

MONA IRRIGATION SYSTEMS



Urban Tree Planting
& Tree Irrigation

Mona Irrigation systems from Green-tech offer several benefits for irrigating plants and trees, focusing on efficient water delivery and promoting healthy growth. Here's a breakdown of the key advantages:

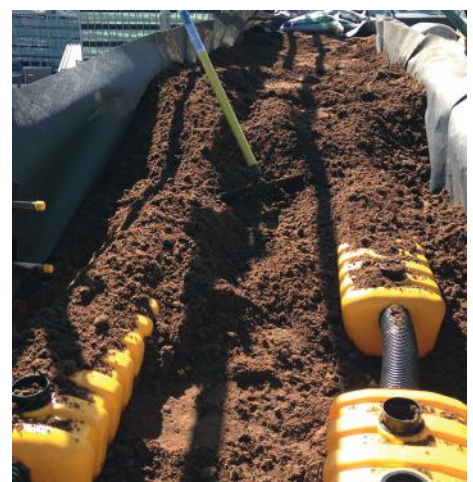
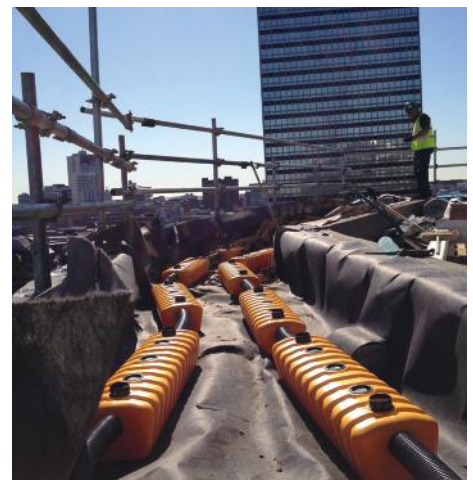
Mona Plant System/Plantsava Tanks

- **Capillary Action** - utilises the plant's natural capillary action to deliver water directly to the roots as and when required, preventing over or under-watering.
- **100% Water Efficient** - ensures that all the water in the reservoir is used by the plant, eliminating waste.
- **Reduces Watering Frequency** - plants can often go for extended periods (e.g., approximately every six weeks under optimal conditions for Plantsava tanks) before needing refilling.
- **Promotes Healthy Root Development** - consistent and direct water supply leads to stronger and healthier root systems.
- **Versatile for Indoor and Outdoor Use** - suitable for a wide range of container types, including pots, planters, window boxes and hanging baskets.
- **Available in Various Sizes** - tanks come in different capacities (e.g., 1 to 25 liters for Plantsava tanks) to suit various planter sizes.
- **Can be Planted at Different Depths** - allows for positioning the water reservoir at the optimal depth for the plant's root system.
- **Made from Recycled Materials** - the Plantsava tanks are manufactured in the UK using recycled materials, making them an environmentally conscious choice.
- **Modular Options (MPS Lins/Rings)** - these systems offer flexibility for irrigating larger or unusually shaped planters and tree root balls by connecting multiple tanks.

In summary, Mona Irrigation systems provide efficient, targeted watering solutions for both trees and container plants, leading to water savings, healthier plant growth and reduced maintenance.

General Considerations:

- **Planning** - carefully plan the layout of the irrigation system based on the number and location of plants/trees, their mature size and the overall landscape design.
- **Soil Conditions** - consider the soil type and drainage. While Mona systems help with water management, extremely poor drainage around the installation site should be addressed.
- **Accessibility** - ensure easy access to the filling points for watering and potential fertiliser application.



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- **Protection** - protect the visible parts of the system (caps, filler pipes) from damage, especially in high-traffic areas. Consider the “Mona Relief Vente” or “Piazza” caps for tree pits in hard landscapes for added robustness and security.
- **Water Quality** - use clean water to prevent blockages in the system. For the Mona Relief Grande, the integral filter helps with this.
- **Backfilling** - ensure even and proper backfilling around the system components to avoid air pockets and maintain the system’s level.

Specific Considerations for Mona Plant/Plantsava (Container Plants):

- **Tank Size Selection** - choose the appropriate size of the Mona Plant tank or Plantsava based on the size of the planter and the water requirements of the plant. Green-tech provides guidelines based on planter volume.
- **Capillary Leg Placement** - ensure the top of the capillary leg is no more than 150mm (approximately 6 inches) from the lowest roots of the plant to allow for effective capillary action.
- **Filling the Capillary Leg** - fill the capillary leg with a good quality topsoil, ensuring it’s settled but not compacted, to facilitate water transfer.
- **Filler Pipe Level** - the top of the filler pipe should ideally be level with the finished soil level in the planter. If it’s too long, it can be cut, but remember to trim the water level indicator by the same amount.
- **Drainage Layer** - consider installing a drainage layer at the bottom of the planter below the Mona Plant/Plantsava unit to prevent waterlogging around the reservoir itself, especially in outdoor containers.
- **Initial Watering** - after planting and installing the Mona system, give the entire area a good surface watering to activate the capillary process and ensure the surrounding soil is moist.
- **Distance Between Links (MPS Links/Rings)** - when using multiple interconnected tanks, ensure the distance between the capillary legs of the links doesn’t exceed 2.6 feet (0.8 meters) for even irrigation. Staggering rows of links can also improve moisture distribution in larger planting areas.
- **Depth for Links/Rings** - dig down to a depth that allows for approximately 150mm of growing media above the tanks and below the plant roots.
- **Water Level Indicator** - for systems with multiple connected tanks, mount the water level indicator on the tank nearest to the filling point.
- **Shallow Planters** - in shallow planters, the Mona Plant reservoir can sit directly on the bottom and the filler pipe can be trimmed.

By carefully considering these installation points, you can maximize the efficiency and benefits of your Mona Irrigation system, ensuring healthy and well-hydrated



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plants and trees. Always refer to the specific installation instructions provided by Green-tech for the particular Mona system you are using.

Avoiding excessive watering with Mona Irrigation is primarily achieved by understanding how the systems work and following proper installation and management practices. Here's a breakdown of how to prevent overwatering with each type of Mona system:

- **Choose the Right Tank Size** - selecting the correct tank size for the planter volume and the plant's water requirements is crucial. A tank that is too large can keep the soil consistently saturated for too long, especially for plants that prefer drier conditions. Refer to Green-tech's guidelines.
- **Proper Capillary Leg Installation** - ensure the top of the capillary leg is positioned correctly (no more than 150mm from the lowest roots). Incorrect placement can lead to inconsistent moisture levels.
- **Use Appropriate Growing Media** - the type of growing media used in the planter significantly affects water retention. Use a well-draining potting mix suitable for the plant species. Avoid heavy, water-retentive soils.
- **Monitor Plant Health** - observe your plants for signs of overwatering, such as yellowing or drooping leaves, soft or mushy stems and root rot.
- **Allow Drying Between Refills (to some extent)** - while the Mona Plant system aims for consistent moisture, allowing the top inch or two of the soil to slightly dry out before refilling can be beneficial for some plant species. This encourages root respiration.
- **Consider Environmental Conditions** - plants in shadier locations or during cooler months will transpire less water, so the reservoir will deplete more slowly. Adjust refill frequency accordingly.
- **Check Drainage Holes** - ensure the container has adequate drainage holes to allow any excess water to escape from the bottom, preventing waterlogging in the root zone.
- **Don't Compact Soil Around the Capillary Leg** - avoid compacting the soil excessively around the capillary leg, as this can impede water movement.
- **Water Level Indicator** - if your Mona Plant system has a water level indicator, use it as a guide but also consider the plant's appearance and soil moisture. The indicator reflects the water level in the reservoir, not necessarily the moisture level throughout the entire pot.

