QUATRO DESIGN®

DRAINAGE GUIDE

DRAINAGE

IMPORTANCE OF DRAINAGE

Drainage is the most important aspect of container gardening and is critical to plant health. It allows the water in the soil to drain freely so ample air is available for the roots. Healthy roots mean healthier plants.

A lack of drainage is one of the most common causes of unhealthy and dying plants, as waterlogged soil can lead to root rot. This is a serious condition that plants rarely recover from. Signs of root rot include wilted and yellowing leaves and eventual leaf-drop. If the plant is removed from the container the roots will have a dark appearance with a slimy texture.

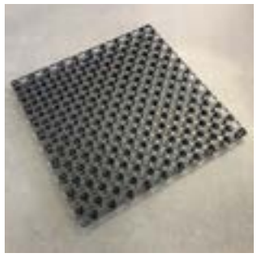
Excess water will also place additional pressure on the container base and sides and if drainage is not corrected surface cracks will appear. Note that even if the soil surface appears dry, the soil at the bottom of the pot may be saturated.

DRAINAGE AIDS

All Quatro Design pots come standard with acrylic-based internal waterproofing and with drainage holes and aids already installed. The location, size and number of drainage holes relate to the size of the pot and its soil volume.

The drainage aids are covered with a thin layer of geofabric filterwrap to prevent the drainage hole/s from blocking whilst still allowing water and fine particles to pass through.

DRAINAGE CELL (For all pots and planters)




VersiFlex flexible drainage cells are fitted to our large and over-sized pots and planters. These interlocking drainage cells are designed for use in planter boxes, roof gardens and retaining walls. Their open surface design and high internal void volume enable the rapid capture and transport of water volume to result in efficient drainage.

The Drainage Cells are covered by a thin layer of Geofabric filterwrap to prevent the drainage hole from blocking whilst still allowing water and fine particles to pass through.

DRAINAGE REGULATOR RISER (To minimise water run-off)

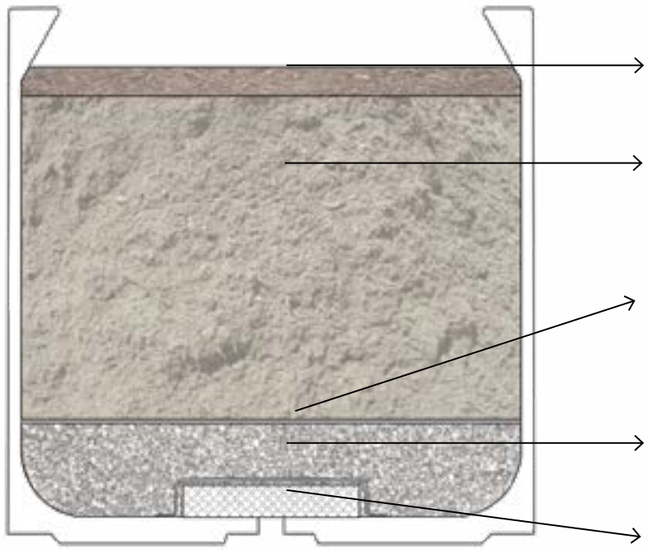



Drainage Regulator Risers are often installed when the amount of water draining from the base of the pot should be limited. They create a 60 mm approx high water reservoir at the base of the pot to prevent excess water from draining away.

The Drainage Regulator Riser is covered by a thin layer of Geofabric filterwrap to prevent the drainage hole from blocking whilst still allowing water and fine particles to pass through.

DRAINAGE CELL PLANTING GUIDE

(For all pots and planters)



STEP 5: Add a **Mulch Layer** to assist with moisture retention and to prevent soil-loss. (Note that coloured, tea tree and bark chip mulch varieties may leach colour pigment or tannins which could cause staining around the base of the pot).

STEP 4: Fill the pot with a good quality **Premium Potting Soil or Podium Mix.**

STEP 3: (Optional) Add **Geofabric / Filterwrap or Non-metallic Flyscreen** between the drainage filler and potting soil, this prevents fine particles from reaching and blocking the drainage hole. Important: Geofabric no finer than 110 - 80 micron! Remember to wet this layer before you proceed to Step 4.

STEP 2: Add a **Layer of Drainage Filler** i.e Activated charcoal or Pebble / Gravel / Course Sand or Scoria

STEP 1: **Wet the geofabric** installed over the VersiFlex drainage cell. Wetting the geofabric before potting softens the weave ensuring optimum drainage form the start.

IMPORTANT PLANTING AND POTTING INFORMATION

SOIL MIX

NOTE: Top soil, clay or sand can't be used as a potting mix substitute, it is too dense and compacts causing inadequate drainage, it can also be contaminated with weeds and disease. Using the incorrect potting mix voids the product warranty.

Premium potting soil is specially blended for containers. it has a light texture that is freely draining. Premium mixes are also sterile to prevent weed and disease infestations. (Regular fertilizing is recommended).

Podium Mix is specially formulated for on-slab applications. It is lighter than traditional garden soil with good drainage properties. This light-weight mix is ideal for projects where weight is an issue.

DRAINAGE FILLER OPTIONS

Activated charcoal pellets have natural absorption and anti-microbial properties and are light-weight.

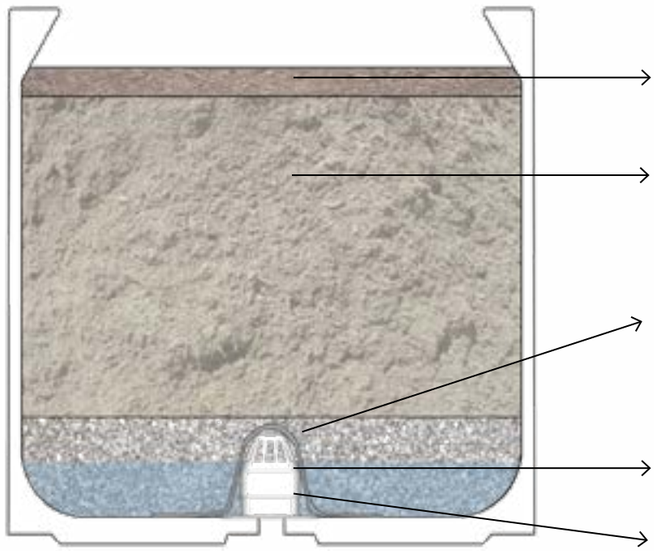
Pebble / Gravel / Course Sand is traditionally used to assist with drainage but can add additional weight. Scoria is a light-weight volcanic stone and is a good alternative to pebble and gravel where weight is an issue.

PLANT ROOTS

Consider the mature root-ball size of the plant selection compared to pot and soil volume as damage caused by plant roots are not covered by our warranty.

DRAINAGE REGULATOR RISER PLANTING GUIDE

(To minimise water run-off)



STEP 4: Add a **Mulch Layer** to assist with moisture retention and to prevent soil-loss. (Note that coloured, tea tree and bark chip mulch varieties may leach colour pigment or tannins which could cause staining around the base of the pot).

STEP 3: Fill the pot with a good quality **Premium Potting Soil or Podium Mix.**

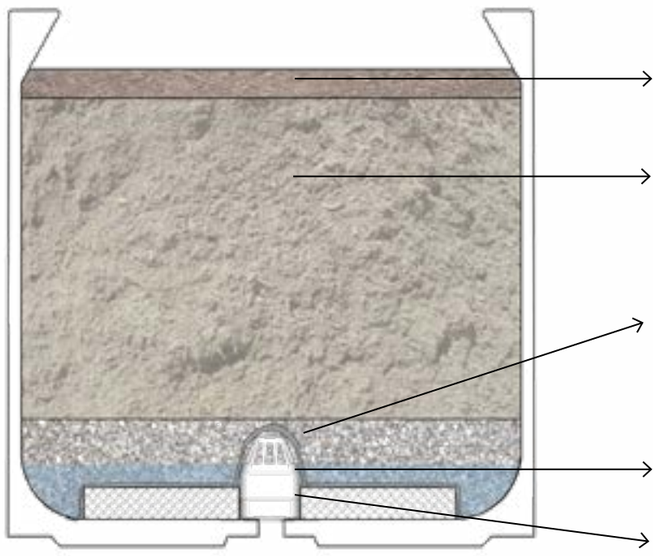
STEP 2: Add a **Layer of Drainage Filler** i.e Activated charcoal or Pebble / Gravel / Course Sand or Scoria. Do **NOT** cover with a layer of Geofabric, Filterwrap or Non-metallic Flyscreen.

NOTE: Water will not drain from below this level.

STEP 1: **Wet the geofabric** installed over the Drainage Regulator Riser. Wetting the geofabric before potting softens the weave ensuring optimum drainage form the start.

DRAINAGE REGULATOR RISER AND CELL PLANTING GUIDE

(To minimise water run-off)



STEP 4: Add a **Mulch Layer** to assist with moisture retention and to prevent soil-loss. (Note that coloured, tea tree and bark chip mulch varieties may leach colour pigment or tannins which could cause staining around the base of the pot).

STEP 3: Fill the pot with a good quality **Premium Potting Soil or Podium Mix.**

STEP 2: Add a **Layer of Drainage Filler** i.e Activated charcoal or Pebble / Gravel / Course Sand or Scoria. Do **NOT** cover with a layer of Geofabric, Filterwrap or Non-metallic Flyscreen.

NOTE: Water will not drain from below this level.

STEP 1: **Wet the geofabric** installed over the Drainage Regulator Riser and VersiFlex Drainage Cell. Wetting the geofabric before potting softens the weave ensuring optimum drainage form the start.

IMPORTANT PLANTING AND POTTING INFORMATION

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DRAINAGE FILLER OPTIONS

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PLANT ROOTS

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AFTER-SALES DRAINAGE HOLE INSTALLATION

In some cases, site conditions or project specifications may require the installation of drainage holes in our products after it has left our factory.

The following guidelines outline best practice for creating drainage holes in Glassfibre Reinforced Concrete:

- We recommend a minimum drainage hole size of 25 mm. More than one drainage hole may be required per planter.
- Contact us for guidelines on the minimum size and number of drainage holes required in relation to the product you've ordered.
- Use a regular drill with a masonry diamond core drill bit or a tungsten core masonry drill bit.
- **DO NOT USE A HAMMER ACTION / HAMMER DRILL** (also known as a percussion or impact drill) as the pounding force generated by this type of drill action causes substantial surface damage to GRC products.
- Ensure that the drainage hole/s are created within the drainage channels in the base of the bowl, pot or planter.
- Position the drainage hole/s approximately 20 – 40 cm away from the sides of the bowl, pot or planter.
- Please follow our planting guidelines as set out in pages 6 to 9 of this document.
- Please take a photograph of the base of the bowl, pot or planter once the drainage hole/s has been installed and before filling with potting soil. This allows us to see if adequate provision was made to facilitate drainage during installation.
- **Failure to follow these guidelines and to provide photographic evidence of the drainage holes installed on site may void your warranty.**

Example
Masonry Diamond Core Drill Bit

Example
Tungsten Core Masonry Drill Bit

IRRIGATION GUIDELINES

Plant variety, pot size, position (sun vs shade), climate and season all affect irrigation requirements and run-times and we recommend the use of a licenced and experienced installer.

The following are good guidelines to consider:

- When hand-watering, it is best to test the soil's moisture content before adding additional water. A simple finger-test to determine whether the top soil layers are dry vs moist would be adequate. Only provide additional water when the soil is dry.
- Automated irrigation systems can be used to water container plants. Best practice would be to add all pots to a seperate irrigation zone to in-ground garden beds that either runs for longer less often or shorter more frequent run-times. It is essential to allow adequate time for root uptake, evaporation and drainage between watering.

IRRIGATION & DRAINAGE REGULATOR RISERS

Over-watering can cause root rot and other diseases.

IT IS NOT RECOMMENDED TO INSTALL AN AUTOMATED IRRIGATION SYSTEM WHEN USING DRAINAGE REGULATOR RISERS.

Should your installer opt for an irrigation system the water reservoir created at the base of the pot should be taken into consideration to allow adequate time for root uptake between watering.

CONTACT US

Contact us for any drainage and planter installation queries

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QUATRO DESIGN®

WHERE LANDSCAPE MEETS ARCHITECTURE®

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