

BUILDING, PLANTING, AND MAINTAINING A NO DIG BED

Creating a no dig bed is an easy way to transform weedy ground into a productive garden in just a few hours, without disturbing the soil. Construction requires few materials, and you can modify the dimensions to suit any growing space. Plant up your new bed immediately in spring and summer, on the same day you make it, and you can be harvesting homegrown vegetables in as little as three weeks.

Tips for success

No dig beds can be made on any type of soil, including heavy clay, sites containing builders rubble, and even on top of concrete or slabs as long as the surface slopes to aid drainage. Remove any protruding rocks and dig out the main stems of woody plants, such as brambles. If the ground is uneven, fill hollows with new soil or compost, or use a sharp spade to shift the soil from ridges into any dips. Cut or strim down weed growth before beginning, so that mulches lie flat on the ground. You do not need to dig heavy soil beforehand, because soil life will aerate it for you, and all weed roots can be left in the soil.

Lay cardboard over the base of the bed to create a temporary barrier which suppresses weed growth during the eight to twelve weeks it takes for cardboard to decompose. Most weeds will be killed by this period of darkness, but the strong roots of perennial weeds will continue to push new growth up towards light, which needs to be removed regularly to weaken and eventually kill the roots (see p.40). Wooden edges are best as a temporary measure and aren't essential, but make it easier to create a bed and maintain weed-free edges initially.

Filling your bed with compost rather than soil will enable stronger, healthier plant growth for several years. Although I recommend a large quantity of compost for this initial stage, you will need much less in future. Use any well-decomposed compost (see pp.22-23) to fill the bulk of your bed, even if its texture is coarse. Just ensure that the top 5cm (2in) is soft and friable, with no large lumps. Firm the compost, to hold moisture and allow plants to anchor their roots. Have trays of young plants ready to transplant on the day you build your bed for quick crops while the weeds underneath gradually die.



Fill your no dig bed with module-raised plants for a quick and easy vegetable plot.

You will need

- Cardboard, brown rather than shiny, with plastic tape or metal staples removed
- Wooden planks x 4, new or reused to form edges of bed
- Large stones to support the planks for a few months
- Compost – 4–6 large barrowloads for 2.4m (8ft) x 1.2m (4ft) bed
- Peat-free multipurpose compost (optional) – about 3 x 40 litre bags
- Watering can with a fine rose
- Rake
- Wheelbarrow
- Trowel
- Dibber
- Young plants, seeds, seed potatoes for planting

1 Stake out the dimensions of your bed (here 2.4m/8ft x 1.2m/4ft) by pushing canes into the ground. Lay planks of wood flat to mark the bed edges, so that their corners meet, and remove the canes.

2 Lay cardboard over the base of the bed and underneath the planks so that it protrudes at least 15cm (6in) outside the bed's edge. Ensure that each piece of cardboard overlaps by 10–15cm (4–6in) so that the ground is completely covered. In dry conditions, water the cardboard thoroughly once it is laid.

3 Add the first layer of compost to make a mound in the centre. Place the wooden planks upright and keep them in position by pushing heavy stones against them on the outside of the bed, while pulling compost against them on the inside.

4 Top up the compost until it is at least 15cm (6in) deep and spread it out evenly with a rake to level the surface. Firm the compost by methodically treading the surface of the bed with your boots.

5 If the compost used to fill the bed has a coarse texture, add a final layer of peat-free multipurpose compost, with a fine texture suitable for transplanting and sowing. Level this layer with a rake and tread the surface of the bed lightly.

6 Finally, level the surface of the compost with the back of your rake, water thoroughly using a watering can fitted with a rose, and your bed is ready for seeds and plants.

7 Measure the spacing for each row of vegetables, dib holes for transplants, and push them in firmly – a little below surface level. Sow seeds, such as carrots, into drills made with your fingers or the back of a rake, and plant seed potatoes into slits made with a trowel. Water the bed after planting.

8 In spring, protect young plants from cold weather and pests by covering the whole bed with fleece after planting. Lay the fleece directly on top of plants and secure it at the edges with stones.



Alternative options

Laying cardboard to cover weedy soil, then adding a 15cm (6in) layer of compost is just one of many ways to create no dig beds. The exact method you use will depend on the condition of the ground and the amount of space you're dealing with. There is no need to lay cardboard on largely weed-free ground; simply rake soil level, spread a 5cm (2in) layer of compost, then sow and plant straight away. To make beds on a lawn, where grass and weed plants have weaker root systems thanks to regular mowing, cardboard with only a 5cm (2in) compost mulch can be enough to suppress weed growth. Wait a month for most of the lawn plants to die before planting, however, so that they don't grow through where vegetable roots make holes in the cardboard. When preparing ground on a larger scale, especially where perennial weeds are persistent, plant vegetables through a black polythene mulch (see pp.40–41).



Maintaining your bed

No dig methods reduce weed growth, but regular weeding is still essential to keep the soil clear.

New weeds from seeds that were in the surface compost are easily removed when they are very small by hoeing or pulling. The more difficult and ongoing weed growth is from roots of any strong perennial weeds underneath the cardboard, the new growth of which needs to be removed at weekly intervals using a trowel, so that the parent root is weakened and eventually dies (see p.40).

It's important to control perennial weeds at the edges of beds, to prevent them spreading. New weeds often push shoots through surface cardboard around bed edges as it decomposes, after about six weeks. When you see this happening, place more cardboard on top to suppress their growth further, and repeat a third and fourth time if necessary.

Watering depends on weather conditions, the consistency and maturity of compost, and how firmly you trod it down when the bed was made. Water new plantings every two days for their first week and after that you should not need to water often if your bed was thoroughly watered after construction (see pp.88–91). If fresh, hot compost was used to fill beds, they will need to be watered more frequently and with larger amounts for the first two or three months.

Making the most of your growing space

Plan successional planting for your bed so that you have seeds or young plants ready to go in as soon as space becomes available when your first planting is harvested and cleared (see pp.66–69). In this bed, for example, I planted leeks after potatoes, kale followed spinach, and lettuce filled the space left after

Plant potatoes through black plastic to produce a heavy crop while the weeds underneath die off.



Remove wooden sides during the first growing season, along with growth from perennial weeds.

radishes and peas. You can also help maximize the productivity of your bed by interplanting or sowing new crops between vegetables which are still growing (see p.70).

Maximizing growth year after year

The temporary sides of your bed can be removed by its first autumn, because the initial 15cm (6in) depth of compost will measure less than 10cm (4in) deep within three months as a result of decomposition and consumption by soil organisms. With little left to hold, the sides become irrelevant and their removal allows plants to root into path soil (see p.29).

Firstly, lay fresh cardboard on the path, then remove the wooden edges of the bed and add a little extra compost along the newly exposed sides of the bed, before pushing them into a 45° slope. Finally, spread a little compost along the edge, then top with woodchip, to define the edge of the bed, reduce weed growth, and keep the soil fertile.

Add a new 3cm (1¼in) mulch of compost to the bed every year, from late autumn, whenever there is space to spread it, along with a similar

depth of old wood chip or compost to the paths. This provides food for soil organisms and maintains fertility for plantings throughout the following year.

Perfecting paths

It's important to realize that when you have open-sided beds you need to create and maintain weed-free paths, because there is no barrier to prevent weeds rapidly spreading into your growing area. This is simple to achieve by covering fairly weed-free ground with a 3cm (1¼in) layer of wood chip. Where there are thick weeds, lay cardboard, topped with a little wood chip to suppress their growth and remove any shoots that grow through with a trowel. Alternatively, just lay bare cardboard, held in place by a few stones, and add more cardboard on top if bindweed or couch grass push up.

Using these methods, path soil can be as weed-free as your bed soil within a year or two and after that it's easy to keep them clean without using more cardboard, by removing any weeds that appear when they are tiny.