

Watering 1 Inch per Week

When temperatures reach 85 degrees a good rule-of-thumb for watering turf is to water no more than 1 inch of water per week. Generally, this amount of water is plenty to penetrate the soil 6 inches below the surface, establishing stronger roots to help the lawn weather the dry season.

If the landscape has clay soil, it's best to keep it moist year round. Clay, when dry absorbs water poorly, producing muddy run-off and preventing water from reaching plant roots. If the soil dries out completely more water will be needed to keep plants healthy.

Determining your soil type - Whether your soil is clay, sand, loam or a combination, its important to know your soil type before determining how much water is needed. The rate at which soil absorbs water is called the "infiltration rate". The chart below shows what to expect for each type of soil.

Soil Type	Bare soil infiltration rate	Grass-covered infiltration rate
Clay	0.1" to 0.5" per hour	0.05" to 0.25" per hour
Loam	0.4" to 0.8" per hour	0.25" to 0.5" per hour
Sand	0.7" to 1.0" per hour	0.4" to 0.7" per hour

Use the infiltration rate, along with the amount of water your irrigation system puts down in a given amount of time (the precipitation rate), to help determine how much time to spend watering each week.

As a general rule, set your irrigation system for short periods of time, over several hours. This will allow water to penetrate more deeply into the soil instead of running off, and will promote deeper roots on plants, grasses, shrubs, and trees.

How to measure 1 inch of water

- Set out 5 empty tuna or pet food cans (all the same size) at various spots, halfway between the sprinklers and the parts of the lawn that get the least amount of water from the sprinkler;
- Turn on the sprinklers for exactly 15 minutes;
- Measure the depth of the water in each can, then add up the numbers and divide by 5. This gives the average water depth of all the cans;
- Find the average water depth from the tuna cans in the chart below. The box on the right tells how much watering time it will take to get 1 inch of water to the turf during the summer months.

Average water depth (inches) in tuna can after 15 minutes	Total watering time in minutes per week for one inch of water
1/8	120

3/16	80
1/4	60
5/16	46
3/8	40
1/2	30
5/8	24
3/4	20
1	15
1 ¼	12

Watering at the best time – Heat and wind cause water to evaporate more quickly. By watering early in the morning, when the air is cool and calm, evaporation is kept to a minimum. Watering in the evening is the next best time.

Getting rid of puddles and run-off – If water puddles or runs off to another part of the landscape, the soil may have a high clay content. To get the most out of watering, divide the total watering time by half, and add a break in between. For example, if the chart recommends watering for 40 minutes per week, water for 20 minutes, break for 2 hours, then water for the remaining 20 minutes. Consider installing a controller for an automatic irrigation system that can be programmed for multiple start times or install a hose bib timer at the outdoor faucet to make this an easier job.

If there are still problems getting water to penetrate the soil, the lawn may need to be aerated or thatched. Yard and garden centers in many areas carry the right tools for this job, as do many equipment rental companies. Learning how to apply the right amount of water will not only save water but will save you money!