

# **Sprinkler System** Installation Guide



Congratulations on acquiring a **Streamfast Sprinkler System**, the simple, easy to install garden irrigation system.

A micro-sprinkler system is the most efficient method of watering flower beds, borders and shrubs. Accurate positioning of sprinklers ensures precise targeting of the water, and by keeping the delivery point close to the ground evaporation is minimised.

**The least efficient method is to use a garden hose.**

You have now bought a quality, value for money, adaptable and extendable system that is easy to install, water efficient and environmentally friendly.

Our starter pack can be installed comfortably in under two hours and no tools are required (although you may find a pair of pliers and a jug of hot water are helpful).

It contains everything you need to water a small garden including 25 metres of supply pipe and 12 micro-sprinklers. You can extend the system by purchasing further starter packs or individual components as needed.

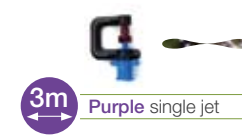
**By installing our sprinkler system you will:**

**Save water** – an increasingly scarce resource on our crowded island

**Save money** – if your water is delivered via a meter

**Save time** – no more standing with hose pipes or moving sprinklers about the garden, just turn it on and turn it off – or, better still, fit and programme a timer and leave your garden to be watered automatically.

# Setting up your Sprinkler System



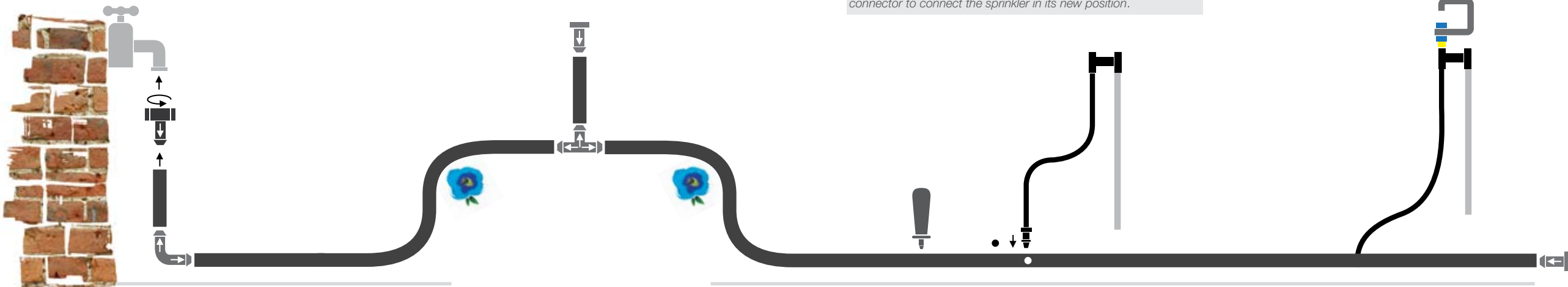
## Step 1 – Connect to your water supply

First unroll the supply pipe and attach it to your garden tap.

**Note:** Do NOT lay the roll flat and pull the end off the top – it will become twisted and will kink.

Most garden taps have a male thread on them. Simply screw the female thread of the tap connector onto the tap and push the end of the supply pipe onto the push-fit barbed end. The barbed end is designed to create a watertight connection and it can be difficult to slip the pipe onto it, particularly on a cold day. It is easier if you dip the end of the pipe into a jug of hot water for 20 seconds to soften the pipe.

You may already have a 'snap-on' connector on your tap, in which case simply screw the female thread of the tap connector onto the male thread of the 'snap-on' fitting supplied.



## Step 2 – Laying out the pipe

Lay the pipe around the garden through the area you wish to water. Spurs can be taken off the main run by using the T-pieces supplied and End-stops are provided to close off the ends. They are all 'push-fit' and, as in Step 1, a jug of hot water may be helpful.

The pipe, having been coiled for some time, will not necessarily stay where you want it to run. Keep it in place temporarily by weighting it down or restraining it with pegs. These can be removed after a few days and the pipe will then stay in place.

## Step 3 – Positioning sprinkler stakes

Place the aluminium stakes into the ground at the positions and heights that you want the sprinklers to operate, then, using the hole punch provided, cut holes in the supply pipe and push the barbed connectors on the ends of the distributor tubes into these holes.

**Making Changes:** The distributor tubes are long enough to allow the aluminium stakes to be moved locally to achieve exactly the right coverage.

If you wish to move a sprinkler to a completely different location you will need to disconnect it and re-connect it into a new hole in the main supply pipe. The old hole can be closed off using the 'mistake plugs' provided. Do NOT pull the barbed connector out of the supply pipe – it may damage the pipe and the 'mistake plug' may then not seal the hole. It is better to cut the distributor tube an inch or two from the supply pipe and push the 'mistake plug' into the tube. You will then need to fit a new barbed connector to connect the sprinkler in its new position.

## Step 4 – Selecting the required nozzle

Select the type of sprinkler you require at each location and push it onto the distributor nozzle. Make sure that the sprinkler head is pushed firmly onto the nozzle so that the water pressure does not dislodge it.

**Note:** Turn on the water and flush the system before inserting the End-stops to clear any debris from the pipe.

**Timer:** You can automate your system by adding a timer. Many people choose to set the system to operate at night when evaporation is lower and the water pressure is more reliable. You are also helping the water company by spreading demand more evenly over the 24 hour day.

# When to **Water** your Garden

**Newly planted seedlings may need watering every day, however, established beds, borders and shrubs should not be watered too often. It is much better to water for an hour once a week than for 10 minutes every day.**

Watering for a short period every day means that the water does not penetrate beyond the surface layers of the soil which then dry out quickly so a significant proportion of the water evaporates back into the atmosphere. The plants find their water close to the surface and develop their root structures accordingly. They then become dependent on this frequent watering and will wither and die quickly if this supply is interrupted for any reason.

Watering once a week for longer is closer to the normal natural rainfall pattern. The water penetrates deeper into the soil and the plants develop deeper, stronger root structures to gather it. This produces stronger plants which are used to surviving without daily watering. An hour once a week is also a more efficient use of water than 10 minutes a day because the total evaporation is lower and more stays in the soil for the benefit of your plants which is where you want it.

## Water Pressure & Flow Rates

For most people their mains water is delivered at between 1.5 BAR and 2 BAR (23psi-31psi). OFWAT sets a minimum of 1 BAR. There is no upper limit and a few people may experience 3 BAR or more.

The Streamfast sprinkler system works best at between 1.5 BAR and 2 BAR (if your mains pressure is greater than 3 BAR you may need to buy a Pressure Reducer).

Increasing the length of the supply pipe, for example adding another 25 metre length between the tap and the sprinklers to feed sprinklers further down the garden, will normally make little difference to pressure and flow rates.

However, the system is more sensitive to changes in height. For example, if a sprinkler is 2 metres higher than the supply point, the pressure will reduce by about 0.2 BAR and the flow rate will fall by 10% to 20%.

Increasing the number of sprinklers in the supply line also affects their performance: at 1.5 BAR pressure the loss of performance becomes noticeable beyond 15 or 18 sprinklers, whereas at 2 BAR at least 20 sprinklers can be accommodated before any noticeable fall-off in performance occurs.

The flow rates (in litres per hr) for Streamfast micro-sprinklers are approximately as follows:

Pressure (BAR)	1.25	1.5	1.75	2.0
Black & Red Spinner	89	97	105	112
All others	68	74	80	85



Red 360° mister

# The Streamfast Garden Sprinkler System

is designed for maximum ease of installation, quality and value for money. It is an adaptable and extendable system that is efficient and environmentally friendly. To see our other garden watering solutions and accessories visit [streamfast.co.uk](http://streamfast.co.uk).

## Streamfast Watering Solutions

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