

## VertiVerd Installation Guidelines

**Green Walls can be installed on any wall depending if it can withstand the weight of the Vertical Planters fully planted and watered which is about 4Kg per planter. There are, depending on planting preferences, 8-10 planters per square meter - so that is 32-40Kg per square meter. So any structure has to withstand these weights.**

If your wall cannot support these weights there are other installation options.

Once a suitable wall has been chosen its aspect is important in the choosing of what types of plants to have.

### Using Unistrut

For walls that are not strong enough to support a green wall, using Unistrut to create a structure and hang 50mm galvanised mesh on it is advised.

50mm (2") welded galvanised mesh is widely available, usually in 8' x 4' (2.4m x 1.2m) panels.

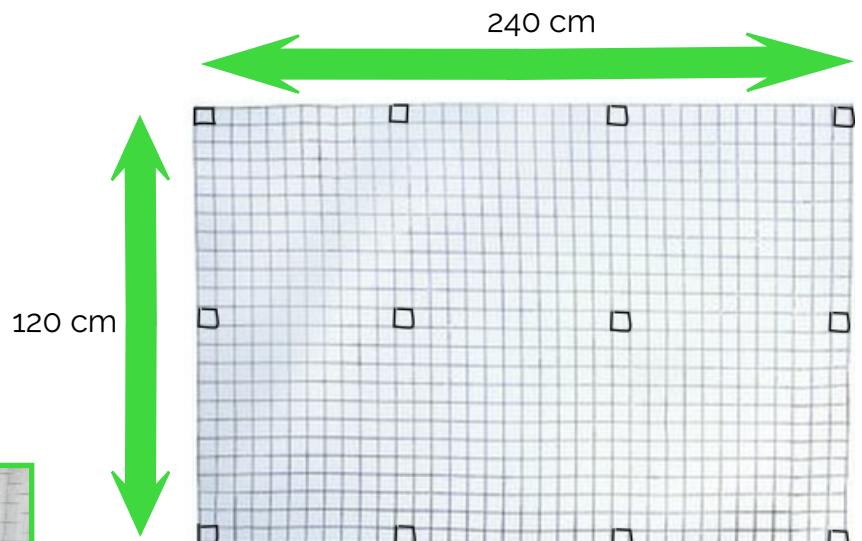
The vertical planter has been specifically designed to fit this size mesh, kindly note, using other size mesh will not work.

Unistrut is a structural galvanised steel channel material that is used to make frameworks and support systems. This is readily available online or at any electrical wholesaler. We recommend 41 x 41.

Unistrut is very strong and easy to install, there are various fittings and components available to create any structure. The weight is transferred down to the ground and the Unistrut is fastened to the wall for horizontal support.

The mesh clip easily fastens onto the Unistrut using 10mm long spring channel nuts, adjustment is easy and quick.

Kindly note, spacing between Unistrut verticals should be about 80cm.



The position of the clip on the Unistrut can be moved so not to interfere with the installation of the vertical planter. But in some instances this is unavoidable.

To secure the Unistrut so that it is not lifted upwards off the mesh clips we recommend one or two clips fitted on the bottom upside down.

The Unistrut should be hung with the horizontal wires facing out over.

Application Categories: Living Walls

## 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.

The vertical planter should be attached to the Unistrut by hanging the planter by the moulded hooks on the back top edge. To secure the planter to the Unistrut so it can not be pulled forward there is an added hook on the back that clips onto the Unistrut.

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. Vertical spacing is dependant on plants used but usually is between 20-30cm.



Where two sheets of Unistrut butt up to each other one mesh clip is sufficient to connect and support both.

When hanging the planters onto the Unistrut and a mesh clip interferes with the plastic hook on the planter from hanging properly, unfortunately sometimes this is unavoidable, however you can cut back the hook to make it fit. Kindly note, the hooks and the planter are flexible and can be forced onto the Unistrut to make them fit.



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## 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.

- 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. Kindly note, 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.
- 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.
- 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.
- **Kindly note, 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.



## 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.

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## Planting

There are two ways to plant up.

- 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.
- 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 water to start dribbling from the overflow spouts at the bottom planter. Repeat this a few times over a few days to gauge 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 the following is advised -

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.

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.



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