# **IRRIGATION INSTALLATION GUIDELINES**

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Irrigation is the most difficult and most important part of a water efficient landscape.

### TIPS TO START YOUR PROJECT:

- 1. An irrigation plan must be designed and installed before plants area planted.
- 2. When to use drip irrigation:
  - a. Larger shrubs and trees
  - b. When homeowner or gardener will maintain it well
- 3. When not to use drip irrigation:
  - a. In high foot traffic areas
  - b. In areas with gophers, coyotes and other thirsty wildlife
  - c. If no one knows how to maintain it
- 4. When to use overhead sprinklers:
  - a. When area is grass or groundcover to pop up heads can reach high enough to provide good distribution
  - b. Use MP Rotating heads for slower, more even coverage. Great for clay soil and slopes.
- 5. How to water a newly planted garden:
  - a. Initially water new plants often and to the root zone. Make sure the soil does not get too dry for too long or plants may suffer.
  - b. After 6 months, reduce frequency of watering and increase the duration to get the water deeper into the soil to the now more mature root zone.
  - c. Adjust irrigation with the plant size.
  - d. Adjust irrigation with the seasons.

#### **IRRIGATION DESIGN INFORMATION:**

Consider hiring an irrigation specialist for this part of your project. If you want to do it yourself, there are several helpful websites:

https://www.rainbird.com/homeowners/free-sprinkler-design-services

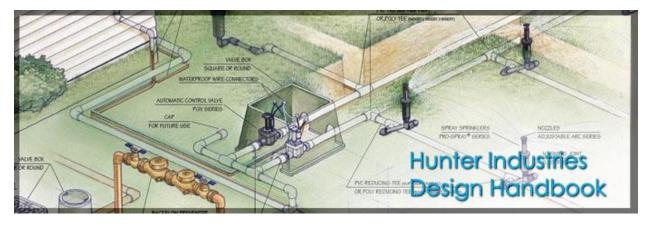
https://design.orbitonline.com/

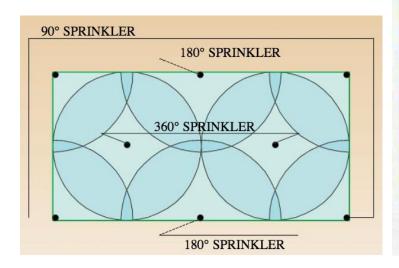
https://www.hunterindustries.com/residential-system-design-guide

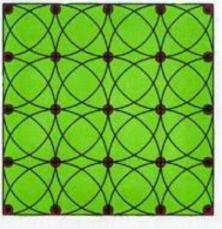
#### TIPS TO KEEP IN MIND WHILE DESIGNING & INSTALLING:

- 1. Design for safe and easy maintenance. Don't place heads in hard to get to places. Don't have heads too high where they will be kicked or tripped over.
- 2. Design for the fully mature plant. Don't put 6" pop-up heads in front of a plant that will be 4' high. The plants beyond that area will not get water and die.
- 3. Make sure you have good and even coverage or you and your dead plants will regret it later.
- 4. Don't mixed your drip and overhead sprinklers on the same zone.
- 5. Don't mix your spray heads on the same zones.

- a. Rotors spray far and hard versus MP rotating sprinkler heads that slowly spray large droplets.
- b. Rotors use 30% to 50% more water every minute than MP rotating sprinkler heads
- 6. Make sure you have filters on your drip valves.
- 7. Pay extra for stronger pipes (ie: schedule 40) and make sure you glue your pipes together securely.
- 8. Consider flow sensors and a master valve.
- 9. Study solid and long term reliable irrigation designs before begging your work







FULL COVERAGE: HEAD-TO-HEAD SPACING. SPRAY FROM EACH HEAD TOUCHES THE NEXT SPRINKLER OVER ENTIRE AREA.



#### WATERING SCHEDULE

- 1. Initially you will water your baby plants more often and not very deep (as deep as the root zone)
- 2. Within 3 to 6 months, irrigation days can be reduced and the number of minutes increased to get the water to the deeper mature root zone
- 3. Within a year or two, time for irrigation days can be reduced and the number of minutes increased to get the water to the deeper mature root zone
- 4. Seasonal adjustment and/or turning off the controller is important to keep in mind.
- 5. Consider a smart controller if you are not the type to adjust your irrigation on a regular basis. Please know
- 6. Hydrozone These types of congtrollers need
- 7. There are several website to help give you a starting point for your irrigation schedule:

https://www.bewaterwise.com/calculator.html

http://whentowater.loripalmquist.com/prop\_info.php?Submit.x=73&Submit.y=30

8. Keep track of your watering schedule with an irrigation schedule sheet (example below):

						Date:	
Controller Area:			Start Time:		Start Time:		
Valve #	Area Name	Minutes	Station	Days	Minutes	Station	Days
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							

9. Check your sprinklers monthly for breaks, broken heads, etc. See CalWEP's irrigation maintenance section for more information