

## Raised Garden Beds

*"I want to grow food... I need a raised garden bed... wow that's expensive!"*

That's the thought process of most families looking to start a healthier outlook on food and lifestyle. Most people don't need a raised bed – read the soil building and wicking bed information sheets instead – but if you must have one, read on.

Raised beds are the 'flavor of the month' with corrugated metal, recycled plastic, treated pine logs, and other types making lots of money as companies cash in on the craze. To guide us through all the vested interest information out there, let's apply some permaculture or 'common sense'. I like permaculture, its busy teaching you how to think, not telling you what to think.



The raised bed technique originally came from Europe where soil was raised and exposed to more sun and heat to remove the winter frost and allow a longer growing season. We certainly don't need this in Perth and some designs – corrugated iron beds particularly – can get so hot in summer that the soil life is cooked next to the metal sides. Further, it might be that a sunken bed for cooler soil, passive water harvesting (water runs to low ground) and nutrient capture is more logical for free draining coastal soils.

That said, there are some advantages. While we don't need the heat, the elevation can be handy for:

- exclusion of damaging forces (chooks and dogs),
- greater access to sunlight (along near a fence line), or
- easier gardening for those who find kneeling/bending difficult.

Again apply common sense. The ergonomic sales pitch needs to be thought about as even if it's perfect height for you, there only needs to be a 5cm difference in height that makes it unsuitable for the rest of the family/heights.

The rest of this information sheet shows you a few raised bed designs, the materials and construction techniques. Material availability, costs, permanence and available labor and skills should all be factored into deciding if a raised bed is best for you.

Some general rules for any garden bed design are:

- It's hard to reach more than 0.7m. If you can access a bed from both sides, 1.4m is a good width to use.
- Ensure you have adequate pathways. Sleeper and block beds may have wide enough edges to walk on, but iron and others do not. It's worth allowing 0.8m for wheelbarrows and wheelchairs on arterial pathways.
- Garden bed soil for veggies doesn't need to be much deeper than 0.3m. While we certainly need to be holding water and nutrients with clay or techniques like wicking beds, having

0.8m of high grade garden soil in a bed is an expensive waste. Build up the bottom layer with something cheap that will preferably hold nutrients and water – street tree mulch is good.

### Cement Slab Tilt-up Beds

The simplest, quickest, cheapest and *recycled* raised bed we have seen, and can recommend, is a cement slab bed. The slabs are supported (buried, propped, framed) and joined end to end to make the bed. Different sized slabs give different height beds so best get large ones so you can bury  $\frac{1}{3}$  for stability.



The ones shown above have been sealed between slabs with silastic, and braced in the middle. Try lining the bottom with bentonite clay and make a wicking bed.

Bricks, limestone blocks and other wall building products can be used but make sure you seal the inside of the material to avoid water being sucked out of your bed.

### Corrugated Iron Beds



Corrugated iron bed prices can vary hugely. You get what you pay for – don't bother with the cheapest kit DIY ones from the hardware store, as they won't last long and if you want cheap, make them yourself. A simple technique is to cut a corrugated iron sheet in half length-wise then join the two bits together in a diamond-type shape. *Put the cut edge down*, use grooved wood or similar to secure at ends and cover the shape ends/edges.

On the other hand, if you need portable beds because you rent or you feel this design suits you (remember the heat issue) then look around for fully constructed sealed and rust-proofed heavy duty galvanized or colourbond types that will last. They may cost 3 times the cheap ones!

### Timber Framed Beds



Timber beds can be as simple as a box or as complicated as a 3 tier Jarrah sleeper bed. Choosing materials that are rot resistant, termite resistant and non-toxic is tricky though. Try your luck with 'safe' ACQ pine, or recycled Jarrah.