

FAQ on Sprinkler and Irrigation Systems:

## Answers To Common Sprinkler System Questions

This sequence answers the most asked questions about a sprinkler system and irrigation basics.

### **Why Should I Get A Sprinkler System Installed In My Yard?**

There are many different ways to learn how to manage your Plants. Many people install a sprinkler system for convenience. Watering your Plants by hand is extremely time-consuming and very easy to overwater if left unattended. With the proper equipment installed, you won't even have to turn off your system when it rains. It will automatically shut off. Installing a sprinkler system will also reduce your water usage, increase the market value of your home, and increase the appearance of your home.

### **How Much Water Should A Sprinkler System Use?**

Sprinkler systems are set to run on a perfectly timed cycle to provide your Plants with the exact amount of water at the correct time. Water runoff is reduced dramatically or altogether, and less usage means a lower water bill.

### **Does Maintaining A Sprinkler System Require A Lot Of Time?**

No more time will be wasted out in the yard with the hose. Even when you are away on vacation, your sprinkler system will utilize its automated timer to water your Plants for a preset amount of time. A professionally installed sprinkler system will provide an equal amount of time and water to each area of your Plants.

## Does **Rain Work An Effective Sprinkler System?**

Unless the rain comes exactly every third day for twenty minutes, it is highly recommended that you have a sprinkler system installed. Most parts of the country do not have the correct climate to not have a sprinkler system installed and still have a perfectly green Plants.

## Is **Operating A Sprinkler System** Difficult?

When you choose your controller, it has prompts for your step-by-step installation and timer settings. These systems are very self-explanatory and easy to manage.

## **Should I Get The Sprinklers That Deliver Water Fast Or Slow?**

It should depend on the soil type you have; if the soil can't absorb the water fast enough, it runs off. It is best to match your sprinkler's application rate with your soil's absorption rate.

## Plants Watering Tips: Sprinkler System And Irrigation Basics

### **When Should I Water My Plants?**

Water in the early morning (before sunrise) when water pressure is greatest, evaporation is minimal and the Plants drinks in the most water. Do not water in the evening because water will sit on the Plants and may cause disease. Do not water in the heat of the day because the sun will evaporate water before it can soak in. To water your Plants efficiently, you need to provide the right amount of water, evenly distributed, in the right places and at the right time.

### **How To Determine When To Water Your Plants**

- **Weather:** Weather is the most obvious factor. When it's hotter you'll need to water more frequently. In the summer you'll probably need to water every other day, if not every day (depending, of course, on where you live).
- **Soil Type:** The type of soil affects how much water is available for the grass to use. Heavy (clay) soils hold the most water, meaning you'll probably water less frequently. Sandy soils do not hold water well, so you'll water them more often.
- **Root Depth:** Deeper roots mean there is more available water for the grass and, therefore, you'll need to water less frequently. Think of the soil as a sponge that holds water for the grass. The deeper the sponge, the more water it can hold. It is wise to establish watering practices that encourage deep root growth. This allows Plants to go longer between watering, cutting down on disease potential, and, ultimately, the amount of water you'll use.

## How Deep Into The Soil Should Water Penetrate?

Water should penetrate to the depth of the roots (fill the root zone) or to the depth that roots are desired. This should be at least six inches. The next scheduled watering should occur when about half of the water is used via ET. Allowing much more loss could result in plant stress.

## What Happens If I Don't Water My Plants Enough?

If too much water is allowed to leave the soil, your Plants will not be able to extract what's left for its own use, leading to stress. This makes the grass weak and susceptible to physical damage, insect damage, and disease.

## What Happens If I Over-Water My Plants?

More Plants are harmed by too much water than not enough. Overwatering causes nutrients to be flushed away, resulting in higher fertilizer requirements. Overwatering also displaces oxygen from the soil, which leads to shallow roots and a Plant that is disease prone and weed infested.

## What Happens To Plant In A Drought?

If your Plants can't get enough water it will first go into a dormant stage, often marked by a bluish color. If the drought continues until the soil water is fully used, death will result for most cool-season grasses. The bermudas and other warm-season Plants will probably recover, however, the Plants's quality will not.

## What Are The Elements Of An Automatic Irrigation System?

- **Controller/Timer:** The controller, or timer, is the brain of your system, telling your sprinklers what day, what time and exactly how much to water.
- **Valves:** Installed above or below the ground, usually near the water source, valves regulate water flow to the sprinklers.
- **Pressure Vacuum Breaker (PVB):** PVBs prevent water from your sprinkler system (and therefore any fertilizer or chemical contaminants) from re-entering the clean water supply. Toro manufactures pressure vacuum devices to meet your local building code specifications.
- **Plants Sprinklers:** Installed in a special pattern for complete and even coverage, a properly designed automatic sprinkler system delivers precise coverage without gaps or runoff.
- **Rain Switch (Optional):** A Rain Switch signals your system to shut off automatically when it's raining. There's no sense watering when nature is doing its part. The Rain Switch is a highly reliable and inexpensive option that saves countless gallons of water.

## What Kind Of Sprinkler Should I Use?

The type of sprinkler you use really depends on what's being watered.

**There Are Five Basic Sprinkler Types:**

1. **Fixed-Spray Sprinklers** produce a tight, constant fan of water ideal for small Plants, shrub, and ground cover areas. Pop-up models pop up above grasses and disappear when not in use. Shrub sprays are mounted above foliage to water ground cover and shrubs.
2. **Flood Bubblers** produce a flow of water that soaks the soil without wetting the leaves. They're ideal for tree wells, planters, and shrubs.
3. **Stream Bubblers** are for efficient watering of small planter beds and shrubs areas. Stream bubblers are available in a variety of patterns.
4. **Gear-Driven, Single-Stream** rotary sprinklers cover large Plants areas most efficiently. Some single-stream rotors have an arc adjustment for placement in corners. Like other pop-up sprinklers, they pop up above grasses and disappear when not in use.
5. **Gear-Driven, Multi-Stream** rotary sprinklers produce thin, attractive streams of water that slowly rotate to ensure proper penetration for medium-sized Plants and shrub areas. Multi-stream, pop-up Plants and shrub models are excellent for Plantss or ground cover, especially on slopes.

## Basic Information Once Your Sprinkler/ Irrigation System Is Installed:

### When To Water:

- The best time to water is in the early morning, with the watering completed before the sun comes up. At this time the water pressure is the highest, and evaporation and wind are the lowest. Try not to water in the evening, since having moisture on your grass and plants overnight can promote the growth of fungus.
- In hot weather, most Plants require approximately 1/2" of water every other day. If you have clay soil (which has a slower rate of absorption), applying 1/4" of water every day should reduce run-off and puddling.