

Drip Irrigation Planning

So you've decided to have a go at installing a Drip Irrigation System yourself but you don't know where to start. Take a look at this for all the help you'll need to get your garden green again.

Product Guides by [SunshowerOnline](#)



Drip Irrigation: How to Plan a New Drip System

So the heat's really affecting your garden and you're getting sick of getting up early to hand water your plants. You've decided to take up the challenge of installing a drip system yourself and need to know what's involved. Don't worry it's not too hard, but there's some things you need to keep in mind to make sure your garden gets watered properly.

(For the purpose of this Product Guide we will start from the outlet of the Solenoid Valves, for help with Solenoid Valve Manifold installations click the appropriate Product Guide link.)

Draw Up A Plan of Your Garden

The first step is to create a scale drawing of your garden, to help you calculate accurate line lengths it is vitally important that the plan is to scale.

Choose Your Type of Drip Tube



Although they all look pretty similar, there are some distinct differences between types of drip tube. We suggest [Netafim TechlineAS](#) for residential drip systems.

[TechlineAS](#) has drippers every 30cms but drips at 3 lph so you can get more water on your garden in your allocated 2 hours. Techline is great for undulating gardens because it is pressure compensating and can be run for a max 72m.

Another type, [Toro Drip-Eze](#), has drippers every 30cms and each drips at 2 litres per hour. It isn't pressure compensating so it's recommended for flat garden beds, and it can be run for a max 60m. However [Toro Drip-Eze](#) can be run with [Netafim Landline](#), an 6mm drip tube with the same flow rate. **Only combine different drip tubes with the same flow rate**

Determine Your Zones

Now you have chosen your tube, start planning the sections or 'zones' of garden you want to water separately. The division of sections is usually determined by the amount of sun each section of garden receives daily and the length of drip tube you are using. Dividing zones is important because sections of garden can get over or under watered because of the variance of sun exposure or drip lines won't work properly because the lines have been run too far.

Try to keep the number of zones to a minimum, 4 zones means ½ an hour of water per zone each cycle. Now you can start planning how much equipment you'll need.

Pressure Reduction & Filtration



Due to the method in which drip tube distributes water, it is vitally important that all drip lines are equipped with a pressure reducer and filter. Without, the drippers can become blocked and fittings can leak or even blow off. Ideally, use a [20mm Netafim Inline Pressure Reducer](#) and [19mm Inline Poly Filter](#) after the [Solenoid Valve](#) or [Tap Computer](#).

Planning and Laying Drip Tube



For your garden to be watered effectively it is important that your tube is planned and laid correctly. In a garden bed with regular soil that's not too sandy or full of clay, we suggest running a line of tube around the perimeter and then connecting lines 40cms apart through the middle. For sandy soil lay the lines closer together (30cms) and for heavier soils lay further apart (50cms). Also keep in mind that your drip tube will try and lift from the ground when you are laying it out so you will need [Galvanised Steel Pins](#) to secure it to the ground.

Calculating Your Fittings



The accuracy of your plan will determine how well you can do this step. The important thing with calculating your fittings will be to keep in mind the size of pipe you are using. We suggest running either [19mm or 13mm Poly Pipe](#) from your [Solenoid Valve](#) to your [13mm Drip Tube](#).



So when connecting 19mm Poly to Drip Tube you will need to decide whether a [10mm x 13mm Poly Fitting](#) punched into the poly with a [10mm Punch Tool](#) would be better than cutting a [19mm x 13mm Fitting](#). If connecting 13mm Poly Tube to Drip Tube you will just need [13mm Poly Fittings](#).



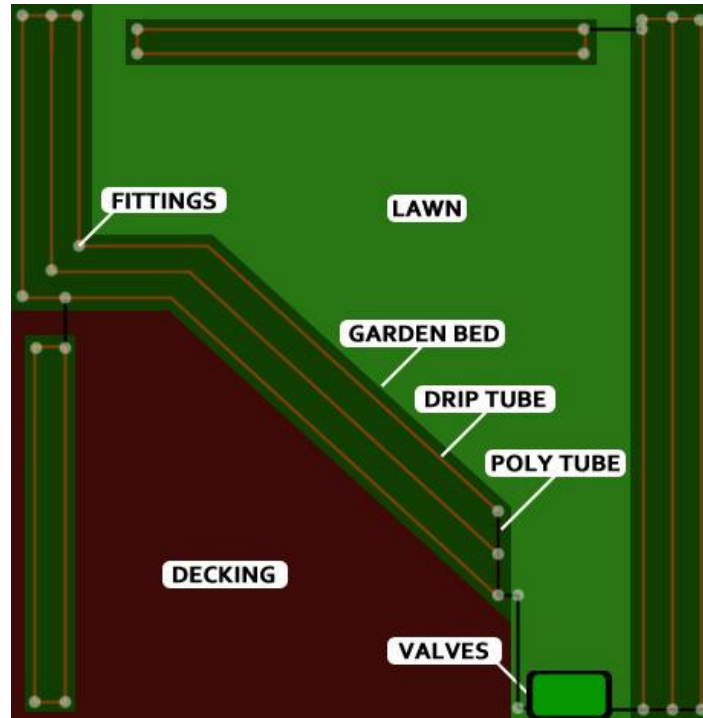
When calculating the elbows, tees and joiners you'll need to refer to you plan, wherever you see a 90° bend add an elbow, where you see a junction, add a tee or a cross.

Flush, Program & Operate!



Before you turn on your system you need to flush your lines, this can be done with a [Netafim Flush Valve](#) or [13mm Shut Off Tap](#). Then program the [Controller](#), because of the method of water distribution, drip tube needs to be run for longer, depending on the time of year this could be 30 mins to 2 hours. Now you can watch your garden turn green again!

Sample Drip Irrigation Plan



SunshowerOnline sells only the highest quality Drip Irrigation components we use all of the trusted brands to make sure your system works first time everytime!