



## GARDENING

### Garden planters, flower pots and planting containers

Vegetation solutions for paved surfaces require the following rational thinking to match the right product to the right place. The needs that change from place to place require different solutions, but the basic rules for success are permanent and binding.

Before planning any gardening in planting containers, we first need to determine the desired benefits and match our demands accordingly.

Correct gardening in planters offers many diverse advantages, mainly the following:

- Hiding and creating privacy;
- Defining natural borders without the need for permits and licenses;
- Preventing the passage of people or animals;
- Providing ecological, green and environment friendly diversity;
- Providing freshness, color and odor by means of vegetation;
- Accentuation of changing colors in the garden;
- Absolutely powerful and immediate barrier against noise and air pollution;
- Ability to protect vegetation by changing its location according to season and weather.

The components of gardening in planters are: type of plant growing containers, planting substrate, vegetation, irrigation and drainage system and ongoing maintenance. In this article we will address all issues at great length.

### Type of plant growing containers

Gardening on paved surfaces requires planting containers. Today there are various types of containers that can be used, with every type having its advantages and disadvantages.

**Planters, flower pots and vases of all kinds of plastic material** – they have a lot of advantages. Nowadays, you may find a vast variety of planting containers of all kinds, garden planters, flower pots, vases and vases that are lit with LED lighting. At ALMI Plastic Industries Ltd. the selection of products is enormous, it ranges from local production to imported goods from a number of places in the world, in a variety of colors that can amount to 15 colors per product, in any size and dimensions; planting containers may be provided with drains or completely sealed for hydroponic vegetation. The use of planters, vases, flower pots and planting containers also provides more options in design, in addition to the types of vegetation.

**Planters or flower pots made of concrete** – their high weight is used as a stable anchor, but it is quite difficult to move them around as needed. Also, they are not too nice to look at and they do not present any respectability and prestige. They require to be sealed in two layers and passing time is not an advantage for them. Their enormous volume does not allow any TECHNORAM drain to be installed and connected, but requires any other improvisation.

**Planters or flower pots made of clay** – their beauty depends on their country of origin; the most beautiful of them, which have gone through a worthwhile process in a furnace burner and glaze during the production, are also the most expensive ones. They are fragile and placing them in high-traffic areas of passers-by may be problematic. Most of them are small on the bottom and in case of strong winds are likely to fall over, especially with high vegetation planted in them. Their oval shape manifests a presence, but does not produce a full border definition, due to the space created between the plant and the flower pot. The more simple tools need a special sealing and over time a white layer of salt and calcium, thus existing in water, is formed.

**Planters made of wood** – they can be built according to precise measurements, their weight is a solid foundation, even in the case of high vegetation, they can be placed on wheels with stoppers, sealing them is a must, preferably with PVC sheets. It is simple and easy to connect them to a standard TECHNORAM drain; their geometric shape allows complete closure, thus preventing the passage of passers-by, noise and air pollution and they allow complete privacy. They may be built in beautiful designs and they may be given an appropriate color tint, suitably integrating with the one existing on site.

### The Planting Substrate

While the planting substrate is invisible, it is still one of the most important elements. The first layer on the bottom of the planter should be a drainage layer of 3-5 cm thickness of 4-20 mm tuff; this layer allows free flow of water that drains down through the drain at the bottom of the planter, thus preventing the accumulation of salts and bad smell and it allows the input of fresh water to the base roots.

On top of this layer it is desirable to fill the substrate planting comprising of a mixture of peat, coconut and 4-8 mm crushed tuff. Thus mixture is available after it has gone through a disinfection process by steam, thus assuring the cleaning of diseases and viruses and preventing the development of weeds. This mixture has hygroscopic properties, thus creating favorable conditions for the development of the root system and the vegetation.

### Vegetation

The type of vegetation will be determined according to the desired purpose. Tall plants, low plants, sloping plants or plants of various heights together; the choice of the types of plants will relate to the location of the planter, whereby the affecting factors are: sun or shade at different times during the day, wind directions, the volume of the roots compared to the size of the planter, maintaining the correct proportion between the size of the plant and the size of the planter, (this is important at the time of strong wind gusting, when the foliage of the plant is used like a sail against the wind), resistance to disease and pests, since we do not wish to mess with spraying crop protection at places where people eat, resistance to environmental conditions such as soot and pollution, seasonal herbs, in aspect of rash and loss of leaves, a combination of plants with interesting textured leaves and pleasant odors and density of foliage.

Here are a few types of plants that can be used as vegetation in planters: herbs, Pelargonium Peltatum, types of Cuphea, Scaevola Aemula, Russelia, types of Sumacs, Bauhinia Tomentosa, types of Recoma, Oil tree, Breynia, Solanum Rantonnetii, Psidium Guajava, types of Citrus fruit and more. A new, revolutionary and interesting product existing on the market today is a product called "garden fence" – an off-the-shelf hedge that has been developed by the nursery "Nymphaea". This product is a green wall immediately ready for use and which may reach any height to instantly provide the perfect solution.

### Irrigation system

The computerized irrigation system is a prerequisite for success. Experience has shown that one should not rely on manual irrigation, even where there is constant presence. Nowadays, a simple and efficient computerized system, installed inside a locked cabinet that looks like a small fuse box is available. The system consists of a main faucet, pressure reducer, electric valve, water filter and pressure regulator. Those who are extremely meticulous about all details also add a backflow valve and a fertilizer pump. The irrigation of planters is done by means of a tube aesthetically attached to the wall or bottom of the planter. This tube can be obtained in three colors – black, white and brown. Each planter will be irrigated via a 16 mm drip line or in small planters by an 8 mm drip extension. The amount of water irrigation is updated in the computer, in accordance with weather conditions; during hot periods when daily evaporation is high the water amount is increased and during the winter period it is reduced; planters that are exposed to the sun all day consume more water than those, which are placed in shaded areas. On rainy days the irrigation has to be stopped, but planters that are placed under the roof will still need irrigation.

### Drainage

The drainage of planters begins with the TECHNORAM drain, installed at about 2 cm above the bottom of the planter; inside the planter above the drain there is a perforated tube with a top cover that allows us to maintain, if necessary, the drain opening and relief blockages, should there be any. The outer part of the drain on the outside of the planter is a fast connection that is easily plugged into the 20 mm drainage tube, thus collecting all excess irrigation of all planters to one regulated draining point.

### Ongoing maintenance

The maintenance of the planters is done in a short biweekly treatment, during which the irrigation system and water flow are checked, dry leaves are cleared, light pruning or cutting of branches growing laterally is done, flowers that stopped blooming are removed and vegetation is renewed at places where we planted seasonal vegetation.

### Summary

Success is the result of a perfect performance. Unfortunately the market is too wide and open, with no clear standards, and everyone pretends to be called an expert in the field. It is necessary to choose a real professional and a reliable company, which uses the highest quality materials. Defective sealing, the wrong choice of plants or a malfunctioning irrigation and drainage system will make any investment go down the drain.

Good Luck.

The article was written by Yoram Ben-Ami, planter