

Craig and Kerry Castree  
88 Rowes Road, Werribee Vic 3030  
Phone: 0411 720-283  
ABN: 55 537 434 624

craigcastree@optusnet.com.au  
www.craigcastree.com.au



Edible Gardens by  
Craig Castree

## Wicking beds

Wicking beds are like a great big self watering pot only in this instance they are a timber crate repurposed to become a wicking bed, you may have a large one or a half size one depending on your allocation? These wicking beds have a waterproof liner that are normally used to line water tanks, so they are food grade, this allows the bottom half or more to be filled with stone to form a water reservoir that is then covered by a geo-textile fabric, this stops soil from entering the reservoir. It is then filled with soil and planted out then mulched etc. The reservoir is then filled with water until it flows out of an overflow pipe that is installed around about the level of the fabric, when the water runs out of it, this tells you it is full. For the first week or so you will need to water the young plants until the wicking effect takes place. The plants will now wick the water up as they need it and all you need to do is to check every two to three weeks that the reservoir is full by taking off the cap on the fill pipe in the corner of the bed and check it, if it appears low? Chances are that it will be, and you will need to poke the hose down into the fill pipe and once again to fill it until it runs out of the over low pipe telling you it is full.

Step by Step instructions:

1. Choose a level site for the box ensuring that it does not rock around if it does then you may need to level the area with a shovel or rake to stop it from rocking by moving the soils or what ever substance it is to sit on.
2. Check the inside of the box for any stray nails? If you find any use a hammer and hit them down into the timber so that they do not pierce the liner when it is installed. Also check that there is not any sharp timber shards/splinters? If so break them off or make them blunt by hitting them with a hammer.
3. Unfold the green liner and carefully insert it into the timber crate. Push it down so that it is flat on the floor of the box and pushed into the corners, there will be a little overhang over the sides that will need to be nailed in place so that it stays put during the rest of the installation.
4. Using the small flat headed nails supplied in your kit, nail one in each corner and one in the middle of the box through the liner once you are happy it is in place.



5. You will need to place the 50mm x 500mm long PVC fill pipe with cap on the top into a corner of the box, (the top of the pipe is opposite the end with the holes drilled in it). See picture.



6. Next you will need to fill your box with 20mm scoria/stone or similar being careful not to pierce the liner. Keep sharp objects away from the liner when cutting open the bags of stone mistakes are easily made and if you pierce the liner the wicking bed will not work. You will need approximately 16 x 20 kg bags of 20mm Scoria to fill a large box and 8 bags to fill a ½ box. You may need to lift the pipe up a little to ensure has some stone under it.



7. Now your scoria is in the box you will need to get the geotextile fabric (supplied) some will be in two pieces, most will be in one piece, If so overlap them but tuck the sides down between the liner and the stone a little this will ensure that it stays in place. This stops the soil from penetrating the reservoir in the bottom. At this stage you also need to insert the small 20mm x 100mm white overflow pipe from the outside using the middle gap in the timbers of the box. If the pipe is a little tight you may need to use a sharp Stanley knife or similar to cut a little timber to allow the pipe to be inserted. Once the pipe can be seen making an indentation on the liner from the inside, with a sharp knife, cut a small cross in the liner to allow the pipe to be pushed through it. Careful not to make these cuts too big. Keep the pipe on the same side as the fill pipe that way when it overflows you will be able to see it.



8. Next you will need to fill you box to within about 70mm from the top of the box with a combination of potting mix and compost. To fill a large box you will need 8 bags x 20L potting mix and 8 bags x 20L compost. To fill a half box you will need half of this amount

9. The next step is to put on the timber capping over the top of the liner, these have been mitered at 45 degrees so as to picture frame the box keep the liner in its place and provide a ledge for convenience. Pick up one of the planks and you will need to locate by feel about half way of the angled piece of timber in the corner under the liner. Fix the plank down with just one screw (supplied) with a cordless drill and Phillips head bit into that angled piece of timber with a screw only don't screw it all the way home as it may need adjusting. Go to the other end and repeat this step so that you now have a plank semi fixed to one side. Repeat this step until you have all four planks semi fixed to the top. Refer to picture in step 10. Once you are satisfied that the joins are looking neat and you are happy with them? Then screw them all home flush with the top of the plank. The other screws will need to be carefully measured so that you land in timber when you screw them in the middle of each plank. This will leave you 4 screws left and they are to screw the mitre joins together on the end of the planks, one per join refer to picture in step 10 the red circle indicates where the screws should be used.

10. Now that you have filled your box with soil it is time to plant it out with edibles and companions. See notes: once you have planted it out it is time to mulch which is important to stop evaporation and to help the soil stay cool in the hot weather and warmer in the cold weather. I use sugar cane or a new product called whoflungdung but it is up to you what you use provided it isn't pebbles, or bark as the pebbles heat up and the bark can be toxic to the plants.



11. You will need to fill your wicking bed up now by taking the cap off the fill pipe by and use a hose to fill it up. The wicking bed will take for a large box around 300 litres and 150 for a small. Please be aware that if you are using a hose across the footpath that this poses a trip hazard to pedestrians so you should either alert people walking past to it or temporarily pause the fill and get the hose off the footpath until they pass. You will know when the reservoir is full when the overflow pipe runs. I recommend that you fertilise all of the seedlings/plants that you put in with a pelletised manure of some sort. I also recommend that you use a small amount of pet friendly snail bait if it is not used by the snails and slugs it breaks down as fertiliser and is safe with edibles this will protect your investment. You will need to water these plants by hand for the first week perhaps with a watering can or similar to save the hassle of running the hose out again. In one weeks time your seedlings will be good to look after themselves for water, all you need to do from here is to check the fill pipe and see if the water level is low and fill it up until the overflow runs again. I find I have to fill mine up once every three weeks as the plants grow larger you may find it will be every two weeks. Over winter I don't fill it at all. If it rains heavily it wont matter the overflow pipe deals with any excess.

I hope you have enjoyed the installation and that you get many years of fun and food from your wicking bed, I have been using them for some years now and I truly believe they are the best way to grow food that there is, they are water saving allowing the plants to take up the water they need when they need it rather than relying on us to give it to them when we think. For any further information please visit my website [www.craigcastree.com.au](http://www.craigcastree.com.au) either send me a message or to purchase my book.