



Irrigation How-To

Irrigation System Maintenance

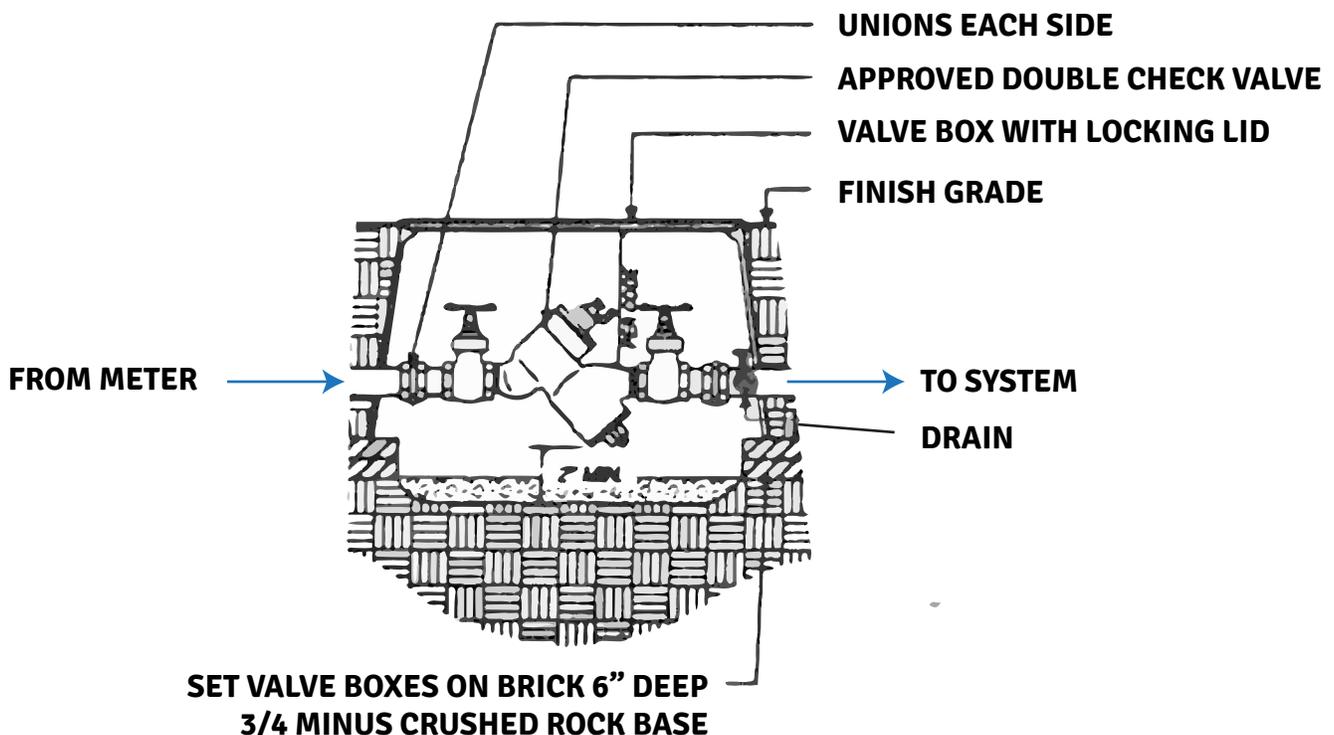
Your irrigation system was installed using the latest and best commercial quality parts. We have installed hundreds of irrigation systems and have very little problems with them. Your new system should give you years of trouble free operation provided you do a couple things every year. If you have any problems or questions, do not hesitate to call.

1. How do I turn on my irrigation system in the Spring?
2. Troubleshooting Instructions
3. How do I Winterize my Irrigation System?
4. How much water should I apply?
5. How long should I water at one time?
6. How do I set my irrigation clock?

If you follow these suggestions, your landscape should grow and flourish. If you don't, you will have wasted your landscape investment.

HOW DO I TURN ON MY IRRIGATION SYSTEM IN THE SPRING?

Time of year should be after last freeze but before warm dry weather. Late April -- early May. But could be as late as June. Watch the weather.



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1. Close manual drain valve. This valve is located in the large green backflow box.
2. Slowly open gate valve. This valve is located before the large green backflow box in a pipe with its own round cover.
3. Test backflow. Backflow should be tested yearly by a certified backflow tester. This test is usually done in the spring at turn on.
4. Check mainline, valves, backflow for breaks or leaks.
5. Open the front cover of the irrigation clock, find the battery and replace. Follow the instructions in the irrigation clock manual. Fire all the zones one at a time. Check each zone for coverage, leaky heads, and breaks.
6. Cut and clean growth away from sprinklers. We suggest using a sharp knife to cut turf away from heads. You will end up with a donut shaped piece of turf. This is probably the most important function to perform to insure a good operating system.
7. Check and make sure head is level and flush with grade, to insure that nothing strikes them. (see enclosed diagram)
8. Make sure heads are an inch away from concrete, to insure that edgers do not hit them. (see enclosed diagram)

We suggest checking the system two additional times during the summer.

TROUBLESHOOTING INSTRUCTIONS

If clock fails to operate, please refer to clock manual for instructions.

If valve fails to turn on. Check connections at valve and at clock. Replace if necessary.

If backflow fails. Replace immediately.

If you notice an excessive amount of water, check clock watering schedule, check for broken heads, stuck open valves, broken main or lateral lines, clogged rain drains on house. Repair or replace as necessary.

If a valve sticks opens and will not close, open valve box and manually close valve by turning the throttle control valve located on top of valve. Wait a minute and reopen valve. Occasionally dirt or debris can cause a valve to stay open. If valve continues not to operate properly, remove and replace.

HOW DO I WINTERIZE MY IRRIGATION SYSTEM?

Irrigation system clock should be turned down as fall rains increase. Before first frost (usually middle of October) turn clock to off. Open backflow vault. Shut off valve (see Point of Connection), open drain valve, let system drain. Close all boxes. System is ready for winter. It is not necessary in Oregon to "blow out" irrigation systems with compressed air.

If you have any problems, please feel free to call. Thanks!

HOW MUCH WATER SHOULD I APPLY?

All Natural Landscape recommends that you water your turf with two inches of water per week. This water can be delivered in the form of rainfall and/or automatic sprinklers. The kind of sprinkler head and "nozzle" you are using will determine how long you will need to water to apply that much water.

Can Test

An easy way to determine the time required is to lay a number of cans around the lawn and water checking the can periodically. When the cans have 2" of water in them, note the time. That is how long you should water your lawn per week. Please note that 2" is a guide; if your lawn is southwest facing and growing in sand, you may have to water 4" per week to keep it green; likewise if your lawn is north facing and growing in the shade of trees, you may not have to water! You will need to perform this little test with each zone of your sprinkler system. Other things that affect watering times include: slopes, root zone depth, exposure, thatch, and compaction of soil.

You may also find that some cans have 2" of water and some cans have almost nothing - this is an indication that your irrigation system is not watering efficiently. This problem can and should be fixed by adjusting the coverage, adding sprinkler heads, changing nozzles, etc...

HOW LONG SHOULD I WATER AT ONE TIME?

In an ideal situation, you would water once a week - long and deep - but that does not always work for a number of reasons. Your watering schedule will be determined by a number of factors:

The time of year and the amount of rainfall - We as turf managers want to water our lawns approximately 2" per week. In the spring and fall we will need to supplement normal rainfall. Most people over water, remember after a good 24 hour rainfall, the soil may be saturated and may hold water for up to 7 days. Let your lawn be your guide, it will "tell" you when it needs watering. Watch it:

Is it dark green, thick and lush? - don't water.

Is it green, but dry and the ground is hard? - apply some water.

There is nothing wrong with "stressing" your lawn a little, it is actually a good thing to do, for a stressed lawn sends its roots down in search of water and that is a good thing!

The kind of soil present in your landscape - Think of your soil as a big sponge, for that is one thing it is. As we apply water, your soil "soaks" it up and holds a certain amount of water for immediate and later use by your turf. Some soils hold water better than others. The two types present in the northwest are:

Sandy Loam - Holds water well and because of its loose structure allows water and turf root to penetrate deep. The ideal soil would be 12 or more inches of this type of soil. With this we would "fill" the sponge up once a week with 2" of water and the turf would draw it up as needed.

Clay - Does not hold water well. Because of its tight structure, clay is easily compacted - not allowing water and roots to penetrate deep. This soil is very common in the hills of Portland. Clay soil becomes saturated fast and then "runs" off. With clay soil, we need to water for less time and more frequently.

The slope or drainage - Water will take the path of least resistance and that is down. Slopes are not easily irrigated because water usually "runs" off after a short while. Slopes require less time and more frequent watering.

The exposure and micro-climate present - It is obvious to most that a west facing landscape will require more watering than say a north facing shaded landscape.

The day of the week you mow and work in the yard - It is best to not allow your turf sprinklers to water for two days prior to your normal mowing day. It is generally not a good idea to mow your turf when the soil is saturated, as this can cause, rutting of the lawn, mud or damaged turf, and compaction of the soil.

SOIL TEST

To determine how long we can water at a time, we shall perform the following test.

1. Don't water your lawn for 5-7 days, let the lawn and soil dry out.
 2. Turn the sprinklers on and let them run - note what the time is.
 3. Watch for the first sign of the water running off, you are looking for the point at which the soil is "saturated" and almost all the water we are applying is running off (don't be mistaken by "overspray" running down the street or sidewalk) - note the time this took. This is the water holding capacity of your soil - it may have taken 10 minutes to run off or it may have taken 2 hours. This is the maximum time you can water your lawn without "wasting" water.
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HOW DO I SET MY IRRIGATION CLOCK?

We know that we should apply two inches of water and we know how long that will take - based on the results of the Can Test and the instructions in How much should I water?. For the purposes of our example, we will say our "test" showed that we should water one hour to apply 2 inches of water to our turf.

We know that we can only water our turf for 20 minutes at a time because we performed the Soil Test and followed the instructions in How long should I water at a time?.

So now it is simple to set our clock. We know that we must water for one hour - we know that we can only water for 20 minutes at a time - so we set our clock to water 3 times per week for 20 minutes - this give our turf the amount of water needed, and it applies the most water our soil can "hold" without "running off", and at the same time "trains" the roots to go deep.

Second Example

Suppose your Can Test showed that your lawn zone took 3 hours to apply 2 inches of water (say a large rotor zone). Your Soil Test found that you had "run off" after 30 minutes. In this case, you will need to set your clock to water 6 times per week for 30 minutes to apply 2 inches of water.

Other water requirements

Shrubs: same process, 1.5 inches per week

Roses: same process, 2" water per week

Trees: same process, 2" water per week

Call if you have questions- 5037407733

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