>PP Ø 80 mm<br/>Type: AMK80<br/>PP Ø 100 mm Type:<br/>AMK100</p>   |
|  | <p>AirMax Connector<br/>PP Ø80x80x80mm</p>  |  |  |

## End caps components

|   |  |  |  |
|---|--|--|--|
|    | <p>Circular Endcover<br/>Grid: plastics or steel<br/>100 x 100 mm<br/>Type: AME100KC</p> <p>Circularly produced from our own recycling process</p> |    | <p>End cover with screw lid<br/>PP Ø 80 mm<br/>Type: AME80 Screw</p>   |
|    | <p>Click-fit end cover with 5 air holes<br/>PP Ø 80 mm Type: AME80L<br/>PP Ø 100 mm Type: AME100L<br/>PP Ø 160 mm Type: AME160L</p>                |    | <p>End cover hot-dip galvanised steel<br/>RAL 9005, powder coated<br/>PP Ø 80 mm, steel thickness 1 mm<br/>Type: AMRound80</p> |
|   | <p>End cap hot-dip galvanised steel grid*<br/>100 x 100 mm<br/>Type: AMTHERM10 Small</p>   |   | <p>End cap hot-dip galvanised steel grid*<br/>170 x 170 mm<br/>Type: AMTHERM17 Large</p>                                       |
|  | <p>End cap stainless steel grid*<br/>100 x 100 mm<br/>Type: AMRVS10 Small</p>  |  | <p>End cap stainless steel grid*<br/>170 x 170 mm<br/>Type: AMRVS17 Large</p>  |
|  | <p>End cap sherardized grid*<br/>100 x 100 mm<br/>Type: AMSTEEL10 Small</p>  |  | <p>End cap sherardized grid*<br/>170 x 170 mm<br/>Type: AMSTEEL17 Large</p>  |
|  | <p>End cap Corten steel grid*<br/>100 x 100 mm<br/>Type: AMCORTEN10 Small</p>  |  | <p>End cap Corten steel grid*<br/>170 x 170 mm<br/>Type: AMCORTEN17 Large</p>  |

- \* All steel end caps: undertray galvanised
- \* Colour deviations possible
- \* Leaf grate optionally available in the steel end caps, always supplied without.

# AquaMax BIO

AirMax/AquaMax BIO is a compostable aeration/irrigation system produced from corn and the bio synthetic granulate Cradonyl®.

All components are biodegradable and will begin to decompose within 3 to 5 years. It is therefore a much more durable solution than the standard plastic systems. Undergrundaeration and irrigation desperately needs the tree for the first few years after planting, after which the system is superfluous and the plastics remain useless in the ground.

## Advantages

- Natural resources
- 40% Reduction of CO2 gasses during the production process
- Sustainable and environmentally friendly
- In the right circumstances the system is completely compostable



AirMax Bio meets all the requirements of biodegradability (biodegradable) according to the standards EN13432, ASTM D6400, Vincotte OK Compost.

## Components

|   |   |  |   |
|---|---|--|---|
|  | <p>Irrigation/Aeration hose Bio<br/>           Ø 80 mm<br/>           50 m1 per roll<br/>           100% biodegradable<br/>           Type: CNBS80<br/>           Type: CNBSK80 (incl. coconut filtering cloth)</p> |  | <p>Connector bio<br/>           Ø 80 mm<br/>           100% biodegradable<br/>           Type: CNMK80</p>                             |
|  | <p>T-piece Bio<br/>           80 x 80 x 80 mm 100% biodegradable<br/>           Type: CNT80</p>   |  | <p>Click-fit end cover Bio<br/>           Ø 80 mm<br/>           100% biodegradable<br/>           Type: CNEK80</p>                   |
|  | <p>End cover with screw lid Bio<br/>           Ø 80 mm<br/>           100% biodegradable<br/>           Type: CNES80</p>  |  | <p>Click-fit end cover Bio with aeration holes<br/>           Ø 80 mm<br/>           100% biodegradable<br/>           Type: CNEG</p> |

## Material

- HDPE, pressure resistant and UV-stable
- Ø 80 mm and Ø 100 mm
- 100% recyclable
- Wall perforation: 45%
- All lengths possible on request (max. 250 cm)
- Optional: polyester filtering cloth
- Made from recycled products



Aeration; ideal for tree granulate

## AirMax 45

The AirMax 45 Aeration system is placed deeper in the tree pit to provide much needed air allowing the deeper roots to establish and thrive.

The AirMax 45 tubes have 45% perforation and are, due to the high pressure resistance, ideal for use in structural soil. The system is covered with a polyester filtering fabric with a very long life span, exceeding the lifespan of coconut fibre.

## Components

|  |  |
|--|--|
|  | <p>AirMax 45 Aeration tube<br/>PE, 45% perforated incl. woven filtering cloth<br/>Type: AMB80K (80 mm, 1.05 m of 2.1 m)<br/>Type: AMB100K (100 mm, 1.05 m of 2.1 m)</p> <p>Other dimensions on request</p> |
|  | <p>Bend pipe 90 degrees<br/>PP Ø 80 mm<br/>Type: AM80 Bend pipe<br/>PP Ø 100 mm<br/>Type: AM100 Bend pipe</p>  |
|  | <p>T-piece<br/>PP Ø 80 x 80 x 80 mm<br/>Type: AMT80<br/>PP Ø 100 x 100 x 100 mm<br/>Type: AMT100</p>   |

Expandable  
with end caps  
and accessories  
from page  
44 t/m 46



### Extension optional

|   |  |
|---|--|
|  | <p>Steel end cap, galvanized bottom part<br/>100 x 100 mm<br/>With 4 types of grid:<br/>Galvanised steel, Stainless steel, Corten steel and Sherardized steel<br/>(see page 46)</p>  |
|  | <p>Steel end cap, galvanized bottom part<br/>170 x 170 mm<br/>With 4 types of grid:<br/>Galvanised steel, Stainless steel, Corten steel and Sherardized steel<br/>(see page 46)</p>  |
|  | <p>Circular Endcover<br/>100 x 100 mm<br/>Grid: plastics or steel (Stainless steel)<br/>Type: AME100KC (grid plastic)<br/>Type: AME100K-RVS (grid Stainless steel)</p> <p>This new end cap is produced from recycled plastic from our circular collaboration with the plastic recycling industry.<br/>The grid is a replacement for the iron end caps, cheaper, strong, drive-over and available in different colours. 100% recyclable, so very durable.</p> |



# Aeration sets

## Set B1

| Dimensions: approx. 1.05 x 1.05 x 1.05 m. (L x W x H)                              |  |
|--|--|
|   | 4 pcs AirMax45 with cloth<br>Ø 80 mm, 1,05 m <sup>1</sup><br>Type: AMB80K                |
|   | 4 pcs AirMax45 with cloth<br>Ø 80 mm, 0,5 m <sup>1</sup><br>Type: AMB80K - customization |
|   | 2 pcs Click-fit end cover*<br>Ø 80 mm<br>Type: AME80 Long                                |
|   | 2 pcs T-piece<br>Ø 80 mm<br>Type: AMT80  |
|  | 4 pcs Bend pipe 90 degrees<br>Ø 80 mm<br>Type: AM80 Bend pipe                            |

Delivered as a bundled set



### \* Alternatives



## Set B1-F

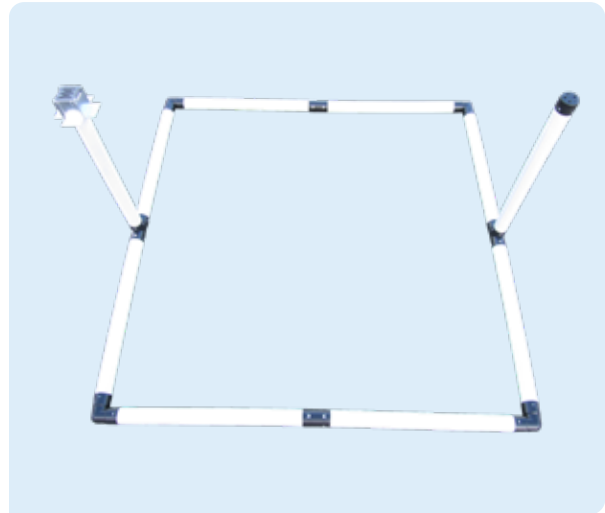
| Dimensions: ca. 1.05 x 1.05 x 1.05 m. (L x W x H)                                    |  |
|--|--|
|  | 2 pcs AirMax45 with cloth<br>Ø 80 mm, 1,05 m <sup>1</sup><br>Type: AMB80K  |
|   | 4 pcs AirMax45 with cloth<br>Ø 80 mm, 0,5 m <sup>1</sup><br>Type: AMB80K - customization                                 |
|   | 2 pcs Flexible Irrigation/aeration hose including woven filtering cloth 1 m <sup>1</sup><br>Type: AMS80K - customization |
|   | 2 pcs Click-fit end cover*<br>Ø 80 mm<br>Type: AME80 Long  |
|   | 2 pcs T-piece<br>Ø 80 mm<br>Type: AMT80  |
|   | 4 pcs Bend pipe 90 degrees<br>Ø 80 mm<br>Type: AM80 Bend pipe  |

### \* Alternatives



### Set B2

| Dimensions: approx. 2.10 x 2.10 x 1.05 m. (L x W x H)                              |  |
|--|--|
|   | 10 pcs AirMax45 with cloth<br>Ø 80 mm, 1,05 m <sup>1</sup><br>Type: AMB80K |
|   | 2 pcs connector<br>Ø 80 mm<br>Type: AMK80                                  |
|   | 2 pcs Click-fit end cover*<br>Ø 80 mm<br>Type: AME80 Long                  |
|   | 2 pcs T-piece<br>Ø 80 mm<br>Type: AMT80                                    |
|  | 4 pcs Bend pipe 90 degrees<br>Ø 80 mm<br>Type: AM80 Bend pipe              |



#### \* Alternatives



### Set B2-F

| Dimensions: approx. 2.10 x 2.10 x 1.05 m. (L x W x H)                               |  |
|---|--|
|  | 8 pcs AirMax45 with cloth<br>Ø 80 mm, 1,05 m <sup>1</sup><br>Type: AMB80K  |
|  | 2 pcs Flexible Irrigation/aeration hose including woven filtering cloth 1 m <sup>1</sup><br>Type: AMS80K – customization |
|  | 2 pcs connector<br>Ø 80 mm<br>Type: AMK80  |
|  | 2 pcs Click-fit end cover*<br>Ø 80 mm<br>Type: AME80 Long  |
|  | 2 pcs T-piece<br>Ø 80 mm<br>Type: AMT80  |
|  | 4 pcs Bend pipe 90 degrees<br>Ø 80 mm<br>Type: AM80 Bend pipe  |

#### \* Alternatives





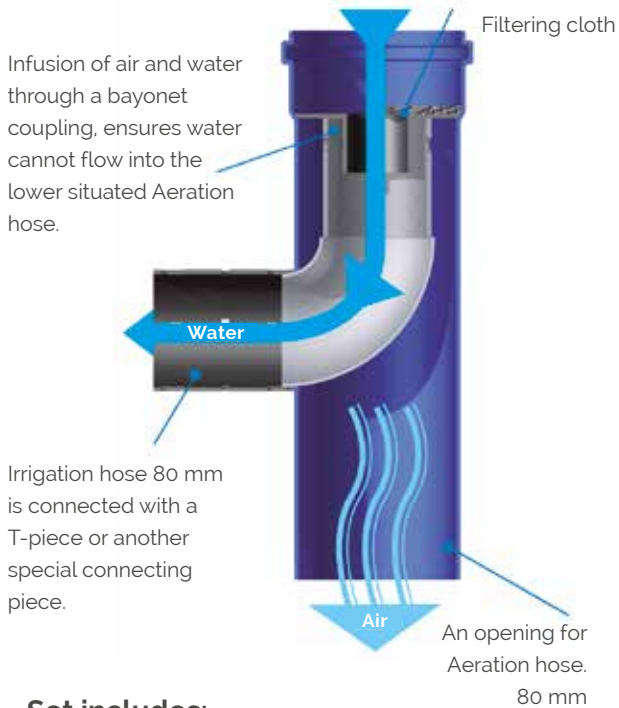
## Aeration & Irrigation **LUWA**

Many newly planted trees suffer from lack of water or oxygen caused by highly compacted soil, particularly in urban environments. It is imperative that an effective Aeration and Irrigation system be installed to support the newly planted trees in urban environments.

Existing systems have the risk of Aeration tubes being used for Irrigation, and vice-versa. Therefore this is the primary reason prompting the development of the LUWA system.

Two systems: one input!

Aeration and Irrigation systems are combined in the LUWA-system, ensuring that water cannot flow into the Aeration system which is installed deeper in the tree pit. By installing a two-in-one system, there are significant cost savings in both time and materials.



### Set includes:

|   |   |  |                  |
|---|---|--|------------------|
|  | LUWA Splitter                                       |   | Reducer 110-80   |
|  | Connector<br>PP Ø 80 mm<br>Type: AMK80              |  | Specie cover 110 |
|  | 2 pcs T-pieces<br>PP 80 x 80 x 80 mm<br>Type: AMT80 |  | Filter           |

\* Can be expanded with plastic end cap Ø 110 mm or steel end cap 170 x 170 mm

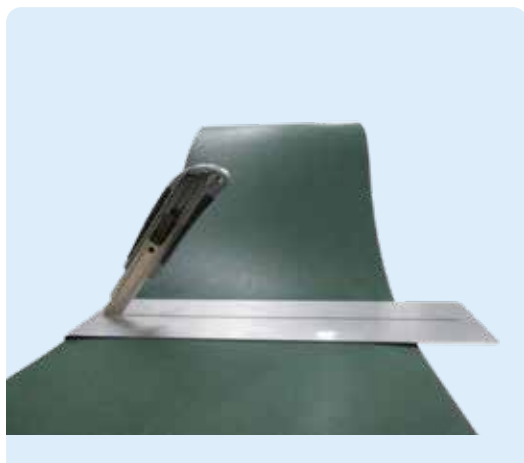


### Material

- Produced from high quality recycled HDPE
- Produced from high quality recycled LDPE
- Polyethylene based on residual sugar cane waste
- PMD, based on plastic waste
- 100% recyclable
- Colour: green, grey and brown

### Installation tool

Cutting the water reservoir in a straight line with the AquaMax/AMGR CUTTING BOARD. The stainless steel cutting board is 10 cm wide and 36.5 cm high.



## Water Reservoir AquaMax

Dry soil in the urban environment will reduce the growth of young trees. The AquaMax water reservoir is a functional solution to keep the trees healthy. During the summer period it has an added benefit of protecting the trunk against mower or strimmer damage whilst in the winter it will protect against gritting operations.

The inside of the water reservoir can be filled with a coconut fibre mat or wood scraps to prevent weeds. The water reservoir can easily be filled with water and has a large water storage capacity.

A small part of the AquaMax should be placed in the ground (+/- 10cm). This will make sure that the water reservoir stays stable and that the water will remain in the area around the tree trunk.

The water reservoir can be closed with double-sided tape or, upon request, with a coupling.



Suitable  
for multiple  
reuses

## Dimensions and material

|   | Type                              | Material/colour   | Length            | Height | Thick-ness | Structure      | Lifecycle        |
|---|-----------------------------------|---|-------------------|--------|------------|----------------|------------------|
|    | Budget water reservoir AMGR125Z   | High-quality recycled HDPE Black/anthracit* partly UV-stable    | 25 m <sup>2</sup> | 30 cm  | 1,5 mm     | Smooth         | Approx. 5 years  |
|    | AquaMax water reservoir AMGR225Z  | High-quality recycled HDPE Black UV-stable                      | 25 m <sup>2</sup> | 30 cm  | 2 mm       | Smooth         | Approx. 10 years |
|   | AquaMax water reservoir AMGR325Z  | High-quality recycled LDPE Black UV-stable                      | 25 m <sup>2</sup> | 30 cm  | 3 mm       | With structure | Approx. 10 years |
|  | Budget water reservoir AMGR320G   | High-quality recycled LDPE Green* partly UV-stable              | 20 m <sup>2</sup> | 30 cm  | 3 mm       | Smooth         | Approx. 5 years  |
|  | AquaMax water reservoir AMGR225G  | High-quality recycled HDPE Dark green UV-stable                 | 25 m <sup>2</sup> | 30 cm  | 2 mm       | With structure | Approx. 10 years |
|  | AquaMax water reservoir AMGR225GZ | High-quality recycled HDPE Bicolour: Dark green/black UV-stable | 25 m <sup>2</sup> | 30 cm  | 2 mm       | With structure | Approx. 10 years |

All our water reservoirs are re-usable. By using our water reservoir coupling (see page 58) re-using became much easier, because the water reservoir stay without nail holes.


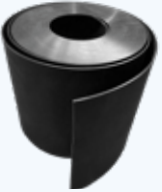

\* Colour variations possible

### Dimensions and material

|   | Type                               | Material/colour                                       | Length            | Height | Thick-ness | Structure                 | Lifecycle        |
|---|------------------------------------|---|-------------------|--------|------------|---------------------------|------------------|
|    | AquaMax water reservoir AMGR325G   | High-quality recycled LDPE<br>Dark green<br>UV-stable | 25 m <sup>1</sup> | 30 cm  | 3 mm       | With structure            | Approx. 10 years |
|    | AquaMax water reservoir AMGR335G25 | High-quality recycled LDPE<br>Dark green<br>UV-stable | 25 m <sup>1</sup> | 35 cm  | 3 mm       | With structure            | Approx. 10 years |
|   | AMGR Biobased water reservoir      | Made of su-<br>gar cane waste<br>Brown*<br>UV-stable  | 25 m <sup>1</sup> | 30 cm  | 2 mm       | Smooth                    | Approx. 10 years |
|    | Circulaire water reservoir         | Based on plastic waste<br>Grey**<br>partly UV-stable  | 20 m <sup>1</sup> | 30 cm  | 3 mm       | Smooth                    | Approx. 5 years  |
|    | AMGR 2KGG                          | High-quality recy-<br>cled HDPE<br>Green<br>UV-stable | 25 m <sup>1</sup> | 30 cm  | 2 mm       | With structure/<br>smooth | Approx. 10 years |
|    | AMGR 3KGG                          | High-quality recy-<br>cled HDPE<br>Green<br>UV-stable | 25 m <sup>1</sup> | 30 cm  | 3 mm       | With structure/<br>smooth | Approx. 10 years |

\* Colour variations possible

## Dimensions and material

|  | Type      | Material/colour  | Length              | Height | Thick-ness | Structure                 | Lifecycle            |
|--|-----------|--|---------------------|--------|------------|---------------------------|----------------------|
|   | AMGR 2ZGG | High-quality recycled HDPE<br>Black<br>UV-stable                         | 25 m <sup>1</sup>   | 30 cm  | 2 mm       | With structure/<br>smooth | Approx.<br>10 years  |
|   | AMGR 3ZGG | High-quality recycled HDPE<br>Black<br>UV-stable                         | 25 m <sup>1</sup>   | 30 cm  | 3 mm       | With structure/<br>smooth | Approx.<br>10 years  |
|  | GreenWell | High-quality recycled HDPE<br>Green and black<br>UV-stable<br>In 3 parts | Content<br>60 liter | 25 cm  | 2 mm       | Smooth                    | At least<br>10 years |





Aeration & Irrigation



## Water reservoir accessories

| All the accessories are available separately.                                       |  |  |
|---|--|--|
|    | AquaMax water reservoir coupling 30-2  | Coupling for the water reservoir of 1 – 2 mm, to attach together by sliding into each other  |
|   | AquaMax water reservoir coupling 30-3  | Coupling to close the 3 mm thick water reservoir. Coupling for the water reservoir of 3 mm, to attach together by sliding into each other                    |
|    | AquaMax Water Reservoir click coupling   | Coupling for attaching the water reservoirs of all thicknesses with a click coupling.<br>With a pin for easy insertion of the click coupling into the ground |
|    | Edgefix-2  | Stake for casting edges<br>Length: 40 cm, Width: 12 cm   |
|   | Coco Disk > 57 cm<br>Coco Disk > 73 cm<br>Coco Disk > 100 cm<br>Coco Disk > 133 cm | Coco fiber mat bundle packaged per:<br>14 pieces<br>11 pieces<br>8 pieces<br>6 pieces  |
|  | Steel anchor   | Steel anchor to attach coco fiber mat in the ground<br>Length: 30 cm   |
|  | BIO anchor   | Biodegradable anchor to attach cocofiber mat in the ground<br>Length: 20 cm  |
|  | Wooden anchor  | Biodegradable anchor to attach coco fiber mat in the ground<br>Length: 30 cm   |
|  | AMGR Cutting board   | AquaMax cutting board to cutting the water reservoir in a straight line<br>The stainless steel cutting board is 10 cm wide and 36.5 cm high                  |
|  | AMGR screw   | For screwing water reservoirs to tree stakes   |



**Aeration & Irrigation**



### Material

- Capacity: 75 liters
- Easy to install
- Reusable
- 1 or more AquaBags per tree
- Can be used with trees and shrubs



## Irrigation

# AquaBag

**When planting new trees, it is very important that they root well. Use the AquaBag to prevent your newly planted trees from drying out or from being over-watered.**

The AquaBag is a water bag that slowly releases drops of water around the trunk of the tree over a period of 6 to 10 hours, which prevents the water from draining away, and gives the tree ample time to absorb the water. The bag is easy to attach around the tree using a zip.

Fill the AquaBag with clean water once or twice a week for optimal growth and to prevent the holes of the AquaBag from becoming blocked.

The bag can also be placed around the tree post if there is a risk of fungi or a lack of oxygen at the stem/trunk. This allows the water to drip at the root ball, while leaving the trunk unrestricted.



## Material

- The TreeDiaper is available in the following sizes

### Small

Inner Diameter: 10 cm  
Outer Diameter: 60 cm  
Number of parts: 1 piece

### Medium

Inner Diameter: 30 cm  
Outer Diameter: 90 cm  
Number of parts: 2 pieces

### Large

Inner Diameter: 30 cm  
Outer Diameter: 120 cm  
Number of parts: 4 pieces

- Colour: black
- The small TreeDiaper fits into the GreenWell



## Irrigation

# TreeDiaper

The TreeDiaper absorbs (rain)water and slowly releases it to the soil. Filled with water-absorbing crystals, the TreeDiaper ensures the tree receives water in a controlled manner, preventing extremes such as drought and waterlogging.

Additionally, the TreeDiaper acts as a root barrier, inhibiting weed growth around the tree's base. By using the TreeDiaper, fewer watering sessions are needed, resulting in cost savings.

Featuring a circular, float-like shape, the TreeDiaper easily fits around a tree. It is durable, withstanding sunlight exposure, and can last for years.