



DRIP IRRIGATION VS. ROTORS/SPRINKLERS

DRIP IRRIGATION SAVES WATER AND ACHIEVES HEALTHIER PLANTS

A Netafim drip irrigation system has both short and long term benefits over other emission devices such as conventional irrigation rotors/sprinklers. From water savings to healthier plants, drip irrigation provides solutions for efficient and effective irrigation even in the most challenging residential and commercial landscapes.

Throwing water into the air increases evaporation. Wind creates a potential for overspray and uneven distribution uniformity. Even without considering an increase in evaporation and negative uniformity associated with wind, drip irrigation is proven to be more efficient in the distribution of water than rotors or spray heads.

Data published in the AB1881 using the California Model Water Ordinance, states that drip irrigation is 90% efficient while rotors are 75% efficient. Taking it a step further, we can look at the difference in water used based on the 15% efficiency difference alone and applying it to the estimated annual water use formulas.

This is highlighted in the following example:



A 50,000 square foot area with a similar ETo and Plant Factor has an efficiency difference of 15%. This results in 200 HCC (hundred cubic feet) a year or 149,600 gallons of water wasted when using rotors/sprinklers.

This example is only one category associated with water savings and a Netafim drip irrigation system. As you start to compile all the benefits, the water savings can easily reach up to 50% when compared to rotors/sprinklers.

Most areas are on the verge of mandatory water restrictions. With limited rainfall, counties will be forced to implement some type of water restrictions for landscapes. In the past, drip irrigation has been exempt from these water restrictions.

DRIP IRRIGATION BENEFITS

- Applies water at a very slow rate and directly to the plant root zone - gallon per hour (GPH) versus gallon per minute (GPM) - so the plant is better able to process and utilize the water producing a healthier plant with fuller blooms.
- Systems are pressure regulated and operate at lower pressures. With no pressure regulation and a much higher operating pressure, rotors/sprinklers cause evaporation, wind drift and run-off.
- Can be applied at any time of day or night without interfering with human activities.
- Watering subsurface (below the ground) reduces the susceptibility of fungal diseases for many types of plants.
- Irrigation water is not applied to impervious surfaces reducing collection and run-off.
- Easily conforms to unique and odd-shaped planters.
- Surfaces bordering the irrigated area, like glass and fences, are not stained.

Critics highlight the slight increase in costs associated with the installation of drip irrigation system compared to conventional irrigation rotors/sprinklers. This becomes a non-factor as contractors become more familiar with drip installations.

ADVANCED WATER CONSERVATION TECHNOLOGIES

Netafim USA's comprehensive drip irrigation product line includes technologically superior Techline® driplines, emitters, valves, pressure regulators, hydrometers, filters, water meters and the most advanced web-based smart controllers on the market. Recognizing the evolving needs of a diverse and dynamic landscape industry, Netafim addresses the challenges of today's modern landscapes through product innovation, education, training and research.

For more information, visit www.netafimusa.com/landscape or call (888) 638-2346.



WATER SAVINGS EXAMPLE

50,000 Sq. Ft. area uses 32" of water per year when sprinkler irrigated
= 997,353 Gallons per Year
Estimated water cost - \$2.00 per HCC
= \$2,666.00 Total Yearly Water Cost

Using **DRIP IRRIGATION** estimated water savings could be between
\$400.00 - \$1,333.00
Per Year