

CALIBRATING YOUR IRRIGATION SYSTEM

Irrigation Basics

- ❖ Avoid applying more water than can be contained in the root zone. Never water when the soil is wet!
- ❖ Irrigate according to the requirements of the plants.
- ❖ Water lawns and shrub beds/perennial beds separately. (These should be on different irrigation zones.)
- ❖ Water trees and shrubs, which have deeper root systems, longer and less frequently than shallow rooted plants.
- ❖ Do not over water - most established vegetation does not require more than 1 to 1 ½ inches per week depending on the season and rainfall. Plants will develop deeper roots and ultimately require less watering when not over-watered.
- ❖ Use a rain gauge placed in an unobstructed bed area where it can capture rainfall to determine how much precipitation you receive during a rain event. Turn your sprinklers off if you get an inch in a week.

The “Catch Can” Test - Measuring your precipitation rate (PR)

- ❖ Step 1 – Place 6 identical, straight sided, flat bottom cans (or glasses) randomly between sprinklers in one zone. *Do not use short cans like tuna cans or rain gauges, as water may splash out.*
- ❖ Step 2 – Run sprinklers exactly 10 minutes.
- ❖ Step 3 – Pour all the water into one of the six cans.
- ❖ Step 4 – Measure depth of water in can. This is the precipitation rate (PR) in inches per hour.
- ❖ If the amount of water in some containers is significantly more or less than others, it indicates that the system is poorly designed or heads are malfunctioning.

Determining your run times - Converting inches to minutes

Formula:

$$\text{Run time} = \frac{\text{Water to apply (inches)}}{\text{PR (inches/hour)}} \times 60 \text{ minutes/hour}$$

Example:

$$\text{Run time} = \frac{0.25 \text{ inches}}{1.5 \text{ inches/hour}} \times 60 \text{ minutes/hour} = 10 \text{ minutes}$$