

Please take your time to read through this carefully for us to help you determine your irrigation system requirements.

## Automatic Irrigation for a Beautiful Garden

**Plants do not receive all the water they need from nature. An automatic watering system allows you to:**

- Regularly provide water that is necessary for your plants.
- Maintain the health of your landscape.
- Keep your spare time for leisure and relaxation.
- Keep your garden watered even when on holiday.
- Utilise rain water with water butts & rain water harvesters.
- Save water compared to using a hosepipe (upto 80% saving).
- Add value to your home when it comes to selling up.



### What is Automatic Irrigation?

Automatic irrigation is a method of delivering water throughout the garden effortlessly with a simple network of pipes and outlets hidden around the garden. There are different types of irrigation systems designed for watering certain areas of the garden. These include pop up sprinkler systems for watering lawn areas, micro jets, sprays and mini sprinkler systems for large areas of plants, and drip irrigation systems for precise watering of plants in borders and containers. More information on each of these types of garden irrigation system can be found later in the pack.

### Utilising Rain Water with Water Butts and Rain Water Harvesters

Automatic irrigation systems not only reduce the amount of water used to keep your plants healthy, but they can also use rain water. This means that we can help the environment by recycling water that would have otherwise gone down the drain, which in turn can help you reduce your water bills even more. If you do decide to use a water butt or a rain water harvester, you will also have to use an irrigation pump to connect your system to. The pump will have to be carefully selected to match the requirements of the irrigation system you choose to install. See our guide on choosing an irrigation pump in the help and advice centre.

### Wise Watering Solutions

Automatic irrigation systems are well known to be much more efficient for garden watering compared to using a traditional hose pipe. A saving of up to 80% can be achieved when using a drip irrigation system. This efficiency is recognised by water authorities and is why they made drip irrigation systems exempt from the 2012 hosepipe ban.





## Types of Garden Irrigation Systems

### Pop Up Sprinkler Systems

Pop up sprinkler systems are the ultimate in automatic irrigation and are fast becoming the popular choice amongst homeowners in the UK. The pipework and sprinklers are all buried underground meaning they are completely hidden from view. The pop up sprinklers rise from the ground whenever the system is activated, and then retract back down when the system is turned off. Pop up sprinkler systems are ideal for many different types of gardens, and are used primarily for watering grass areas, but can also be used for watering flower beds and borders too.



### Drip Irrigation Systems

Drip irrigation systems are the most efficient of the garden watering systems, designed to precisely release water to the roots of plants. It works by using a network of pipes to carry water around the garden, and then connecting drip emitters and positioning them close to the base of plants. Because the drip emitters release water slowly, you have greater control of the amount of water being delivered, eliminating water waste. These are ideal for borders and flower beds, vegetable patches, greenhouses, hanging baskets and plants in containers.



### Micro Jet and Spray Systems

These are widely used throughout gardens and are a very popular choice because they provide a good soaking spray over a large area making them cost effective compared to drip irrigation systems. When a system like this is turned on, you'll see a fantastic spray of water disperse through the air soaking your plants just like rain. Because the Micro Jets and Sprays are usually pre-assembled on a stake with micro tube, installation time is very quick, and because all the components are available separately, customising this type of system is very easy as well.





## Types of Garden Irrigation Systems cont.

### Soaker Hose Systems

Soaker hose is a porous pipe also known as leaky pipe, and when used, it releases water slowly along its entire length providing a deep soaking action. Its great to use in flower borders, vegetable patches, hedge rows or any other large areas. Available in a 13mm diameter for long lengths (50m max lengths is recommended) and a micro 4mm diameter which is ideal for containers. Installation of soaker hose is very quick due its simplicity. All thats required is to roll the soaker hose out in the area to be watered, stake it in place, and connect to a water source.



### Drip Line Irrigation Systems

Drip Line irrigation systems work in a similar way as soaker hose, releasing water along its length. Instead of being just a porous pipe (which is unregulated), the drip line is a plastic pipe with pre-determined drip emitters along its length. This makes it much more controlled in the way it releases water as each drip emitter will release a precise amount of water. This precision not only allows for exact watering, but it also allows for much longer runs to be made (in most cases upto 150m length). Installation is simple, all thats required is to roll it out in the area to be watered, stake it in place, and connect to a water source.



### Mini Sprinkler Systems

With a coverage of up to 5 metres radius, mini sprinkler systems are great for covering large areas of plantation quickly and easily. These are similar to the micro jets and sprays, but instead of giving a fine spray, they throw water in large droplets which minimises evaporation during distribution. Installation is quick and easy, with pre-assembled mini sprinklers on stakes available, as well individual components for fully customising mini sprinkler systems. Typically these are installed in vegetable patches, large flower beds, nurseries and greenhouses.





## Preparing the Required Information for Design



### Which Type(s) of Irrigation System

From the information provided earlier, which type of irrigation system will best suit your needs?

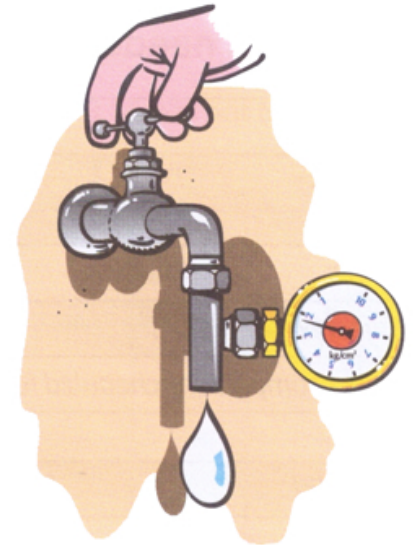
- Pop Up Sprinkler System
- Drip Irrigation System
- Micro Jet and Spray System
- Soaker Hose System
- Drip Line Irrigation System
- Mini Sprinkler System

## Calculate the pressure and the flow of your installation

### Pressure

*(force exerted by water on a given surface)*

Expressed in bar, it is measured using a pressure gauge connected to your water source. If you do not have a pressure gauge, you can rent one from pressure gauge rental for the cost of delivery and a refundable deposit. For a water system to function correctly, you must have a pressure reading of at least 1.5 bar. If your pressure exceeds 5 bar pressure then you must use a pressure reducer.



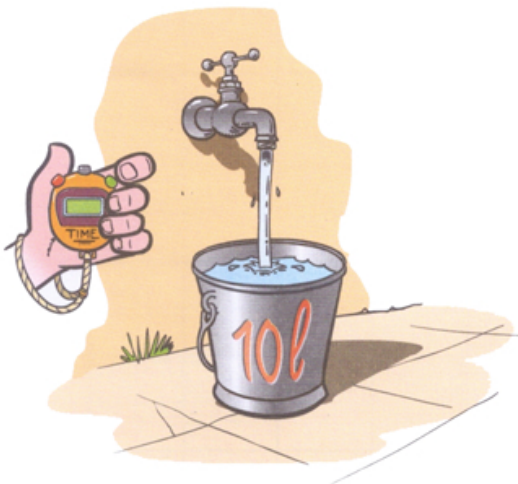
### Flow

*(quantity of water provided during a given time)*

Expressed in litres per minute, you can easily measure this with a bucket and the calculation below. Simply take a bucket (doesn't matter what size it is, but you need to know the volume to be able to complete the calculation) and then time how long it takes to fill it up. From this exercise you will then be able to follow the formula below to determine the flow rate coming from your water source.

$(\text{Volume of container} \div \text{Time to fill container}) \times 60 = \text{Litres per minute}$

*\*If you use a pump, refer to the technical note which indicates the pressure and the flow available.*



## Preparing the Required Information for Design cont.

### Draw a Map of Your Garden

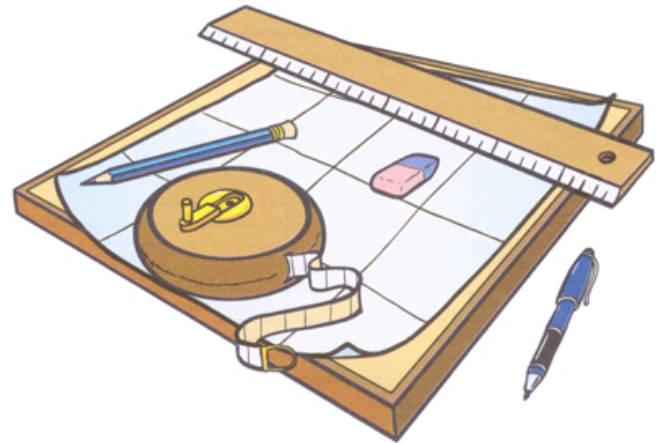
#### Draw a rough map of your garden

You will need: a sheet of paper, a tape measure, a pencil, a ruler, an eraser, a felt tip pen.

- Start with locating the house and the property line.
- Draw the paths, terraces, sheds, greenhouses etc.
- Indicate the location of borders, flower beds, trees and shrubs.
- Mark the location of the water source.
- The more information you include, the easier the planning is.

#### Measure your garden accurately

- Measure the property boundaries, paths, flower beds etc.
- The more measurements you take, the easier planning is.
- Count the number and locations of pots, containers, hanging baskets etc.
- Note any notable features and obstacles for pipework. Garden gates, ponds etc.



Part of this process is to understand how much pipework is required, the fittings needed to navigate that pipework and how many/what type of outlets are required. Being accurate with your measurements is crucial, especially if you are enlisting someone else to plan your watering system.

#### Transfer the map to graph paper

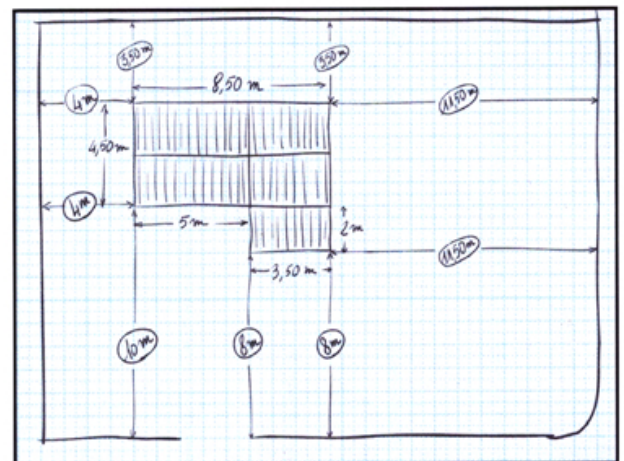
After completing the rough drawing, carefully transfer your measurements to the graph paper provided. Depending on the size of the area, use one of the following scales:

- 1cm square = 0.50 metres (1:50)
- 1cm square = 1 metre (1:100)
- 1cm square = 2 metres (1:200)

Indicate those areas which are to be watered and which are not to be watered.

For larger gardens, you will have to divide the system into several zones. This could be splitting the front garden and back garden, or splitting the right hand side and left hand side.

Indicate on the map how you want to split the zones.





## Preparing the Required Information for Design cont.

### Whats Next?

From here, you can either continue planning the system for yourself using the appropriate planning guide for the type of system you have chosen, or you can send through this pack to one of our technical team who will then be able to create a shopping list based on your needs. Upon purchase we will send you back the plan with an overlay of where the pipework, water timers and water outlets are to be positioned as well as a installation instructions and tips.

We also have a comprehensive library of instructional videos that you can view to help you even further, and a helpline that you can call if you get stuck at anytime during installation.

If you would like to take advantage of our free design service, scan in this pack and send it via email to [tech@easygardenirrigation.co.uk](mailto:tech@easygardenirrigation.co.uk).



### Further Planning

#### Pop Up Sprinkler System Planning Guide



#### Micro Jet and Spray System Planning Guide



#### Drip Irrigation System Planning Guide



#### Mini Sprinkler System Planning Guide



#### Soaker Hose System Planning Guide



#### Drip Line Irrigation System Planning Guide



