

Sideways GrowBag Boxes.

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GrowBags can be a wonderful resource for the smaller and larger gardener alike, and they are an extremely reliable way of producing a tasty crop of tomatoes, courgettes, sweet peppers, chillies, etc. They are used on patios, balconies and decks, in porches conservatories and greenhouses and are often placed in unused corners. However, when a grow-bag is used on its side in a box the required floor area is reduced, the plant roots push deeper and more naturally into the growing media, the plants become stronger and the cropping yields increase as the nutrient content of your grow-bag is fully utilised.

Sideways grow-bags are also suitable for an even wider variety of crops including those that prosper when runners are trained up a trellis such as Peas & Runner Beans, Cucumbers, some types of Squash and even Grapevines, Sweet Peas and other flowers, and they are especially useful for companion growing as part of a holistic fruit, vegetable and flower growing regime.

I have decided that adopting a board width of 7.5cm/3" will be the most efficient and economical way to utilise the reclaimed pallet wood for my current sideways GrowBag boxes and my next couple of projects: After being ripped down to width using a circular saw, having standard width boards to hand means that these projects can take on an almost modular style of construction.

Here I am checking the dimensions of a GrowBag; be aware that different brands are different sizes. However, a box slot that is 9cm wide is sufficient for all the brands I have purchased locally. The bags are normally 7.5cm thick but do require a little extra room to allow for water expanding the compost and the plant roots pushing out a little, so a 9cm internal slot width is just about perfect.



You will need to mitre the ends of the boards to 45° for the boxes. I have set the circular saw up to cut at 45° and I have a length stop in-place so the boards are all the same angle and length when cut, but this can be done manually with some careful measuring and the use of a mitre block and tenon saw (available from DIY outlets). I have chosen 37.5cm or about 15" height for these boxes which works out at 5 boards high.



30 boards which is sufficient to make 3 GrowBag boxes all cut to length with mitered ends and stacked up ready for receiving a couple of coats of raw Linseed oil.



As previously mentioned, I settled upon 9cm being the perfect internal box width, but I only had two short pieces of 9cm wide timbers available. However, I did have a lot of 7.5cm X 4.5cm reclaimed pallet stringers so I cut them down to 4.5cm X 4.5cm and glued them together to make pieces 9cm X 4.5cm. Here I am using a completely waterproof (Marine quality) expanding Polyurethane adhesive, but a fully waterproof resin construction grade (D4) wood glue will be suitable for this job.

YOU DO NOT WANT TO GET WATERPROOF GLUE ON YOUR HANDS OR CLOTHES: IT DOES NOT WASH OFF!
It's waterproof and you have to wait for it to either wear off or in the case of your skin peel off.



The timbers require only light but firm clamping; too much clamping force can be worse than no clamping at all as it can squeeze the glue out of the joint. After 24 hours the glue will have fully hardened and you may release the clamps, scrape and sand off the excessive dried adhesive, and cut the timbers to length: approx 16" or 40.5cm.



When you begin to assemble your sideways GrowBag boxes, you will make a much better job of it if you use a bradawl to mark the position of, and to start the nails. It really does reduce the chances of splitting the timbers when knocking the nails in. In this instance I have chosen 40mm long bright zinc galvanised steel “lost head” nails. I like to use these because the heads are easily hammered below the surface of the timber which greatly reduces the chances of you catching your hands or clothes on a protruding nail head.



When you begin to start nailing don't forget to use a square and get everything lined up properly prior to hammering the nails home.



Using a suitably sized clamp can make things considerably easier for you. If you don't have a clamp, then the use of an adjustable luggage strap or even an elastic bungee cord will help make a difference.



OK, if like me you have a position in the garden which you would like to fill but it is not suitable for a full box, then make one that is the same size as the width of a GrowBag. You will find that most GrowBags are approx 2.2 to 2.5 times longer than they are wide so one GrowBags width is not quite half a GrowBags length.



The GrowBag box carcasses assembled. You could actually begin to use them “free standing” at this stage, but I have one more little trick up my sleeve, and my next task will be to give them all a finishing coat of Linseed Oil blended with Beeswax before undertaking the final stage.

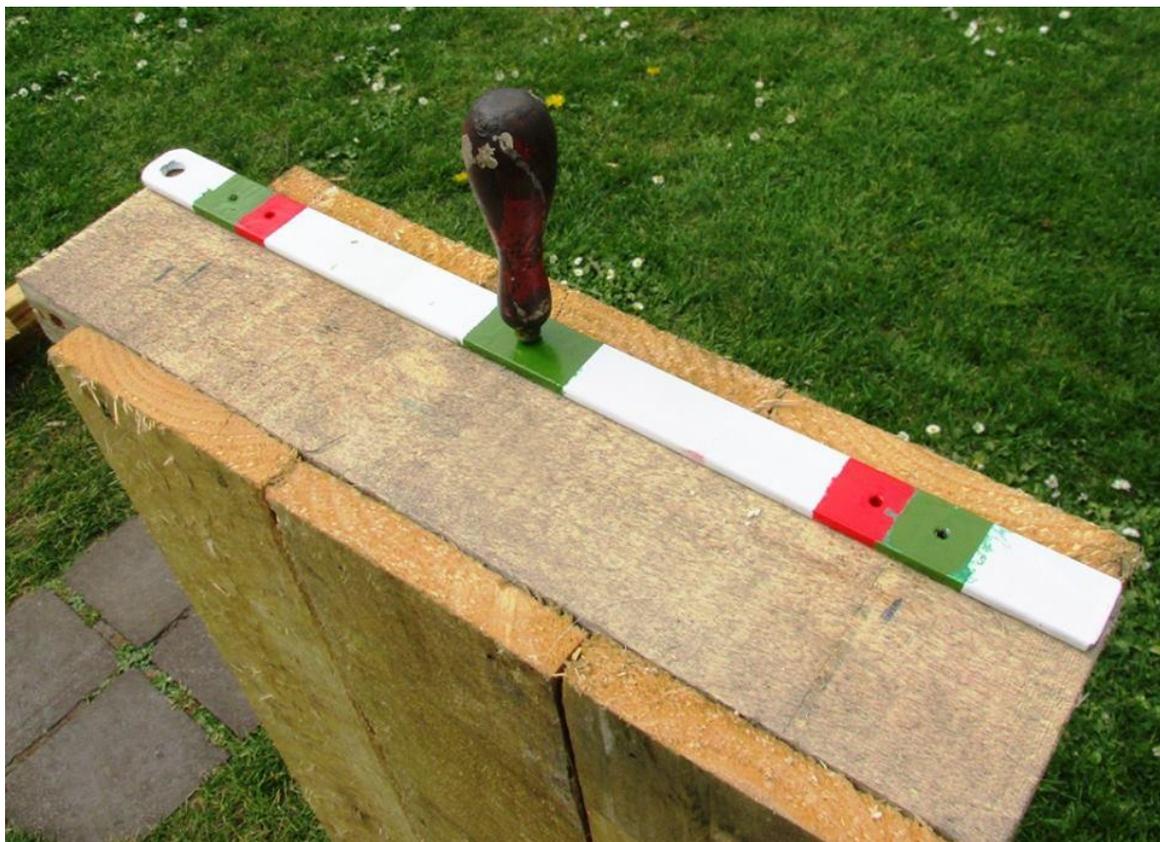


Connecting the GrowBag Boxes together: Forming a structure or physical barrier for your garden.

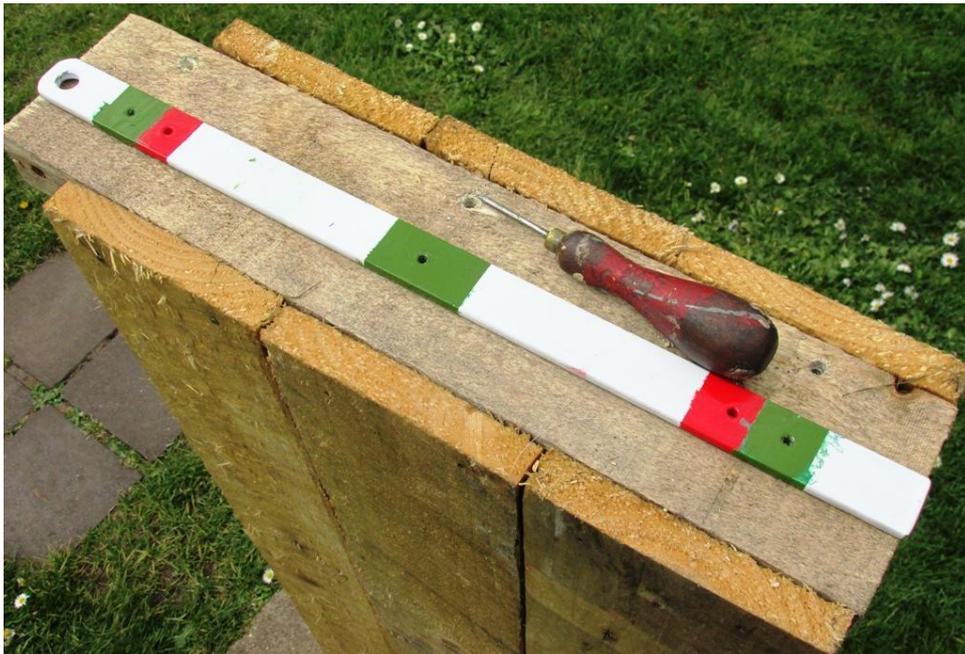
I made myself a marking out/drilling jig for positioning the screw eyes I am using to connect the sideways GrowBag boxes. I have used and painted a piece of steel, but you could use a piece of wood or plastic, etc.

The 3 green painted sections are for marking out the holes for the screw eyes on the right hand side of the boxes and the 2 red areas are for marking out on the left hand sides of the box.

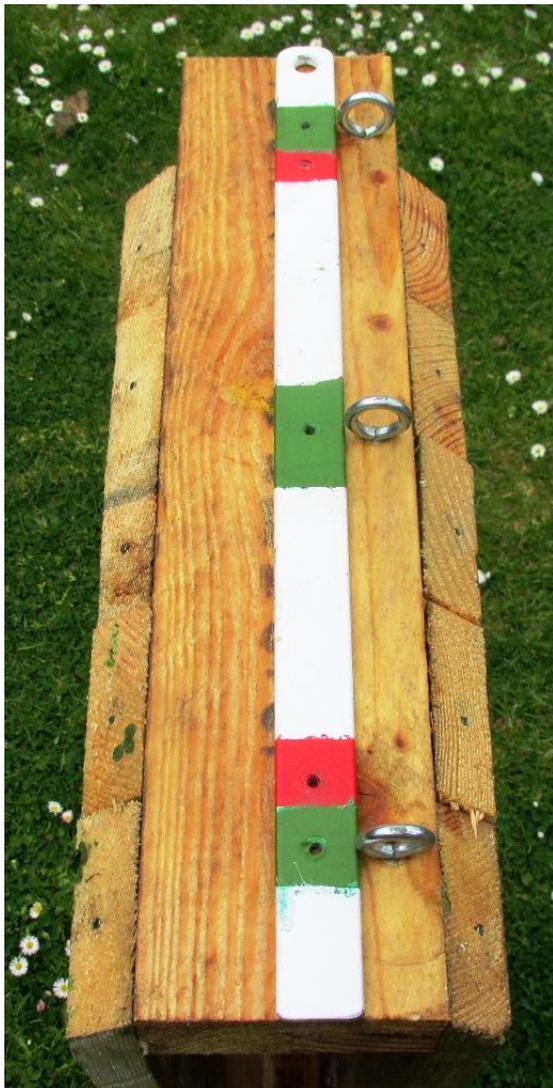
The jig has been designed to line up with the side and bottom edge of the stringer timbers and includes a larger hole for hanging the jig on a hook for storage, which also identifies the top of the jig.



The drilled holes for the screw eyes on the right hand side of the box: Green = Right/Starboard ... Got it?

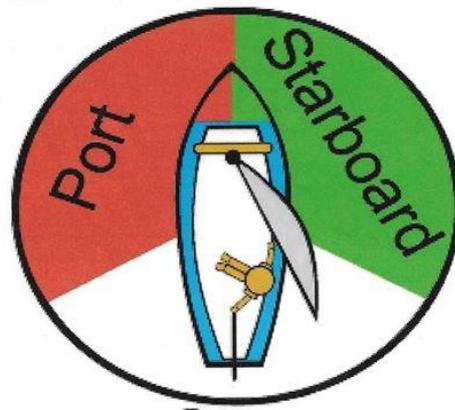


The 3 screw eyes in position on the right hand side of the box: Green = Right/Starboard Got it?

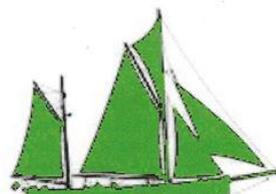


Red; Port.

Green; Starboard.



Stern



Starboard Side



Port Side



Port Side

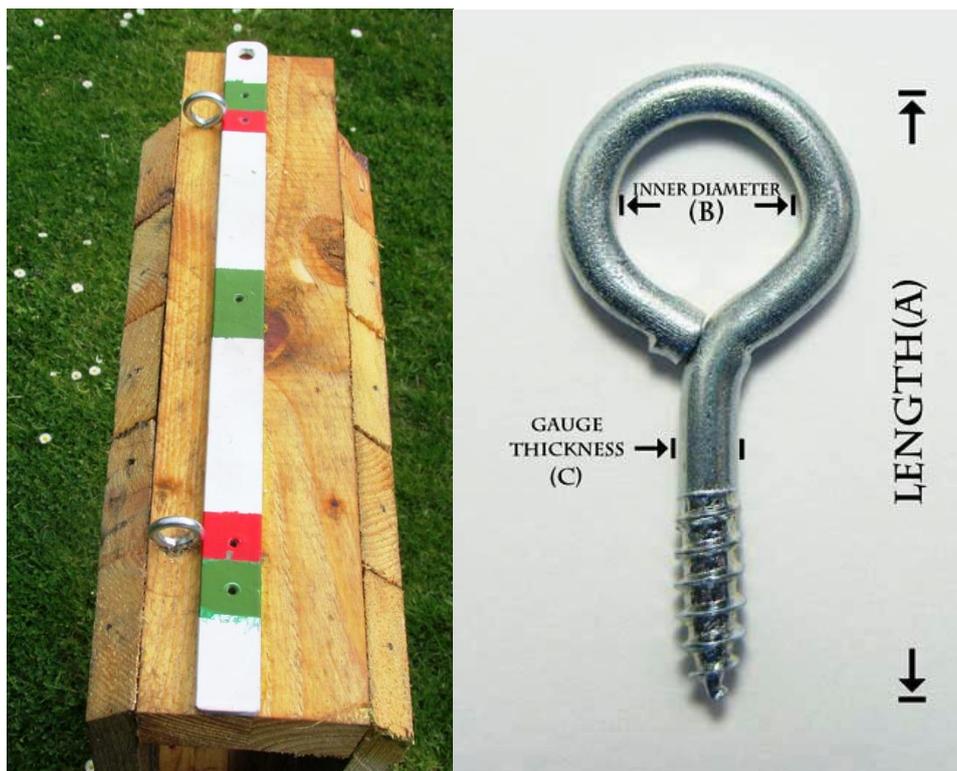
Starboard Side



Starboard Side

Port Side

And the 2 screw eyes on the left hand side; see how the screw eyes have been lined up with the pilot hole positions in the Red areas: Red = Left/Port. The screw eyes are **(A)** 7.5 cm long and have a **(B)** 1.5cm centre.



Here are two grow bag boxes pinned together using some 1.2cmØ X 65cm long steel stakes hammered into the ground. You could also have M12 connector nuts welded to the steel ground stakes so that steel trellis uprights can be screwed into them like this. The trellis uprights could then have vine wires, strings, cords, netting or even bamboo canes tied to them so that the plants can be trained up the trellis and supported off the ground and therefore helping to prevent deterioration of the developing fruits, vegetables or flowers.



Installing the grow bags into the sideways GrowBag boxes. Tip: lower the GrowBags into the boxes, but at the end of the season it is much easier to lift the boxes clear of the spent GrowBags.



Long boxes pinned to short boxes at the corners making a barrier around a plot.



Now you can see why I really like sideways GrowBag boxes. They offer a better growing environment for a smaller foot print: about 1/3 of the ground area normally used. They make a physical barrier against pets and children cutting corners as they play which can often result in trampled and damaged plants. We install them on the North, East and West sides of our plots to provide a localised wind break to protect the growing plants, which allows a better opportunity for the sun to warm the soil as the GrowBag boxes help to retain the heat by preventing the wind from cooling the warmed areas of soil.

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