

## Using Wooden Battens

We recommend slater's laths 25mm x 38mm. They have been treated and will not rot. Or any other treated battens. These can be sourced from any builders merchant or DIY store. They should be secured to any suitable wall perfectly horizontal, using 75mm wood screws, by a competent person (see picture below)

The batten at the top is for the irrigation pipe.

The next one down 13cm below is for the first row of Planters

There after battens should be **spaced at between 20-30cm from top edge down to top edge**. Spacing is dependant on plants used and how high they will grow. This is a **personal** choice and decision.



## Installing The Planters

Firstly assemble the Vertical Planter. Insert the planting tray, hook it to the back of the Planter Using the 2 hooks on each funnel and then attach the two support straps from front to back of the Vertical Planter using the slots as per photograph below.

The Vertical Planter should be attached to the wooden battens using a 25mm wood screw and 25mm penny washer as per photograph

Start with the bottom row. Horizontal spacing between Planters should be about 10cm minimum but is dependant on the plants used and their spread.

Once the bottom row is secured. Start on the next row aligning the water overflow pipes into the planting tray funnels below.



A length of 13mm irrigation pipe which is easily cut with pipe cutters is fitted onto the overflow spouts on the underneath of the Vertical Planter. The length is dependant on the planter spacing's, 15-20cm lengths are normal but the pipe should be long enough to go into the funnel by 5 cm. This will flow the water directly into the funnels and guarantee alignment so the water is not spilled out.

## Irrigation

A 13mm LDPE supply pipe will come from the water source, garden tap is the most common. If a timer is to be used that should be attached to the tap and then the pressure regulator. From the pressure regulator the 13mm supply pipe should then be connected, to then create the irrigation installation up to and then run along the tops of the first row of the Vertical Planters.

1. Cut the pipe with pipe cutters, lengths of 135mm and join a 13mm- 4mm T piece connectors at each end. Make sure the pipe is pushed all the way up past the last barb on the connector to the physical stop.

**TIP:- This can be done much more easily if the pipe end is dipped in a cup of hot water to soften, before pushing onto the barb.**

2. Cut two pieces of 4mm pipe 150mm long and attach to the bottom of the two T's. These will flow water into the funnels. You will need one set of these for each Planter along the top row.



3. If the horizontal spacing of the Planters is 10cm then cut 38.5cm of pipe to join each irrigation set to each other. Then fit and tie the pipe along the top as per picture below.

**Accuracy is essential when cutting and joining these as the 4mm down pipes need to align with the funnels.**



## IMPORTANT NOTE

If there are more than 13 columns of Vertical Planters in the installation and depending on the pressure and volume of water. The furthest column might not get any water flowing from the pipe. This is because it is all going to the Planters before it. To remedy this and for the bigger installations pressure compensating drippers are attached to the 13mm pipe instead of the 13mm T's and then the 4mm tube is fed from these into the funnels. For larger installations seek professional irrigation advice. (See Picture left).



## Testing

Once the irrigation system is installed it should be tested before installing the drainage pipework. Turn the main tap on and see how the water drips into each of the top funnels. Make sure that each 4mm drip tube is feeding water into the planters and the overflow from each planter down to the next is working until there is water emerging from the bottom planters spouts.

## Planting

There are two ways to plant up.

1. Just place plants in their pots maximum size 13cm in the Vertical Planter. Either with the planting tray in situ or without it. Both ways will work.
2. With the planting tray in the Vertical planter fill with compost and then just plant up with the plants.

## Testing & Drainage

When the installation is all finished and planted up test the irrigation system again. Time how long it takes the the water to start dribbling from the overflow spouts at the bottom Planter. Repeat this a few times over a few days to guage how long to have the water on and to make sure no blockages occur.

If the overflow of water at the bottom of the Vertical Planters needs to be directed elsewhere rather than drip onto the ground then:-

Using two 13mm T's cut a length of 13mm pipe 135mm long and join the T's together. Cut another two lengths of 13mm tube 60mm long and attach to the T's and then attach to the spouts on the bottom of the Vertical Planters. (See pictures below.)



Join these sections together with 13mm pipe and lead the overflow water away to a drain or Back to a feed tank. (Depending on size and design of system)

