



# GARDENING

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## A U S T R A L I A

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### MR FIX IT: MAKE A PLANTER BOX

Guest Presenter Luke Mitchell

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**Luke demonstrates how to make a mobile planter from salvaged hardwood.**

Luke's design is built using recycled or salvaged hardwood timber.

This planter design can be easily modified – you can have the casters or not, you can adjust the height of the legs to suit your needs and you can include a bottom shelf or not. Once built, the planter can be placed outdoors, indoors or on a balcony.

#### **Materials**

Using hardwood is important as it is more waterproof than softer woods (pine). All measurements are approximate due to the adaptability of the design. Only basic tools are required so you can easily build this in a small space at home.



## What you need

- 4 hardwood posts for the legs (approx 70mm x 50mm x 800mm).
- hardwood slats 90mm width. Old fence palings work well. Length depends on the size of your container. (The number of slats is also dependent on the size of your container)
- container or box for plants - construct using a medium size polystyrene box
- stainless screws
- galvanised nails
- exterior grade PVA (wood glue)
- geotextile fabric to line planting container
- 4 x casters (optional)
- timber for the container support rails (measurements 40mm width is good)

## Tools

- workspace such as a sawhorse or outdoor bench
- handsaw
- tape measure
- pencil
- square
- drill and bits
- impact driver (not essential)
- hammer

**Container:** Luke built his planter using a medium size polystyrene box. These boxes come in various sizes, which is okay as you build the planter around the size of the box. They make a great growing container as they insulate. Look for one with just enough depth to grow herbs, greens or strawberries (25cm+). They are easy to source, and often end up in landfill. Using a box to hold the soil will protect the timber from rotting. It's also removable which means you can take the box outside for watering if required.





## What you do

**1. Decide on the height of your planter (800mm is a good guide), measure each post, mark using square lines on the face, cut your four posts to match. You can use a handsaw. Remember to factor in the casters when deciding the final height.**

**2. Construct the two sides first. (These are the full height sections with the corner posts.)**



- **First step for the sides is to figure out how many slats are needed to cover the end sides of the box. These are the short sides. Measure the height of your box and add 80mm. This extra 80mm will allow room above the box to conceal it and allows room below (60mm) for supports to hold the box. You need enough slats to cover your container height (plus 80mm) also allowing a small gap (3mm) between each slat. Let's assume you need 4 slats.**
- **Then you need to work out how long to cut these slats. To do this, measure the depth (short side) of the container ( $X$ ) and add 10mm. This gives enough wriggle room to install the box once it's done. Cuts 10 slats to  $(X + 10\text{mm})$ . 4 slats for each side and one slat for each side of the shelf below. Make sure your slat pieces have good 'square' or straight ends. You may need to "dock" the ends of your timber before cutting them to the correct length. This means cutting off any ends that aren't "square" edges (straight at 90 degrees).**



- **Start assembling the sides by laying two posts onto the workspace, parallel, at about the same distance apart as the slats you have cut. Pick the best post ends to start constructing – that’s the ends with the perfect 90 degree angles! This is the end where you will attach the slats using screws and glue.**



- **Attach the first slat at the top of the posts lining up the corners. Drill pilot holes 15mm from the top of the slat, followed by a screw. Do both ends and the first slat is in place. For outside use, use stainless screws as they won’t rust.**
- **Then do the same thing with the slat at the bottom end that will form the side of the shelf below the planter box, marking the distance accurately from the bottom of the posts on both sides so that your shelf ends up sitting horizontal.**
- **It’s time to check it’s ‘square’ by measuring the ‘diagonal’. The diagonal distance from top slat to bottom slat should be the same on both sides. You can adjust if need be. Once you are happy, drill a second pilot hole on each of the four joints, then screw to lock in place.**





- Now attach the remaining side slats remembering to leave a space between them (ie 3mm). First glue in place, then drill pilot holes, then screw. A final step is to remove the top and bottom slat, unscrew, then and glue and screw in place now you are sure it all works well. One side is done. Repeat for the other side.



### 3. Measure the slat lengths for the back and front

With the two sides done, now work out the slat length for the front and back, the long sides of the container. Lay the container between the sides and measure the distance between the outer edges of the posts. Add 10mm (5mm each end) to allow the box some wriggle room. Cut 10 slats at this measurement.



### 4. Support Rails

Before installing the slats to the front and back, you need to attach the support rails to four of the slats just cut. These rails will hold the box and the bottom shelf in place. You'll need four rails cut at the same length as the longest side of the container. You could use old decking timber for the rails.



You need to determine where to attach the railings to the slats. For the shelf at the bottom, it's easy. The distance between the railing and the top of the slat will be the thickness of a slat as this will create a nice flush shelf later on. The railings (x2) will be shorter than the side slat because you want it to fit between the posts. When you are happy, glue then screw the rail to the slat. Repeat for the other side.

For the box support rails, use the box as a guide to mark where to put the rails, allowing a 20mm margin at the top. This will allow the top of the box to sit 20mm below the top slat, which will look good. With the 20mm margin allowance, hold the box against the post, place a rail underneath it and mark the bottom of the rail against the post. Transfer this measurement to your slat and secure the rail with glue and screws. Repeat for the other side.



## **5. Attach the sides to the front and back**

Once the rails are in place, the front and back sides can be attached to the sides. Now it's starting to look like a planter!





## 6. Install the shelves.

Cut and install the slats for the bottom shelf and the container support shelf. They should be the same measurement as the side slats. You can lay them in without fixing.



## 7. Casters

If you are putting on casters, then do so using screws, but make sure you drill pilot holes first so that you don't split the timber!





## 8. Planting

Make draining holes in the box if there aren't any already, lay geotextile fabric at the base of the planter, then fill with potting mix.



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